

Awareness of outdoor advertising in Hong Kong

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ABSTRACT

An intercept survey using quota sampling design investigated awareness of eight outdoor advertisements among 332 Hong Kong pedestrians aged 15 and above. Awareness of outdoor posters ranged from 19 percent to 50 percent, with an average of 35 percent. Advertising awareness did not differ by sex, age, or educational level. The message response involvement theory was adopted as the theoretical framework. Results supported the theory as higher motivation, opportunity, and ability were linked to higher advertising awareness. Tourists had lower advertising awareness than Hong Kong residents, probably due to language difficulties and unfamiliarity with local celebrities. Respondents generally held positive perceptions of outdoor advertising. They reported that they would pay attention to outdoor ads that were creative, vivid in color, or larger-than-life. Advertising awareness and perceptions of outdoor ads was positively correlated with frequency of visits to the district. Recommendations for outdoor advertising in urban pedestrian settings are made. This is the first reported study on outdoor advertising awareness among pedestrians in Hong Kong.

Keywords: media planning; surveys; billboards; advertising effectiveness

Awareness of outdoor advertising in Hong Kong

Introduction

Out-of-home (OOH) media are often used to build product or package recognition, and are characterized as effective media to build large local coverage and high exposure frequency in dense and mobile population. OOH media are regarded as excellent vehicles to reach a mobile consumer who spend more time travelling than staying at home (Francese 2003), and are commonly used in locations where citizens and tourists cluster (Wilson 2008). These media remain innovative through technological breakthrough, and new outdoor advertisements in 3-D, with extensions, digital messages or even interactive formats have been introduced (Belch 2007). Despite the limitations of having comparatively lower attention and difficulties in communicating long or complex messages (Sissors 1995), OOH media use are increasingly popular. The wide adoption of these media has been reflected by the increasing share of advertisers' budget allocated to outdoor media in the US (Wilson & Till 2008) and in metropolitan cities such as Hong Kong (admanGo 2010).

OOH media are popular with Hong Kong advertisers, especially in the major shopping areas [such as Tsim Sha Tsui and Causeway Bay](#). A survey of advertisers reported that OOH advertising was considered important as a supporting channel in an integrated campaign, but it could at times be a core advertising channel. Advertisers showed an appreciation of the many innovative OOH advertising formats made available by new technology (JCDecaux Pearl & Dean Limited 2006). The OOH media are also considered an effective channel for reaching tourists visiting Hong Kong, as 77 percent of mainland Chinese tourists are estimated to travel on the subway system (JCDecaux Pearl & Dean Limited 2006).

Total advertising expenditure in out-of-home (OOH) media in Hong Kong in 2009 was 876 million US dollars (admanGo 2010). OOH media accounted for 10.1

percent of total advertising expenditure, specifically 2.3 percent was spent on subway advertising, 0.4 percent on bus body display ads, and 7.4 percent on all other OOH media including outdoor video walls, conventional billboards, airport, bus shelter, and tram body, and videos in buses and trains (admanGo 2010).

Since outdoor advertising accounts for such a sizable share of advertising expenditure in Hong Kong, there was a need for an empirical study examining the awareness of advertisements in the medium. This research was modeled on similar studies of cinema advertising (Prendergast 2005a) and handbill advertising (Prendergast 2005b) in Hong Kong. It examined awareness of outdoor advertisements and perceptions of outdoor advertising. The insights from this study were intended to benefit advertisers as well as media vendors in creating impactful messages for the audience.

Literature review

Billboard ad recall

Previous studies have attempted to investigate the effectiveness of outdoor advertising in terms of how well it creates brand awareness or advertising message recall (e.g. Bhargava 1994; Donthu 1993; King 1990; Meurs 2009; Osborne 2008). Donthu and colleagues (1993) selected 10 outdoor billboards, eight of which were along a highway while the remaining two were on smaller streets. Drivers who passed them regularly were sampled. In this American setting where driving is on the right, aided and unaided recall was found to be higher for billboards on the right hand side of the highway, with fewer words, and in black and white rather than color. Billboards on the left hand side of the highway, with more words, in full color, and billboards on smaller streets were less well recalled (Donthu 1993).

Osborne and Coleman (2008) compared the effectiveness of traditional billboards, a tri-vision board and a smartboard among highway drivers. It was found

that the tri-vision board was recalled the best, with 66 percent of respondents reporting that they remembered it. The effectiveness of the traditional standard billboards was the second best, with 15 percent to 64 percent of the respondents remembering the various ads. Respondents with higher incomes recalled fewer ads than respondents with lower incomes, and males were found to have better aided recall than female respondents (Osborne 2008).

Despite a considerable increase in the spending on outdoor advertising, only a handful of studies on the topic can be found (Meurs 2009). Indeed, outdoor advertising is said to be “one of the least researched of any mass medium” (Katz 2003, p.92). Osborne and Coleman (2008) attributed the lack of research on outdoor to the domination of television. It is also difficult to create an outdoor advertising viewing experience in a lab setting (Donthu 1993). [Currently, outdoor media vendors in Hong Kong use estimated pedestrian and vehicles flow in a location as benchmarks to indicate potential media coverage of posters at street levels \(POAD 2008\). Media vendor for the subway network appointed market research companies to conduct reach and frequency studies among subway passengers on a regular basis \(JCDecaux Transport 2011\).](#)

The Outdoor Environment in Hong Kong

Most of the studies mentioned in the above section measured recall of billboards among highway drivers. Competition for the advertising messages of highway billboards and other distractions are relatively low. In metropolitan settings like Hong Kong, outdoor billboards are clustered and compete fiercely for attention. Distraction comes from traffic lights, promotion booths, window displays, handbill distributors and signage. A pedestrian’s attention can be primarily to other pedestrians who may be pushing through or blocking the way. This suggests that the effectiveness of billboard advertising in an urban pedestrian setting will be different from that of

billboard ads along a highway. The authors are not aware of studies which have measured the effectiveness of outdoor advertisements in an urban setting among pedestrians.

Besides outdoor billboards, the subway is a popular OOH advertising venue because of its high potential reach of 3.4 million unique passengers per week (compared with 7 million Hong Kong population) (JCDecaux Pearl & Dean Limited 2011). Two published studies have tested awareness of subway advertisements in Hong Kong. Chan (1994) surveyed residents of a public housing estate near a subway station asking about 27 advertisements displayed in the subway network. Ad awareness ranged from 8 percent to 73 percent with an average awareness of 41 percent. A year later, Chan (1995) tested recall of 42 advertisements which had been displayed throughout the subway network for one to five weeks using an intercept sample of passengers. Ad awareness ranged from 13 percent to 68 percent with an average of 35 percent awareness. Both studies concluded that an ad's creative execution rather than size or the duration of display influenced ad awareness.

Attitude toward outdoor advertising

Apart from assessing the effectiveness of outdoor advertising, researchers have also sought to discover a link between audience attitudes towards advertising and advertising awareness (e.g. Donthu 1993; King 1990; Osborne 2008). Respondents with a positive attitude towards advertising are able to recall more outdoor advertisements (Donthu 1993; Osborne 2008), but studies in this area do not usually measure specific attitudes towards outdoor advertisements (Speck 1997). Research has indicated that consumers have different attitudes towards different advertising media (Speck 1997). For example, in examining ad-avoidance in magazines, in newspapers, on the radio and on television, attitude towards advertising was found to be a predictor of ad-avoidance in all four media. There was a clear difference between

print and broadcast media. Respondents expressed more pragmatic attitudes towards print ads and more emotional attitudes with respect to broadcast ads. The researchers argued that such differences reflected differences in the media themselves as well as audience expectations (Speck 1997). Since billboard advertising remains under-researched, studies of attitudes and perceptions about this medium are needed.

Demographics and Outdoor Advertising

To facilitate advertisers to make informed media choices, it is important to know which segment of audience is more likely to pay attention to a particular medium. Past studies seldom dig into advertising effect among different audience sub-groups. On the contrary, there were studies relating demographic variables with perceptions of a particular advertising and promotion medium. Prendergast and Yuen (2005) found that younger respondents perceived handbills as more informative and entertaining than older respondents. Those received more education were more likely to report that handbills are easy to understand. Other studies also established the link between demographic variables and perception of advertising (e.g., Dutta-Bergan 2006). This study aims at discovering the relationship between demographic variables and perceptions of outdoor advertising, as well as the relationship between these variables and outdoor advertising awareness.

For this study, we are particularly interested in investigating the response of tourists to outdoor ads. It is because, first, tourists spend more time staying at outdoor environment. Second, they have high intention to spend and that makes them an important target group. Third, outdoor advertising was found effective to stimulate immediate sales (Bhargava 1999), and such effect is more apparent on these ready-to-spend tourists. Indeed, travel-and-tourism related businesses are more likely to see outdoor advertising as effective strategy to attract customers and increase sales

(Taylor 2003). Tourists are definitely important target of advertisers using outdoor media and this group of audience deserves more research attention.

Theoretical framework

We adopt the message response involvement theory as our theoretical framework (MacInnis 1989; MacInnis 1991). This theory suggests that motivation, opportunity and ability (MOA) are three determinants of brand information processing from ads. Motivation refers to the desire or readiness to process brand information in an ad. It can be affected by manipulating message characteristics such as message relevance, complexity or picture size (e.g., [Schleuder 1990](#)). Opportunity and ability are two moderators in the relationship between ad exposure and brand information processing from ads. Opportunity refers to the situational factors that either facilitate or hinder a person to process information. These factors include the degree of situational distraction away from an ad and the length of ad exposure time (e.g., [Moore 1986](#)). Ability refers to consumers' skills or proficiencies in interpreting brand information in an ad. Product knowledge, intelligence/education and message difficulty are factors related to ability (see [Lang 1990](#) for a review).

The theory purports that the amount of attention to an ad and cognitive capacity allocated to processing its information depends on the varying amount of MOA, and thus lead to one's likelihood of ad recognition and recall. Though MOA are present prior to ad exposure, they can be enhanced through manipulating ad design strategies. Using ad executional cues is one such strategy (MacInnis 1991). In a situation when MOA are higher, one would pay more attention to an ad and allocate a greater amount of working memory to process the information from the ad. With increased attention and deeper engagement in information processing, higher ad recognition and recall are expected.

Wilson and Till (2008) applied the message response involvement theory to study the effectiveness of airport advertising. It was found that ads placed at the gate where flight passengers got distracted with check-in documents were recognized the least. Ads that appeared twice in the concourse were recognized significantly better. The results supported the influence of opportunity to ad information processing. Ads with fewer words were found to have higher recall as it requires lower ability of consumers to process the information.

As previously discussed, the outdoor environment in Hong Kong is crowded with advertising messages. Audience got distracted easily by other street activities as well. Opportunity is low in this non-captive advertising environment. It is of great value to investigate how audience with varying motivation and ability respond to outdoor ads.

Research objectives

This study was designed to gather information about the [awareness](#) of outdoor advertising to help advertisers make more informed decisions in their media planning. It aimed to measure

1. awareness of outdoor advertisements;
2. audience perceptions of outdoor advertising; and
3. the impact of demographic variables and frequency of visit to the district on ad awareness and ad perceptions.

Methodology

Research context

Pedestrians at one of the most popular OOH sites were interviewed to investigate their awareness of outdoor advertisements and perceptions of outdoor advertising. POAD, a leading vender of outdoor advertising in Hong Kong, assisted the study by providing reproductions and the display schedules of advertisements. Eight

advertisements which had been displayed for at least two weeks before the survey period were selected. None of them had been supported by television advertising during the month before the survey.

Sampling of respondents

The Tsim Sha Tsui (TST) district of Hong Kong's Kowloon region was selected for sampling. The TST district is one of the busiest tourism spots in Hong Kong. The district is a node of transportation with museums, tourist attractions and shopping malls. The choice of the location facilitates us to sample a variety of demographic groups. In this study, quota sampling was performed, with equal numbers of males and females, and with equal numbers of respondents from the age groups 15-24, 25-34, 35-44, and 45 or above. A group of students from a university in Hong Kong was recruited as interviewers. They were assigned to intercept pedestrians and interview them at six pre-determined locations in TST. All the interviews were conducted on the same weekday morning in October from 10:15 to 11:15am. The interviews were conducted in Cantonese, or in English or Mandarin for those who did not speak Cantonese.

Questionnaire

The questionnaire consisted of three parts. Part one solicited data about advertising awareness. 4A size black and white versions of each of the eight posters were shown to the respondents one by one and they were asked if they had seen the advertisements in TST. [The use of black and white ads was due to budget constraint.](#) The eight ads were presented in the same sequence with no randomization of the presentation order ([see Table 2 for the characteristics of the posters](#)).

The second part of the survey involved eight statements relating to the respondent's general opinion [and perception](#) of outdoor advertising, such as "outdoor ads give me a lot of information about what is in fashion" and statements related to

situational stimuli such as “I tend to pay more attention to outdoor ads when I am in a spacious environment.” The statements were modeled after those of a previous study of cinema advertising in Hong Kong (Prendergast 2005a). The respondents were asked to rate their perceptions on a six-point scale, by giving the number with 6 indicating “strongly agree” and 1 indicating “strongly disagree”.

Part three of the questionnaire asked for demographic information about the respondents, including sex, age group, educational level, occupation, the number of times they had visited TST in the previous week, whether they were tourists, and if so their country of origin. The questionnaire was first developed in Chinese and then translated into English. As the questions were simple and straightforward, back-translation into Chinese was not conducted, but two bilingual investigators checked to ensure that the translation was accurate.

Findings

Respondent profile

Altogether 332 respondents completed the questionnaires, and all 332 questionnaires were considered valid. Table 1 shows the demographic data and the frequency of visits to TST in the previous week. Because of the set quota, there were equal numbers of male and female respondents and an almost even sample distribution among the four age groups. Over half of the sample claimed to have completed secondary education, while over one third claimed a tertiary qualification. A high percentage of the intercepts at that time of the week described themselves as students, office workers, or professionals. Nearly half of the sample said they earned less than HK\$14,999 (about 2,000 US dollars) a month. A majority of the respondents were Hong Kong residents, but about 20 percent were tourists. Half of the tourists came from the mainland China or Taiwan. More than 40 percent of the respondents reported

having visited TST one to two times in the previous week, but nearly 30 percent reported three to five visits.

INSERT TABLE 1 HERE

Advertising awareness

Table 2 summarizes the awareness [as well as the characteristics](#) of the advertisements. It ranged from 18.7 percent for a JeanRichard watch ad to 49.7 percent for a Bally leather goods ad. The average advertising awareness was 35 percent for the eight selected posters. Figure 1 shows the two advertisements with the highest awareness.

Advertising awareness did not depend on the duration of display. For the four ads which had been displayed for four months, advertising awareness ranged from 18.7 percent to 49.7 percent. The advertisement with the second highest awareness had been displayed for only two weeks. Poster awareness also did not depend on the size of the advertisements. The ad with the largest size scored third in awareness. The ad with the highest ad awareness ranked number three in terms of size.

Overall awareness was measured by counting total number of ads respondents reported having seen. It ranged from zero to eight. Twelve percent of the respondents could not recall having seen any of the eight selected ads. One respondent reported having seen all of them.

INSERT TABLE 2 HERE

INSERT FIGURE 1 HERE

Independent sample t-tests were conducted to compare the advertising awareness of males and females. Only one of the eight ads recorded a significant gender difference. Male respondents were more likely to report that they had seen the Johnnie Walker poster advertisement. F-tests were conducted to compare the advertising awareness by educational level, and no significant differences were found. Again,

F-tests comparing the awareness by age group found no significant differences except that respondents aged 16-24 were more likely to report having seen the advertisement for the Svenson hair care centers. Independent sample t-tests were conducted to compare the advertising awareness of Hong Kong residents and tourists. These results are summarized in Table 3. Three of the eight advertisements showed significantly different awareness among Hong Kong residents and tourists. Hong Kong residents were more likely to report that they had seen the Svenson hair care ad, the Mengniu milk ad, and the Johnnie Walker Anzenchitai concert ad. These were the three posters which used the most distinctly Chinese visuals, and two of them depicted Asian celebrities. In general, though, the total number of advertisements recalled did not depend on sex, education, age, or residential status.

INSERT TABLE 3 HERE

Perception of outdoor advertisements

Respondents were asked about their perceptions of outdoor advertisements and situational stimuli that attract their attention. Table 4 summarizes the results. Among the eight statements, the level of agreement on three of them averaged over 4.0. These were “I tend to pay more attention to outdoor ads when the outdoor ads are creative”, “I tend to pay more attention when the outdoor ads have vivid colors”, and “The larger-than-life outdoor ads attract my attention”. The level of agreement on four of the other statements averaged between 3.5 (the mid-point) and 4.0. Only one statement had an average level of agreement below 3.5. It was “I tend to pay more attention when I am in an outdoor environment where pedestrian flow is high”. Cronbach’s alpha coefficient for the eight statement was 0.80, indicating that they were measuring a similar construct. In light of the high alpha, a mean score was compiled for all eight statements to represent the overall perception of outdoor advertising.

INSERT TABLE 4 HERE

Independent sample t-tests were conducted to compare the perceptions and situational stimuli favoring audience attention between males and females. None of the eight statements recorded a significant gender difference. F-tests were conducted to compare perceptions of outdoor advertising among respondents of different educational levels. There was no significant difference except for the statement “I tend to pay more attention to outdoor ads when the outdoor ads have vivid colors”. Respondents with a secondary or tertiary education were more likely to agree with this statement than respondents with only a primary education. The mean scores for respondents with primary, secondary, and tertiary education were 3.7, 4.5, and 4.6 respectively ($F=4.2, p \leq 0.05$). F-tests were also conducted to compare the mean scores of by age group, but there was no significant difference in the mean scores among the different age groups. Independent sample t-tests were conducted to compare poster awareness between Hong Kong residents and tourists, and there was a significant difference in that tourists were more likely to report that they agreed with the statement “Outdoor ads help alleviate boredom when waiting on the street.”

Frequency of visiting TST and advertising effectiveness

Frequency of visiting TST might be expected to have an impact on awareness of the advertising displayed there. It was found that frequency of visiting TST in the previous week was positively correlated with the total number of ads seen ($r = .29, p = .00$). However, frequency of visiting TST showed no correlation with perceptions of outdoor advertising ($r = .03, p = .63$), though perceptions of outdoor advertising had a positive correlation with the total number of ads reported seen ($r = .15, p = .01$). Those who had a positive perception of outdoor advertising were more likely to recall having seen more outdoor ads. *It is noteworthy, however, that the coefficients of these*

significant correlations were rather low. Future research should further explore the relationships between the three variables.

Discussion

Before discussing the implications of these findings, some limitations need to be mentioned. First, the sample used in this study was not a probability sample. The findings therefore cannot be generalized to the entire Hong Kong population. Second, this study gives a snapshot of a particular demographic profile. It would be useful for future researchers to study advertising awareness at different times in different locations. Third, respondents' reported frequency of seeing specific ads arises from a combination of exposure, attention, memory retrieval, and reporting. It is impossible to untangle them in the current research design. Also, the visuals used in the survey reproduced the artwork of the outdoor advertisements without the surrounding environment. Advertising awareness measured in such a way may have errors.

Moreover, to keep the questionnaire concise, no filler ads were used to test false recognition of the respondents in this study. Future study can include ads that are not exposed to people for controlling purpose. Order of the ads stimuli can be randomized to remove the potential order effect.

Limitations aside, this study found that outdoor poster advertising can reach mass consumer groups. Advertising awareness ranged from 19 percent to 50 percent for the eight selected advertisements. The average advertising awareness was 35.0 percent.

The 35 percent average awareness measured in this study matches the average aided recall of 36 percent of billboard advertisements on the highway. It was higher than motorists' average aided recall of 23 percent for billboard advertisements on ordinary streets (Donthu 1993). In Donthu's study, the respondents commuted on the highways at least five times a week. In this study, respondents reported that they had

visited the district mostly once or twice in the previous week. In other words, the outdoor advertisements in Hong Kong created high awareness even among infrequent visitors.

The 35 percent average awareness is also comparable to the 35 percent and 41 percent figures compiled in two previous studies of subway advertising in Hong Kong (Chan, 1994; 1995). Since subway billboards are a capture medium, the average awareness of subway ads might be expected to be higher than that of ads on the streets. In the subway system, the ads studied were being displayed in nearly all the stations along the line (Chan, 1994; 1995). As 70 percent of the respondents in this study reported that they had visited TST five times or less in the previous week, the average awareness of 35 percent might be considered very encouraging. People in Hong Kong seem to pay much attention to outdoor advertisements.

The message response involvement theory suggests that motivation, opportunity and ability affect ad recognition and recall with varying amount of attention and cognitive capacity allocated to information processing of ads. The results of this study support the theory in several aspects. Past studies found that creative and novel ideas (Thorson 1988; Till 2005), use of color (Beattie 1985; Fernandez 2000; Lohse 1997), and prominent pictorial and ad size (Finn 1988; Hanssens 1980) can enhance motivation on ad information processing. In this study, the respondents reported that they would pay attention to poster ads that were creative, vivid in color, or larger-than-life in size. In other words, creative ideas in outdoor advertising have positive correlation with attention of advertisements.

Another finding of the study suggests the importance of creativity in outdoor ads. It was found that there is a lack of correlation of advertising awareness with the size or duration of the display, which is consistent with that in previous studies of subway ads in Hong Kong (Chan 1994; 1995). Creative execution is apparently more

important in creating awareness. Because of the limited number of advertisements investigated, it is not able to conclude if advertising awareness is influenced by color or the number of words. The two ads with the best recall differed greatly in both respects (Fig. 1). Further research is needed to elucidate the creative factors that influence outdoor poster awareness.

The use of figure/celebrity (Atkin 1983; Petty 1983) and relevance of ad/brand information (Fernandez 2000; Mitchell 1981; Petty 1979) were two factors related to motivation to ad attention. The mixed result in this study helps explain the effects of using familiar and unfamiliar celebrity. The Svenson hair care advertisement used a local TV celebrity (Fig.1) and enjoyed high awareness, while the advertisement using Anzenchitai (a Japanese band) generated below average awareness. This suggests that ads using local celebrities, compared to using celebrities from overseas, may be found more familiar and thus audience is more motivated to attend to them. Awareness of Svenson hair care was highest among younger respondents who were more likely to be fans of the celebrity but obviously were not attracted by needing the product (hair transplants). The use of celebrities may generate higher advertising awareness only among their fans who find the figures relevant to their interest and taste. Future research on the effectiveness of celebrities in outdoor advertising is needed.

Ability is another determinant of ad information processing. In our study, result shows that language barrier may hinder one's ability to ad processing and thus affect ad awareness. It was found that tourists reported significantly lower awareness of the three ads in which Chinese copy is used predominantly. Given that half of the tourists in our study came from non-Chinese societies, the use of an unfamiliar language will decrease their ability in ad processing, and lead to a lower advertising awareness. Advertisers that target a tourist population should refrain from using unintelligible copy.

The respondents in our study reported that they were less likely to pay attention to outdoor ads where pedestrian flow is high. They got distracted easily when in a crowded area and less attention is allocated to ad. This is consistent with the message response involvement theory that when situational distraction is high, advertising attention will be low. Media planners always try to select advertising space that has high pedestrian flow, but our study suggests that they should strive for a balance between pedestrian flow and the attention focus of the pedestrians. Media planners should perhaps avoid billboard locations where pedestrians are preoccupied, such as at traffic lights. According to the message response involvement theory, opportunity can be increased by enhancing redundancy of ad information and ad repetition (Pechman 1989; Wilson 2008). Our study found that frequency of visiting a location is related to awareness of outdoor ads. Advertisers should analyze the demographic profile of the frequent visitors of a selected location. Frequent visitors (for instance, office workers in business district or students in school area) are expected to expose repeatedly to the ads and thus increase the opportunity of ad attention.

In the current study, JeanRichard watch ad and the a.testoni leather goods ad had the lowest awareness. The low awareness of these two advertisements cannot be attributed to the product category, as the Bally leather goods and Omega watch ads recorded over 40 percent awareness. The low awareness of the JeanRichard and a.testoni advertisements may be due to unfamiliar or ungrammatical brand names. There was also a lack of user images in their visuals. The Bally and a.testoni ads both showed the bottom half of a male model carrying the leather bag, but the Bally ad showed a blonde female model in the background, while the a.testoni ad had no other model. The finding may suggest that user images may be important in outdoor

advertisements. The result seems to suggest that familiar brands are more likely to benefit from outdoor advertisements than less familiar brands.

Conclusion

This study is merited for investigating advertising [awareness](#) in a natural and real outdoor setting in which busy streets in metropolitan city are used as platform for advertising. Though there were similar studies on out-of-home media, many of them were either studying awareness among frequent drivers along highways or in indoor environment such as subway or airport. Open outdoor environment on busy streets is uniquely different from highways and captive environments. Complexity of audience profile and exposure to different message stimuli in a highly distracted environment enhance the interest of the research topic.

The results of this study in general confirm the high [awareness](#) of outdoor advertising. Awareness ranged from 19 to 50 percent. Awareness level was comparable to that of outdoor advertisements along highways and in the subway network among frequent travelers. Advertising awareness in general did not differ by sex, age group or educational level, making outdoor advertising a truly mass-oriented medium.

Outdoor advertising is effective in reaching tourists, and they reported that outdoor advertisements help alleviate boredom. However, tourists had lower advertising awareness than Hong Kong residents, probably due to language barriers and unfamiliarity with local celebrities.

The respondents held positive perception of outdoor poster ads and reported that they would pay attention to poster ads that were creative, vivid in color, or larger-than-life. Advertising awareness and perception of outdoor ads were positively correlated with the frequency of visits to the TST area. These findings confirm that outdoor posters need vivid colors, large size, and above all creativity. Celebrities used

in outdoor advertisements need to be popular with the general public. Outdoor advertisements that target tourists should avoid unintelligible text and symbols.

To conclude, advertisers can adopt the message response involvement theory to include appropriate message cues in their ads so to enhance advertising [awareness](#). Motivation, ability and opportunity are the key elements advertisers need to look into if they wish to catch the attention of their audience at outdoor locations where the targets are easily carried away by other messages and street activities.

Table 1 Demographic profile and frequency of visits to TST (N=332)

		Number	Frequency (%)
Sex	Male	166	50.0
	Female	166	50.0
Age	16-24	82	24.7
	25-34	84	25.3
	35-44	87	26.2
	45 or above	79	23.8
	Education level	Primary	16
	Secondary	190	57.2
	Tertiary	126	38.0
Occupation	Office worker	61	18.4
	Professional	55	16.6
	Factory worker	35	10.5
	Student	63	19.0
	Others	118	35.5
	Personal monthly income	No income	59
Below HK\$14,999		152	46.5
HK\$15,000-29,999		81	24.8
Above HK\$30,000		35	10.7
Residents or tourists	HK residents	260	78.3
	Tourists	72	21.7
	(from mainland China)	(32)	(9.6)
	(from Taiwan)	(5)	(1.5)
	(from other places)	(35)	(10.6)
Visit TST in the previous week	1-2 times	137	41.3
	3-5 times	96	28.9
	6-10 times	53	16.0
	11 times or more	46	13.9

Table 2 Advertising awareness and characteristics of the posters

	Ad aware-ness %	Color used	Language	Use of celebrities	Poster orientation	Size of ad (sq.m.)	Duration of display (weeks)
Bally leather goods	49.7	Full	English	No	Portrait	151.9	4
Svenson hair care center	45.2	Full	Chinese and English	Yes (Hong Kong)	Portrait	65.8	2.5
Omega watch	40.4	Full	English	No	Landscape	381.2	4
Tommy Hilfiger clothing	38.0	Full	English	No	Landscape	51.3	4
Johnnie Walker Anzenchitai concert	31.3	Full	Chinese and English	Yes (Asian)	Landscape	199.5	12
Mengniu milk	30.1	Full	Chinese and English	No	Landscape	47.3	26
a. testoni leather goods	26.5	Full	English	No	Portrait	120.0	5
JeanRichard watch	18.7	Full	Chinese and English	No	Portrait	89.6	4

Table 3 Advertising awareness among residents and tourists

Brand	Advertising awareness (%)		t-value
	Residents (N=260)	Tourists (N=72)	
Bally leather goods	48	56	-1.1
Svenson hair care center	53	17	6.7***
Omega watch	39	46	-1.1
Tommy Hilfiger clothing	37	42	-0.7
Johnnie Walker Anzenchitai concert	34	22	2.0*
Mengnu milk	33	21	2.1*
a. testoni leather goods	26	28	-0.3
JeanRichard watch	19	17	0.5

*indicates significance at the $p \leq 0.05$ (***) $p \leq 0.001$ confidence level in a two-tailed test

Table 4 Perception of outdoor advertisements

Statement	mean	Std. deviation
The larger-than-life outdoor ads attract my attention	4.3	1.3
Outdoor ads give me information about things in fashion	3.8	1.3
I like to pay attention to outdoor ads	3.8	1.2
Outdoor ads help alleviate boredom when waiting on the street	3.7	1.3
I tend to pay more attention to outdoor ads in the following situations		
when the outdoor ads are creative	4.6	1.2
when the outdoor ads have vivid colors	4.5	1.1
when I am in a spacious environment	3.8	1.2
when I am in an outdoor environment where pedestrian flow is high	3.1	1.2

Note: 6-point scale with 1=strongly disagree 6=strongly agree

Figure 1 The ads with the highest awareness



The advertisement for Svenson hair care features the brand's logo at the top, which is written in a stylized green font. Below the logo, the Chinese text '史雲遜®護髮中心' is displayed. The main text reads '「全靠史雲遜，令我頭髮健康，型得起！」' in a bold, black font. Below this, the name '— 陳豪' is written in a smaller font, accompanied by a signature. The central image shows a man with dark hair, wearing a dark suit jacket and a necklace, looking directly at the camera with his hand near his chin. At the bottom of the advertisement, there is a black box containing a phone icon, the number '2368 0283', and the text '預約免費髮理諮詢'. Below this, there is a red arrow icon pointing right, followed by the address '漢口道28號 亞太中心1609室' and the website 'www.svensonhair.com.hk'.

REFERENCES

- admanGo. (2010), "Hong Kong Adspend Market – Media Mix January to December 2009". 202 Tai Sang Commercial Building, 24-34 Hennessy Road, Wanchai, Hong Kong.
- Atkin, C. and Block, M. (1983), "Effectiveness of celebrity sources", *Journal of Advertising Research*, vol. 23, no. 1, pp. 57-62.
- Beattie, A. and Mitchell, A. A. (1985), "The relationship between advertising recall and persuasion: An experimental investigation", in Linda F. A. and Michell A. A. (eds.), *Psychological processes and advertising effects*, Lawrence Erlbaum Associates, Hillsdale, NJ, 1985, pp. 129-156.
- Belch and Belch, (2007), *Advertising and Promotion*, 7th edition, McGraw-Hill Irwin, NY.
- Bhargava, M. and Donthu, N. (1999), "Sales response to outdoor advertising", *Journal of Advertising Research*, vol. 39, no. 4, pp. 7-18
- Bhargava, M., Donthu, N. and Caron, R. (1994), "Improving the effectiveness of outdoor advertising: Lessons from a study of campaigns", *Journal of Advertising Research*, vol. 34, no. 2, pp. 46–56.
- Chan, K. (1994), "Size doesn't always matter when it comes to advertising in HK's MTR", *Media*, July 8, p. 18.
- Chan, K. (1995), "Poster awareness depends very much on creative execution: Big is not always better on the MTR", *Media*, June 23, p. 14.
- Donthu, N., Cherian, J. and Bhargava, M. (1993), "Factors influencing recall of outdoor advertising", *Journal of Advertising Research*, vol. 33, no. 3, pp. 64–72.
- Dutta-Bergman, M. J. (2006), "The demographic and psychographic antecedents of attitude toward advertising", *Journal of Advertising Research*, vol. 46, no. 1, pp.102-112.
- Fernandez, K. V. and Rosen, D. L. (2000), "The effectiveness of information and color in Yellow Page advertising", *Journal of Advertising*, vol. 29, no. 2, pp. 61-73.
- Finn, A. (1988), "Print ad recognition readership scores: An information processing perspective", *Journal of Marketing Research*, vol. 25, no. 2, pp. 168-177.
- Francese, P. (2003), "More home less", *American Demographics*, vol. 25, no. 8, pp. 40-41.

- Hanssens, D. M. and Weitz, B. A. (1980), "The effectiveness of industrial print advertisements across product categories", *Journal of Marketing Research*, vol. 17, no. 3, pp. 194-306.
- JCDecaux Pearl & Dean Limited, (2006), "Out-of-home Media and Mass Transit Railway Advertising". Presentation made by Ms. Teresa Fung, General Manager of JCDecaux Pearl & Dean at Hong Kong Baptist University on March 21.
- JCDecaux Pearl & Dean Limited, (2010), "MTR Facts", Available at http://www.jcdecaux.com.hk/mtr_mediakit.html (accessed on 15 July 2011).
- JCDecaux Transport (2011), "MTR Advertising Research Kit 2011", Available at <http://www.jcdecaux.com.hk/documents/mtr/ResearchKit201106sh.pdf> (accessed on 29 November 2011).
- Katz, (2003), *The Media Handbook: A Complete Guide to Advertising Media Selection, Planning, Research, and Buying*, 2nd ed., Lawrence Erlbaum, Mahwah, NJ.
- King, K. W. and Tinkham, S. F. (1990), "The learning and retention of outdoor advertising", *Journal of Advertising Research*, vol. 29, no. 6, pp. 47–51.
- Lang, A. and Lanfear, P. (1990), "The information processing of televised political advertising", in Goldberg, M. E., Gorn, G. and Pollay, R. W. (eds.), *Advances in Consumer Research*, vol.17, Association for Consumer Research, Provo, UT, pp. 149-158.
- Lohse, G. L. (1997), "Consumer Eye Movement Patterns on Yellow Pages Advertising", *Journal of Advertising*, vol. 26, no. 1, pp. 61-73.
- MacInnis, D. J. and Jaworski, B.J. (1989), "Information processing from advertisements: Toward an integrative framework", *Journal of Marketing*, vol. 53, no. 4, pp. 1-23.
- MacInnis, D. J., Moorman, C. and Jaworski, B. J. (1991), "Enhancing and measuring consumers' motivation, opportunity, and ability to process brand information", *Journal of Marketing*, vol. 55, no. 4, pp. 32-53.
- Meurs, L.V. and Aristoff, M. (2009), "Split-second recognition: What makes outdoor advertising work?", *Journal of Advertising Research*, vol. 49, no. 1, pp. 82–92.
- Mitchell, A. A. (1981), "The dimensions of advertising involvement", in Monroe K. B. (ed.), *Advances in Consumer Research*, Vol.8, Association for Consumer Research, Ann Arbor, MI, 1981, pp. 25-30.
- Moore, D.L., Hausknecht, D. and Thamodaran, K. (1986), "Time compression, response opportunity and persuasion", *Journal of Consumer Research*, vol. 13, no. 1, pp. 85-99.

- Osborne, A. C. and Coleman, R. (2008), "Outdoor advertising recall: A comparison of newer technology and traditional billboards", *Journal of Current Issues and Research in Advertising*, vol. 30, no. 1, pp. 13–30.
- Pechmann, C. and Stewart, D. W. (1989), "Advertising repetition: A critical review of wearin and wearout", in Leigh J. H. and Martin, C. R. Jr. (eds.), *Current issues and research in advertising*, Vol.11, Ann Arbor: Graduate School of Business Administration, University of Michigan, pp. 285-329.
- Petty, R. E. and Cacioppo, J. T. (1979), "Effects of issue involvement can increase or decrease persuasion by enhancing message relevant cognitive response", *Journal of Personality and Social Psychology*, vol. 37, no. 10, pp. 1915-1926.
- Petty, R. E., Cacioppo, J. T. and Schumann, W. T. (1983), "Central and peripheral routes to advertising effectiveness: The moderating role of involvement", *Journal of Consumer Research*, vol. 10, no. 2, pp. 135-146.
- POAD, (2008), "Smart Billboard", POAD Group Ltd., Hong Kong.
- Prendergast, G. and Chan, L. W. (2005a), "The effectiveness of cinema advertising in Hong Kong", *International Journal of Advertising*, vol. 24, no. 1, pp. 79–93.
- Prendergast, G. and Yuen, S. M. (2005b), "Perceptions of handbills as a promotional medium: An exploratory study", *Journal of Advertising Research*, vol. 45, no. 1, pp. 124–131.
- Schleuder, J. (1990), "Effects of commercial complexity, the candidate, and issue vs. image strategies in political advertising", in Goldberg, M. E., Gorn, G. and Pollay, R. W. (eds.), *Advances in Consumer Research*, Vol.17, Association for Consumer Research, Provo, UT, 159-168.
- Speck, P. S. and Elliott, M.T. (1997), "Predictors of advertising avoidance in print and broadcast media", *Journal of Advertising*, vol. 26, no. 3, pp. 61–76.
- Sissors and Bumba, (1996), *Advertising Media Planning*, 5th ed. NTC Business Books, Lincolnwood, IL.
- Taylor, C. R. and Franke, G.R. (2003), "Business perceptions of the role of billboards in the U.S. economy", *Journal of Advertising Research*, vol. 43, no. 2, pp. 150-161.
- Thorson, E. and Zhao, X. (1988), "Attention overtime: Behavior in a natural viewing environment", Paper presented to American Academy of Advertising, Chicago.
- Till, B.D. and Baack, D.W. (2005), "Recall and persuasion: Does creative advertising matter?", *Journal of Advertising*, vol. 34, no. 3, pp. 47-57.
- Wilson, R. T. and Till, B. D. (2008), "Airport advertising effectiveness: An exploratory field study", *Journal of Advertising*, vol. 37, no. 1, pp. 59-72.