

# The effectiveness of minibus taxis as an alternative out of home advertising medium

AT Roux

*Department of Marketing, Logistics and Sport Management  
Tshwane University of Technology*

rouxat@tut.ac.za

## ABSTRACT

The evolution of transit advertising offers marketers a whole range of new opportunities to engage and reinforce their advertising messages, and even to entertain commuters. Minibus taxis are the most-viewed Out-of-home advertising medium, and the dominant mode of transport in South Africa. Despite the potential opportunities and the reach of minibus taxi advertising in the country, there is a lack of understanding of the effectiveness of this medium from an emerging perspective. Therefore, this study attempts to fill this lacuna by investigating the relationships between constructs that might further contribute to the effectiveness of minibus taxi advertising. The target audience comprises regular minibus taxi commuters at six of the largest taxi ranks in Tshwane. Judgement sampling was used; and a total of 1200 questionnaires were completed. The results show that the strengths of the relationships differ: the strongest relationship was found between commuters' view of minibus taxi advertising and the effectiveness of minibus taxi advertising; while the weakest relationship was between the attitude towards advertising in general, and the perceptions of minibus taxi advertising. The research is beneficial to marketers who intend to make use of this conduit, in order to target minibus taxi commuters – who are typically the key decision-makers in household purchases.

South Africans spend, on average, 59 minutes each day commuting to work, compared with the 45 minutes spent by commuters in the United Kingdom, 44 minutes in Germany, and 43 minutes in the Netherlands (World Bank in PMG, 2014). This increased time spent outside homes in the open air – whether for recreation, or simply for commuting from one place to another – presents an opportunity for Out-of-home (OOH) advertising. Recent infrastructural developments, such as the new transportation hubs, new airports, taxi-rank upgrading, SARCC (the South African Rail Commuter Corporation) integration, the new

upmarket Gautrain, the Bus Rapid Transport (BRT) system, should result in an even wider range of OOH advertising media opportunities (Du Preez, 2015). These expansions in public transport routes and the upgrades to minibus taxi ranks and stations have encouraged advertisers to target commuters, as they wait for their transport (PricewaterhouseCoopers, 2013).

Currently, minibus taxis are the most-viewed OOH advertising channels, reaching 87% of all adults in South Africa (OMD South Africa, 2013). This is the primary mode of transport

for the majority of the population (18 million people); and it accounts for 69% of public transport in the country (StatsSA, 2013). With more than 150 000 minibus taxis on the road, and the nearly three quarters of households being able to access a minibus taxi service within one kilometre of their home, this mode of transport currently dominates the market.

Consequently, minibus taxis are used by a significant percentage of workers on a daily basis (26,5%); and these commuters are typically the key decision-makers in their household purchases (OMD South Africa, 2013). It is clear that there are opportunities for advertisers to use minibus taxi advertising to engage and reinforce their advertising messages – and even to entertain commuters.

## **THE PROBLEM INVESTIGATED**

Despite the potential offered by the wide variety of alternative options in the OOH advertising media landscape in South Africa, large advertisers still rely mostly on traditional OOH advertising, or on billboards (Nielsen, 2013). Alternative OOH advertising formats – such as minibus taxi advertising, in particular – remain under-utilised and largely unexplored, despite all the developments and the attractiveness of this medium (Du Preez, 2015; Roux, van der Waldt & Ehlers, 2013).

OOH advertising has not received the attention it deserves in the literature. Limited studies in this area have been published over the past decade; and these have mainly focused on the effectiveness of free-standing outdoor advertising signs or billboards (Osborne & Coleman, 2008; Taylor et al., 2006, Van Meurs & Aristoff, 2009; Wilson & Till, 2011). More recently, the specific requirements when creating outdoor advertising messages for a mobile audience have been researched (Franch, Lopes, Albiol, 2014; Wilson, Baack & Till, 2015).

Even less research on transit advertising can be found, with the exception of exterior-bus advertising (Prendergast & Hang, 1999) and subway advertising in Hong Kong (Chan & Fung, 2013), airport advertising at the La Guardia airport in New York (Wilson & Till, 2008) and taxi-cab advertising in Scotland, UK (Veloutsou & O'Donnell, 2005). However, there is a serious lack of academic literature on transit advertising – in an emerging market context, such as South Africa.

Despite the large number of potential opportunities and the reach of minibus taxi advertising in the country, there is still a lack of understanding of the effectiveness of this medium.

The unique contribution of this study is that it is one of the first to examine minibus taxi advertising media in the South African context. From a practical perspective, this study can assist marketers, advertisers, and brand managers in understanding minibus taxi advertising, in order to make use of this unique OOH advertising channel effectively for their advertising purposes.

## **THE RESEARCH OBJECTIVES**

Despite the potential of minibus taxi advertising, academics have devoted very limited attention to it. The main purpose of this study is to investigate the effectiveness of minibus taxis as an advertising medium in South Africa, by determining the relationship between the constructs that influence this effectiveness. This was done by utilising a number of acknowledged measuring scales in the field of advertising (Mehta, 2000) and transit advertising media (Veloutsou & O'Donnell, 2005), by developing a new scale for minibus taxi advertising in the media context.

More specifically, this study aims to achieve the following research objectives (ROs):

- RO<sub>1</sub>*: Compare the perceived degree of exposure to different transit advertising media formats;
- RO<sub>2</sub>*: Establish the attitudes of regular minibus taxi commuters towards advertising in general;
- RO<sub>3</sub>*: Determine the general view of regular minibus taxi commuters towards minibus taxi advertising;
- RO<sub>4</sub>*: Examine the effectiveness of minibus taxi advertising;
- RO<sub>4</sub>*: Explore the perceptions with regard to minibus taxi advertising in the media context; and lastly,
- RO<sub>5</sub>*: Investigate the strength of correlation between construct measures – with the aim of explaining any variations in the perceived effectiveness of minibus taxi advertising.

The rest of the article is structured as follows: Firstly, it presents the theoretical framework used for the hypothesis development. It then outlines the methods used to design the study; and thereafter, it presents the results. Finally, the article provides conclusions, summarises the limitations, and recommends some areas for future research.

## THE THEORETICAL FRAMEWORK

### *Minibus taxi advertising as a transit advertising media platform*

The nature of public transit advertising media, and in particular minibus taxi transport in South Africa, is rather different in comparison to that in the more-developed countries. The public transport in these countries is well developed in urban centres; and it is utilised by the broad public (Wilson & Till, 2008). Commuters using taxicabs are part of the higher-income segment of the market; and they are transporting only a few passengers at a time (Veloutsou & O'Donnell, 2005).

In South Africa, most minibus taxi commuters are part of the lower- and middle-income segment; while private transport users fall into the higher-income segment (StatsSa, 2013). Minibus taxis are the most popular mode of transport in urban areas for the majority of the South African population; and these buses can transport up to sixteen passengers (PMG, 2015).

Minibus taxi commuters are seen as a captive audience in a controlled environment, considering that these commuters spend on average about 58 minutes daily inside a taxi – where they could well be exposed to advertising media (PMG, 2015). Advertising in the transit environment is not without its challenges. It is probable that transit advertising media would have to compete for the attention of passengers – with all the distracting stimuli in the transit environment (Wilson & Till, 2008).

Transit advertising may reach people who are not necessarily interested in what is being advertised; or, alternatively, they might be merely too absorbed in their thoughts to even notice a message (Roux & van der Walddt, 2014). Certain transport vehicles have a negative image; and they carry an associated risk. For example, a mud-splashed bus or vandalised graffiti-sprayed train might not benefit the brand being advertised (Chan & Fung, 2013). This type of advertising also has its creative limitations. The messages on the outside of vehicles demand visual simplicity and short copy because they are fleeting compared to those placed on the inside, where captive commuters might spend more time (Prendergast & Hang, 1999).

Consequently, transit advertising is predominantly used as a secondary or support-advertising medium; since it works best in conjunction with traditional advertising media, such as television and radio (Veloutsou & O'Donnell, 2005).

### Hypothesis development

Contemporary OOH advertising media includes four major platforms: Outdoor advertising media; street-and-retail furniture advertising media; transit advertising media, and alternative OOH advertising media. Each of these major platforms, in turn, comprises specific media formats (Roux et al., 2013). The transit advertising-media platform consists of two formats: moving transit advertising affixed to the outside or inside of moving vehicles, trains, buses, taxis; and static or stationary advertising positioned in the common areas of train stations, taxi ranks, terminals and airports (Roux et al., 2013).

The focus of this article is on a unique type of moving transit advertising media in South Africa: minibus taxi advertising.

Figure 1 presents a proposed model for the effectiveness of minibus taxi-advertising; and it can be used to guide the study. The study aims to extend the existing, yet very limited body of knowledge, on transit media, with regard to the understanding of how exposure to transit advertising media, attitudes towards

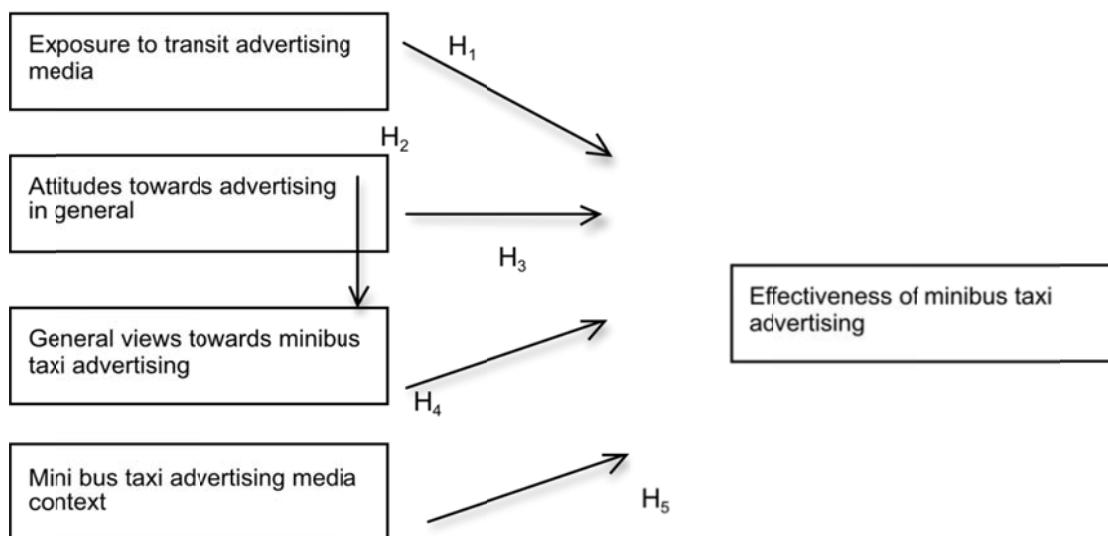
advertising in general, general views towards minibus taxi advertising and minibus taxi-advertising media relate to the effectiveness of minibus taxi advertising.

The theory used to develop the five hypotheses in the model will be discussed in the following sections.

#### *Perceived degree of exposure to the advertising media*

The opportunity to see a specific advertisement, or to come in contact with a specific medium, has been used extensively in the past to examine and estimate exposure (Belch & Belch, 2012; Cannon et al. 2002; Veloutsou & O'Donnell, 2005). These contacts can be estimated by considering the unique physical features of the different OOH advertising media types, or to view them from the perspective of the passer-by. For example Donthu, Cherian and Bhargava (1993) examined which features should

**FIGURE 1**  
Schematic Illustration of hypothesized model for minibus taxi advertising effectiveness



best be used to estimate the exposure rates to outdoor advertising boards, such as their location and position. They found that advertising boards aimed at drivers of cars were more effective when placed on the highways when compared with suburban roads, and at the right-hand side of the road compared with on the left-hand side.

This study concluded that repeated exposure (the number of boards with the same advertisement included in a campaign) was an important factor in successfully influencing the effectiveness thereof.

Wilson and Till (2008) conducted a study on the effectiveness of airport advertising media in New York City's La Guardia Airport, using ethnographic observations to explore how air travellers interact with this type of transit medium, in addition to surveys to measure the recall and recognition of airport advertising. The impact of the locations of the advertisements in the airport terminals was assessed – based on the level of exposure to travellers. The findings suggested that placing advertisements on unusual or unique media vehicles, locations with longer dwelling times and less distracting stimuli all help to increase the effectiveness of transport airport media advertising.

In addition, it also revealed that recall and recognition amongst frequent flyers was twice as big, when compared with infrequent flyers. Similarly, Chan and Fung (2013) found that the frequency of travelling on the subway in Hong Kong was positively correlated with the level of awareness of advertisements and attitudes towards this type of advertising.

Using respondents' perceived exposure to media as a measure might not capture the real contact or be completely objective; but it does provide some insights into the effectiveness of different media types (Cannon et al., 2002). Consequently, Veloutsou and O'Donnell (2005) estimated the exposure to a number of transit advertising media from the perspective of the passer-by. This study found that perceived contact with transit advertising was strongly correlated with the effectiveness of taxi-cab advertising.

In South Africa, minibus taxi commuters are a captive audience exposed to advertisements on transit vehicles, boards at taxi ranks, and at bus terminuses, while waiting at common transit areas. Consequently, advertisers typically combine a variety of mobile and static transit advertising types in one campaign, in order to maximise the exposure to this commuter market (PMG, 2015). It is, therefore, hypothesised that:

*H<sub>1</sub>: Commuters' perceived extent of exposure to transit advertising media is positively correlated to their perceived effectiveness of minibus taxi advertising.*

#### *Attitudes towards advertising media in general*

The Fishbein theory states that an individual's attitude is a function of the individual's own beliefs about the object, and the evaluative aspects of these beliefs (Kaplan & Fishbein, 1969). Attitude towards advertising is important to track; because it may impact consumers' exposure and reactions to individual advertisements through a variety of cognitive and affective processes (Mehta, 2000). Consequently, some researchers have studied the relationships between the

attitude towards advertising in general, and the attitude towards advertising in specific media.

For example, Schlosser, Shavitt and Kanfer (1999) found that the attitudes and perceptions towards Internet advertising and the attitude towards advertising in general were significantly different. Tan and Chia (2007) explored the relationship between attitude towards advertising in general and the attitude towards advertising in the traditional advertising media (television and print). A significantly positive association between television attitudes and the attitude towards advertising in general was reported; but the relationship between print attitudes and the attitude towards advertising in general was found to be insignificant.

Some researchers focused on the attitude towards non-traditional and OOH advertising media. Dahlén and Edenius (2007) found that placing a message in a non-traditional advertising medium usually resulted in more favourable attitudes. Furthermore, studies dealing with transit advertising media, such as that of Veloutsou and O'Donnell (2005), have tested and confirmed the effectiveness of OOH advertising on this attitudinal level. Thus, a positive attitude towards advertising in general may result in a positive attitude towards a specific advertisement or advertising in a specific context – such as minibus taxi advertising. Therefore, the following hypothesis is stated:

*H<sub>2</sub>: Commuters' attitude towards advertising in general is positively correlated with their view of minibus taxi advertising.*

Attitudes towards advertising in general have been proven to influence the success of any specific advertising message (Mehta, 2000). A person's predisposition to respond consistently towards advertising in general, either favourably or unfavourably, would mediate the effectiveness of any given advertisement (Schlosser et al., 1999). This also seems to be valid in the context of OOH advertising. Osborne and Coleman (2008) found that consumers with a more favourable attitude to advertising were more likely to recall outdoor advertisements. In a study by Prendergast and Hang (1999), exterior-bus advertising was found to be more effective when consumers had positive attitudes towards advertising in general.

Veloutsou and O'Donnell (2005) reported that commuters who appreciated the value of advertising in general were more likely to notice, read, and remember taxi-cab advertising. The following hypothesis can, therefore, be stated:

*H<sub>3</sub>: Commuters' attitudes towards advertising media are positively correlated with their perceived effectiveness of minibus taxi advertising.*

#### *General views towards minibus taxi advertising*

The views towards OOH advertising seem to be diverse. In some cases, commercial messages on outdoor advertising boards are regarded as socially unacceptable. For example, alcohol and tobacco companies in America were criticised by the authorities and consumer groups for using outdoor advertising to target ethnic minorities, or lower-income groups (Lowery & Sloane, 2014). Some serious environmentalists perceive OOH media advertising to be obtrusive; and they are concerned about the visual pollution caused by

excessive and/or unregulated OOH media advertising. In one such case, the authorities in Sao Paulo, Brazil, banned outdoor advertising in the city (Bevins, 2010). However, others maintain that such advertising enhances a city's image; and properly controlled OOH media advertising can generate valuable revenue for both town and city councils. They believe that tasteful OOH advertising media can contribute to the aesthetics and characteristics of business centres and cities; while some residents in townships or rural areas in South Africa describe billboards as the flowers of townships that add some colour to an otherwise dull environment (Jordaan, 2002).

Poalses and Joubert (2014) explored the role of media advertising in the lives of different consumer segments in South Africa; and they found that consumers from the mass and middle-market segments revealed a strong affinity for traditional media advertising; and they view billboards as being more effective than new media advertising, such as the internet or cellphones. Similar views were found when Cheung and Leung (2014) examined differences in attitudes towards OOH media advertising in the United Kingdom, China, and Hong Kong.

Their study also revealed that Hong Kong and Chinese respondents held the most favourable attitudes towards OOH media advertising; while UK respondents held the least-favourable attitudes. Surprisingly, the respondents from the three areas had a more favourable attitude towards OOH media advertising when compared with Internet advertising. Veloutsou and O'Donnell (2005) looked at consumers' perceptions of taxi advertising; and these authors found that most consumers expressed neither a positive nor a negative view towards taxi advertising as an advertising medium.

It should be noted that the number of respondents who did have a positive view

exceeded those who had a negative view. In their study on the factors influencing outdoor advertising, Donthu et al. (1993) found that there was a relationship between attitude towards advertising and the recall of outdoor advertising, which they used as a method of measuring the effectiveness of such advertising.

*H<sub>4</sub>: Commuters' general views towards minibus taxi advertising are positively correlated with their perceived effectiveness of minibus taxi advertising.*

#### *Advertising-media context*

The choice of a media platform (such as OOH or home advertising), and within a platform the choice of a particular media format (such as transit advertising) and vehicle (advertisements on a minibus taxi), would often carry direct implications for a company or a product image. Media-context studies explore how and which media-context variables influence the effects of the advertisements situated in that context (Bronner & Neijens, 2006). This is also referred to as the media-option-source effect: "The differential impact the advertising exposure would have on the same audience member if the exposure occurs in one media option rather than in another" (Belch & Belch, 2012).

Both objective media-context variables, such as genre, size and content, as well as subjective and qualitative variables, which depend on the receiver's interpretation, such as involvement and affect induced by the medium's context, have been studied during the past decade (Janssens & De Pelsmacker, 2005; Malthouse, Calder & Tamhane, 2007).

However, the qualitative values of OOH advertising media – such as the image of the different media types and the context in which they are placed – have received very limited attention from researchers, despite the fact that global brands are

increasingly relying on these values to promote the image of their brands (Wilson & Till, 2011). For example, part of L'Oreal Paris' long-term strategy is the iconic OOH-advertising signs in Toronto's premier shopping district – to reinforce the brand's high quality and chic image with the consumer. They are of the opinion that it would help to associate their brand with the image of the medium, and the area in which it is located.

This trend can also be seen in South Africa. For instance, Clinique display their eye-catching, international creative concepts on well-designed signs and fixtures in upmarket malls, such as Melrose Arch and Sandton, in order to strengthen their global and upmarket image with their target audience (World Outdoor Advertising News, 2010).

Wilson and Till (2011) investigated this trend – by examining the impact of outdoor advertising boards in specific contexts – on consumers' overall attitude towards the brand – and the associated image. They used quantitative experimentation, by showing the digital manipulation of boards – with either more-positive, or more-negative environments – to a number of tests and control groups of students, and then measuring their reactions via surveys. The results suggested that the context in which outdoor advertisements are placed does not appear to affect consumers' attitudes and beliefs about the advertised brand. However, some recent studies have found that exposure to different OOH advertising media in a specific context have an impact on consumers' processing of, and reactions to the messages (Burke, 2009; Dennis et

al., 2013; Dennis et al., 2014). It is thus hypothesised that:

*H<sub>5</sub>: The minibus taxi-advertising media context is positively correlated with the perceived effectiveness of minibus taxi advertising.*

## THE RESEARCH METHOD

### ***Data collection and sampling***

Correlational research that attempts to determine the extent of a relationship between two or more variables by using statistical data was used in this study (Iacobucci & Churchill, 2010). The purpose of the study was to determine the relationships between constructs that contribute to the effectiveness of taxi advertising, specifically regular minibus taxi commuters' attitudes towards the advertising media in general, their view of minibus taxi advertising, their potential level of exposure to the medium, and the taxi-advertising media context.

Non-probability judgment sampling was applied to select the 200 regular minibus taxi commuters at six of the largest intermodal transport-interchange facilities in the City of Tshwane's Metropolitan Municipal Area: Denneboom (Mamelodi), Belle Ombre (Marabastad), Mabopane Station (Soshanguve/Mabopane), Blood Street/Dr Savage Taxi Ranks (City Centre), Pretoria Station/Bosman Street (City Centre) and the Hammanskraal Taxi Rank.

This sampling method was deemed most appropriate; since a reliable and professional authority in the transit-media industry was available to help with assembling a representative sample; and



this resulted in saving time and money (Iacobucci & Churchill, 2010). To ensure data stability and to enable selective hypothesis-testing, a reasonable sample size of 1200 commuters was employed. A large transit-media company helped the researcher with the selection and access to ranks at each of the facilities. The fieldwork spanned a period of 8 weeks, with trained interviewers working at different times in the mornings and afternoons, weekdays and weekends, in order to approximate a proper representation in the sample of regular minibus taxi commuters. The respondents who passed the data-collection point at or close to the selected taxi ranks were screened, to ensure that they were regular minibus taxi commuters; and they were then invited to participate in the study.

### ***The measuring instrument***

Four existing and one new measuring scale were used to measure the different constructs of the study. The scale by Mehta (2000) was used to quantify the commuters' attitudes towards advertising media in general; because this scale measured the learned predisposition to respond in the consistently favourable or unfavourable manner to advertising; and this had been used previously in the context of OOH advertising media (Donthu, Cherian & Bhargava, 1993, Veloutsou & O'Donnell, 2005).

The degree of exposure, the general views towards minibus taxi advertising, and the effectiveness of minibus taxi advertising were measured by using scales from the study of Veloutsou and O'Donnell (2005). Some items were added to fit the context of minibus taxi advertising in South Africa. For example, a clear distinction was made between the different types of advertising in this environment: minibus taxis covered in

advertisements, advertising placed inside the minibus taxi, and radio advertisements inside the minibus taxis.

The scale used to quantify the minibus taxi advertising media context was developed on the basis of a series of discussions with experts at a large transit-medium company, as well as specialists at a media agency. Four key variables that might influence how advertised brands are interpreted in this context were identified on the basis of this insight. These variables were then formulated as statements. To ensure that the respondents interpreted them correctly, the statements were firstly pre-tested amongst 20 students, using minibus taxis as their primary mode of transport. Some minor adjustments had to be made – for example, explaining the concepts 'maintained' and 'comfortable minibus taxis'. The items in four of the scales were measured on a five-point Likert scale, with 1 representing 'Strongly disagree' and 5 representing 'Strongly agree', so that the researcher could establish the intensity of the respondent's feelings as regards the particular statement made. The perceived degree of exposure to different transit advertising media formats were measured on five-point frequency scale, with 1 representing 'Very rarely' and 5 representing 'Very often', in order to offer some insights into the effectiveness of the media formats under investigation.

A pilot test with the whole questionnaire was carried out with 30 subjects. These were not included in the sample that was used to establish the level of reliability. After some minor adjustments, the data collection commenced across the City of Tshwane's Metropolitan Municipal Area.

### ***The data analysis***

The data analysis for this study was conducted by using IBM SPSS Version 23 and JASP Version 0.7.1.12. A number of different statistical tests were applied to analyse the

data. The descriptive statistics of the data linked to  $RO_1$  to  $RO_5$  are reported. Furthermore, the similarity of commuters' perceived degree of exposure to the different transit advertising-media formats, linked with  $RO_1$ , was examined via the proportional Z-test. For  $RO_1$  to  $RO_5$  the statistical significance was examined via t-tests; while Cohen's d was calculated to determine the effect-size statistics or the relative magnitude of the differences between the means for  $RO_2$  to  $RO_5$ . An effectual size of 0.2 was regarded as 'small', 0.5 as 'medium', and 0.8 as 'large' – as suggested by Cohen (1969). For the hypotheses linked to  $RO_6$ , the Spearman method was used to test the relationship between the constructs, as proposed in the five stated hypotheses. The sampling distributions were considered to be normally distributed, due to the large size of the sample. The researcher used a 95% level of confidence, and a subsequent significance level of 5% (p-value  $\leq 0.05$ ), to establish the guidelines for rejecting null hypotheses.

## THE RESULTS

The Cronbach's alpha values and the number of items for the constructs are summarised in Table 1. It can be seen that the reliability assessments for all the scales exceeded the minimum standard of 0.70, as suggested by Nunnally (1978).

**TABLE 1**  
Cronbach's alpha values for the constructs

Constructs	$\alpha$	Mean	SD	Number of items
Attitudes towards advertising media in general	0,84	3,67	0,89	5
General views towards minibus-taxi advertising	0,76	3,40	0,98	7
Minibus taxi-advertising media context	0,71	2,91	1,16	4
Effectiveness of minibus-taxi advertising	0,87	3,20	0,98	6

The sample of 120 was marginally dominated by females (51.6%). The majority of the respondents (71,1%) were between the ages of 19 to 30 years. Most of the minibus taxi commuters (79%) interviewed were employed, thus earning disposable income. The monthly household income of the majority of the respondents (59,8%) was below R8000; however, 30% earned an income of between R8000 and R15 000.

In terms of the type of public transport used, all of the respondents used minibus taxis (100%), followed by bus transport (36,17%), and lastly trains (13,75%). The majority of the commuters made use of a combination of modes of transport. The results reflect the considerable amount of time commuters spend on public transportation – either waiting for minibus taxi, or commuting. For example, more than 60,1% of them made use of minibus taxis twice a day; and they spend more than an hour in transit every day. Hence, the extended and regular time spent in commuting offers advertisers a recurring opportunity to communicate with this commuter market.

The behaviour of this captive market (Table 2) needs to be understood, in order to improve the strategies of marketers and advertisers.

The most common aspects commuters thought about in the taxi were their finances, as can be seen by the fact that 63,3% of the respondents mentioned that they think about "money, my budget, and getting a job". This is followed by thoughts about their daily responsibilities (49,8%) and their family/children/friends (45,8%). Their ambitions, dreams and their holidays (42,8%) were also on their minds. Understanding that commuters are interested in aspects, such as financial wellness, personal aspiration and the wellbeing of their families could guide the placement of relevant advertising messages on minibus taxis.

**TABLE 2**  
Commuters' behaviours in minibus taxis

Thinking about when in the taxi	n Responses	% Response rate	Activity while in the taxi	n Responses	% Response rate
My money, my budget, getting a job	760	63,3	Listening to the radio in the taxi	689	57,4
My work/task for the day	597	49,8	Busy on my cell phone/electronic device	561	46,8
My family /children/friends	550	45,8	Looking out of the window	490	40,8
My ambitions, my dreams, my holiday	514	42,8	Talking to the other passengers	468	39,0
What I am doing after work	421	35,1	Reading a magazine	328	27,3
What I am having for my next meal	420	35,0	Reading the newspaper	273	22,8
What shopping I need to do in the week	361	30,1	Watching TV in the taxi	107	8,9
What I need to make for dinner	343	28,6	Sleep/rest	66	5,5

**TABLE 3**  
Perceived exposure to different transit advertising media formats

	<i>Moving transit advertising media on taxis/ trains/ buses</i>	<i>Static transit advertising placed at the common transit areas</i>
	Often / very often	Often / very often
Proportional n	980	848
Total n:	1200	1200
Proportional %	81,7%	70,7%
Weighted average proportion (P):		0,762
Z =		
SQRT(P(1-P))		0,426
SQRT((1/n1)+(1/n2))		0,041
		0,017
P1-P2		0,110
Z=		6,324
Critical value:		2,480
P-value		0,000*

\*Significant

It is evident that commuters consume multiple media types while in transit. More than half of them indicated that they are listening to the radio in the taxi (57,4%); while others are reading the printed media (magazines 27,3%; newspapers 22,8%). At the time of the study, large plasma televisions inside minibus taxis had just been introduced – but in only a small number of taxis (PMG, 2015). This explains the low percentage of commuters (8,9%) watching television inside the taxis. The other activities with which commuters kept themselves busy while in the taxi, were mostly just looking out of the window (40,8%) and keeping themselves busy on their cellphones or electronic devices (46,8%), and talking to other passengers (39%). Marketers could thus include promotions via electronic media in their transit advertising-media campaigns, in order to obtain measurable and behavioural responses.

**RO<sub>1</sub>: Perceived degree of exposure to different transit advertising media formats**

A comparison of the respondents' perceived exposure to different transit advertising media formats is depicted in Table 3. The majority (81,7%) of the respondents indicated that they are exposed to moving transit advertising media often or very often; while significantly less (70,7%) declared that they very often or often have contact with static transit advertising placed at the common transit areas. This proportional difference in exposure to transit advertising-media formats is significant ( $p < 0.05$ ). Therefore, advertisements on moving transit vehicles are statistically on average more frequently noticed than static transit advertising placed at the common areas of taxi ranks, train stations and bus terminals. This is probably due to mobility and to the unique features of the vehicles that attract more

attention than static media (Roux, van der Waldt & Ehlers, 2013).

**RO<sub>2</sub>: Attitudes towards advertising in general**

When considering commuters' attitudes towards advertising in Table 4, it can be seen that all the means are significantly different from 3, which constitutes the mid-point or divide between agreement and non-agreement ( $p < 0.05$ ). For most of the statements, the magnitude of the differences were either large (Cohen's  $d \geq 0.08$ ), or medium (Cohen's  $d \geq 0.05$ ) – due to the respondents agreeing or strongly agreeing.

They regarded advertising as being a valuable source of information to keep them up to date with new product developments and features ( $M = 4,18$ ;  $SD = 0,85$ ). The magnitude of the differences in the means (mean difference = 1,18; 95% CI: 4,13 to 4,23) was large ( $d = 1,39$ ), thereby suggesting a strong level of agreement. Similarly, they indicated that they actually like to look at advertisements ( $M = 3,8$ ;  $SD = 0,88$ ). In this case, the magnitude of the differences in the means (mean difference = 0,80, 95% CI: 4,13 to 4,23) was also large ( $d = 0,91$ ).

Advertising was not perceived to be misleading ( $M = 4,66$ ;  $SD = 0,88$ ). Further, the magnitude of the differences in the means (mean difference = 1,67, 95% CI: 4,63 to 4,70) was large ( $d = 2,92$ ), suggesting strong agreement.

The effectual size statistic with regard to the statement that there are too many advertisements, was small ( $d = 0,33$ ), suggesting there was some agreement, but not necessarily strong agreement.

**TABLE 4:**  
Attitudes towards advertising in general

	Descriptives		One Sample T-Test				95% Confidence Interval	
	Mean	SD	t	p	Mean Difference	Cohen's d	Lower	Upper
Advertising keeps me up to date with new product developments and features	4,18	0,85	48,03	< 0,001	1,18	1,39***	4,13	4,23
I like to look at advertisements	3,80	0,88	31,54	< 0,001	0,80	0,91***	3,75	3,85
Advertising is often misleading (r)	4,66	0,57	101,15	< 0,001	1,67	2,92***	4,63	4,70
There are too many advertisements (r)	3,85	1,07	11,48	< 0,001	0,35	0,33**	3,29	3,42
Advertisements are entertaining	2,84	0,88	-6,35	< 0,001	-0,16	-0,18	2,79	2,89

Note: n = 1200, (r) = reverse-scored All tests, hypothesis is population mean is different from 3.  
Effect size \*\*\* = Large \*\* = Medium \* = Small

**TABLE 5**  
General views towards minibus taxi advertising

	Descriptives		One Sample T-Test				95% Confidence Interval	
	Mean	SD	t	p	Mean Difference	Cohen's d	Lower	Upper
I like to listen to radio ads inside the minibus taxi	3,66	0,94	24,15	< .001	0,65	0,70**	3,60	3,70
The concept of minibus taxi advertising is a 'creative' one	3,66	0,96	23,77	< .001	0,66	0,69**	3,60	3,71
I am familiar with the brand names advertised on minibus taxis.	3,68	0,99	22,62	< .001	0,65	0,65**	3,59	3,71
I prefer to look at minibus taxis completely covered with ads more than others with less advertising	3,64	0,95	16,18	< .001	0,44	0,47*	3,39	3,50
I like to look at minibuses covered in advertisements.	3,38	0,97	13,55	< .001	0,38	0,39*	3,32	3,43

Note: n = 1200 All tests, hypothesis is population mean is different from 3.  
Effect size \*\* = Medium \* = Small

The respondents did not seem to regard advertisements as particularly entertaining, as indicated by the small effect size ( $d = -0,18$ ). In fact, the average suggests disagreement. This might be due to a lack of creativity, or to the relevance of advertising to target this particular group.

### **RO<sub>3</sub>: General views towards minibus taxi advertising**

When examining the commuters' general views towards minibus taxi advertising (Table 5), it can be seen that all of the means are significantly different from 3 ( $p < 0,05$ ), all of which measured higher than the mid-point.

Furthermore, the effectual size statistics or the relative magnitude of the differences between the means were medium (Cohen's  $d \geq 0.05$ ) for three of the statements. This was the case for listening to radio advertisements, while commuting in a taxi ( $M = 3,66$ ;  $SD = 0,94$ ). This supports the integration of radio advertising with transit media to increase the effectiveness of a campaign aimed at this market.

Commuters have ample time sitting in a taxi; and they may thus welcome the diversion or distraction that advertisements on the radio can provide. Additionally, commuters regarded minibus taxis advertising to be creative and novel ( $M = 3,66$ ;  $SD = 0,96$ ), thereby suggesting that it could also be used to attract the attention of this target market, or to launch

new brands. The respondents also seemed to be rather familiar with the brand names advertised on minibus taxis ( $M = 3,68$ ;  $SD = 0,99$ ), thereby supporting the findings of Veloutsou and O'Donnell (2005) that this type of advertising is effective in reinforcing an existing message, or to maintain high levels of awareness for the leading brands.

The respondents affirmed that they look at minibus taxis completely covered in an advertisement ( $M = 3,64$ ;  $SD = 0,95$ ), but not necessarily more than vehicles with less advertising ( $M = 3,38$ ;  $SD = 0,97$ ). For both of these statements, the magnitude of the differences in the means was small or close to neutral.

**TABLE 6**  
Effectiveness of minibus taxi advertising

	Descriptives		One Sample T-Test				95% Confidence Interval	
	Mean	SD	t	p	Mean Difference	Cohen's d	Lower	Upper
I remember branded minibus taxis/taxi advertisements more than advertisements in other media	2,54	0,92	-17,43	< .001	-0,46	-0,50**	2,48	2,59
I often notice brands/advertisements on passing minibus taxis.	3,59	0,94	21,76	< .001	0,59	0,63**	3,54	3,65
I pay attention to the new branded taxis/taxi minibus advertisements.	3,68	0,97	24,33	< .001	0,68	0,70**	3,62	3,73
I often read brands/advertisements on minibus taxis.	3,40	1,05	13,09	< .001	0,40	0,38*	3,34	3,46
I often read brands/advertisements inside minibus taxis.	2,64	1,05	-11,88	< .001	-0,36	-0,34*	2,58	2,70

Note:  $n = 1200$  All tests, hypothesis is population mean is different from 3.  
Effect size \*\*= Medium \* = Small

Commuters suggested that they do not particularly discuss advertisements on minibus taxis with the other consumers ( $M = 2,83$ ;  $SD =$ ), or enjoy looking at advertising placed inside the minibus taxi ( $M = 3,16$ ;  $SD = 1,05$ ). For both of these statements, the differences were trivial, despite being statistically significant from 3 ( $p < 0.05$ ).

#### **RO<sub>4</sub>: Effectiveness of minibus taxi advertising**

All the means are significantly different from 3 ( $p < 0.05$ ) with regard to the effectiveness of minibus taxi advertising (Table 6). Although advertising on minibus taxis is not recalled

more frequently than advertising on other media ( $M = 2,54$ ;  $SD = 0,92$ ), it is known that advertising is not only aimed at the conscious mind, but also at the sub-conscious (Wilson, Baack & Till, 2015). Reading advertising inside taxis, and seeing the branded taxis would surely increase the brand's familiarity with the audience – especially when used as a support for other media in a campaign.

These factors can increase brand recognition and aid recall during the evaluation of alternatives, when buying products; since most of these commuters buy at shopping outlets close to the taxi ranks (PMG, 2015). Furthermore, it seems to have some ability to attract attention; since the respondents stated that they often notice advertisements on passing minibus taxis ( $M = 3,59$ ;  $SD = 0,94$ ). It is clear however, that newly branded taxis ( $M = 3,68$ ;  $SD = 0,97$ ) are more likely to attract interest.

The respondents indicated that they really do read those advertisements, which are placed

inside the vehicles ( $M = 2,64$ ;  $SD = 1,05$ ). Thus, although they are a captive audience, they might not be able to clearly see the brand message obscured by the 16 or more other passengers typically packed inside a taxi. Accordingly, advertisers must use strikingly visual branding to get noticed, when advertising on the exterior; but also ensure that advertisements placed inside are visible and interesting, in order to achieve the desired effect.

#### **RO<sub>4</sub>: Perceptions with regard to minibus taxi advertising in the context of the media**

When examining commuters' perceptions of the minibus taxi-advertising media context (Table 7), it is interesting to note that commuters slightly disagree with two of the statements; while they agree somewhat with the others. It can also be seen that all of the means are significantly different from 3 ( $p < 0.05$ ). However, the effect of the size statistics needs to be examined, in order to

**TABLE 7**  
Perceptions with regard to minibus taxi advertising media context

	Descriptives		One Sample T-Test				95% Confidence Interval	
	Mean	SD	t	p	Mean Difference	Cohen's d	Lower	Upper
Responsible taxi drivers will influence my perception towards the advertised brand positively	2,41	0,97	-21,13	<,001	-0,59	-0,61**	2,35	2,46
Larger minibus taxis, which are comfortable would influence my perception towards the advertised brand positively	2,54	1,02	-15,62	< 0,001	-0,46	-0,45*	2,48	2,60
Minibus taxis, which are clean would influence my perception towards the advertised brand positively	3,83	0,97	13,55	<.001	0,38	0,39*	3,32	3,43
Minibus taxis, which are kept in a good condition (maintained) would influence my perception towards the advertised brand positively	3,62	0,67	13,44	< 0,001	0,26	0,39*	3,22	3,30

Note: n = 1200      All tests, hypothesis is population mean is different from 3.  
Effect size \*\*= Medium    \*=Small

understand the actual magnitude of the differences between the means. The respondents suggested that responsible drivers ( $M = 2,41$ ;  $SD = 0,97$ ) are not likely to influence their perceptions towards the advertised brand positively. Furthermore, the magnitude of the differences in the means (mean difference = 0,59, 95% CI: 2,35 to 2,46) was medium ( $d = -0,61$ ); since they don't really agree. Similarly, the use of larger minibus taxis ( $M = 2,54$ ;  $SD = 1,02$ ) would probably not change their perceptions towards the advertised brand. On the other hand, the commuters suggested that the maintenance ( $M = 3,62$ ;  $SD = 0,67$ ) and cleanliness ( $M = 3,83$ ;  $SD = 0,97$ ) of the minibus taxis might influence their perception towards the advertised brands. For this reason, when transit media companies negotiate with minibus taxi owners and seek to use their vehicles for advertising purposes, it is stipulated that branded taxis must be kept clean and properly maintained. They also provide formalised car-wash structures in the townships (PMG, 2015).

The taxi recapitalisation project of the government to replace the aged and unroadworthy minibus taxis with new taxi vehicles is consequently good news for advertisers.

**RO<sub>5</sub>: Correlations between constructs that might contribute to the effectiveness of minibus taxi advertising**

The results of the hypotheses testing are indicated in table 8.

The first hypothesis ( $H_1$ ) investigates the correlation between the extent of exposure to transit advertising media and the perceived effectiveness of minibus taxi advertising. Based on the results ( $r = 0,627$ ,  $p < 0,05$ ),  $H_0$  is rejected in favour of the alternative ( $H_1$ ). There is a statistically significant, positive correlation; and the magnitude of this correlation can be described as medium, based on the "rule-of-thumb" proposed by Burns and

Bush (2006). The second hypothesis ( $H_2$ ) investigated whether or not there is a positive correlation between commuters' attitudes towards advertising in general and their view of minibus taxi advertising. A positive correlation was found between commuters' attitudes towards advertising media and their perceptions of minibus taxi advertising ( $r = 0,293$ ,  $p < 0,05$ ). Therefore,  $H_0$  is rejected in favour of the alternative ( $H_2$ ). However, the magnitude of the correlation is very weak (Burns & Bush, 2006). Only 8,6% of the variance in perceptions of minibus taxi advertising can be explained by the commuters' attitude towards advertising in general. The third hypothesis ( $H_3$ ) investigates the correlation between commuters' attitudes towards advertising in general and the effectiveness of minibus taxi advertising. The results suggest that there is a statistically significant, positive correlation between commuters' attitudes towards advertising media and the effectiveness of minibus taxi advertising ( $r = 0,328$ ,  $p < 0,05$ ) in general. Thus, the  $H_0$  is rejected in favour of the alternative ( $H_3$ ). The strength of this association is also rather weak (Burns & Bush, 2006); and there is a 10,76% common variance shared between the two constructs.

Hypothesis 4 is concerned with testing whether or not there is a positive correlation between commuters' views of minibus taxi advertising and the effectiveness of minibus taxi advertising. A strong positive correlation is observed ( $r = 0,856$ ,  $p < 0,05$ ), which is significant. Therefore,  $H_0$  is rejected in favour of the alternative ( $H_4$ ). Furthermore, 73,27% of the variance in the effectiveness of minibus taxi advertising can be explained by commuters' perceptions of minibus taxi advertising.

The last hypothesis ( $H_5$ ) investigates the correlation between the minibus taxi advertising media context and the effectiveness of minibus taxi advertising. The p-value ( $p < 0,05$ ) calculated in the test is



**TABLE 8**  
Spearman's rank-order correlations for hypotheses 1 to 5

<b>Hypothesis 1</b>			Effectiveness of minibus taxi advertising
Spearman's rho	Perceived exposure to transit advertising media	Correlation Coefficient	.627**
		Sig. (1-tailed)	.000
		N	1200
<b>Hypothesis 2</b>			General view of minibus taxi advertising
Spearman's rho	Attitudes towards advertising	Correlation Coefficient	0.293**
		Sig. (1-tailed)	0.000
		N	1200
<b>Hypothesis 3</b>			Effectiveness of minibus taxi advertising
Spearman's rho	Attitudes towards advertising media	Correlation Coefficient	.328**
		Sig. (1-tailed)	.000
		N	1200
<b>Hypothesis 4</b>			Effectiveness of minibus taxi advertising
Spearman's rho	Perceptions of minibus taxi advertising	Correlation Coefficient	0.856**
		Sig. (1-tailed)	0.000
		N	1200
<b>Hypothesis 5</b>			Effectiveness of minibus taxi advertising
Spearman's rho	Minibus taxi advertising media context	Correlation Coefficient	0.217**
		Sig. (1-tailed)	0.000
		N	1200

\*\* . Correlation is significant (1-tailed).

significant; and therefore,  $H_0$  is rejected in favour of the alternative ( $H_5$ ). The coefficient of determination implies that 43% of the variance effectiveness of minibus taxi advertising can be explained by the environmental influences.

## MANAGERIAL IMPLICATIONS AND RECOMMENDATIONS

The results shown in the previous section have several implications for marketers, advertisers or media planners. The reported association between the exposure to transit advertising

media and the effectiveness of minibus taxi advertising is in line with the direction of the first proposed hypothesis (Donthu et al., 1993; Chan & Fung, 2013; Veloutsou & O'Donnell, 2005; Wilson & Till, 2008). These results should be interpreted against the backdrop of the difference between the advertisers' current media expenditure on traditional OOH advertising compared with that of the transit media. In South Africa, more than half of OOH-advertising expenditure is spent on billboards; while only five per cent is spent on mobile transit media, such as minibus taxi advertising (Nielsen, 2013). This is true, despite the fact that it is the primary mode of

transport for the majority of the population (StatsSA, 2013) and the most viewed OOH advertising channel (OMD South Africa, 2013). Hence, advertisers relying on traditional OOH advertising might reach fast-moving vehicular traffic; but they would not obtain the required degree of exposure for their brand message amongst the sixteen passengers typically packed inside a minibus taxi. Marketers aimed at this commuter profile, should rather synergistically combine alternative OOH advertising options – such as the minibus taxi advertising, retail advertising displayed outside or inside shopping malls, or stores and promotions, or events/shows – in their marketing communication mix. For example, external minibus taxi branding could be aimed at the broader market, in order to achieve awareness; while the advertisements placed inside taxis could be used to deliver more detailed information. Using retail advertising with promotional messages at stores and malls close to taxi ranks could convince and remind commuters to buy or try a brand. Promotions in the form of live events or shows at transport interchange facilities could create an engaging experience for commuters to relate to the advertising message, or to participate in the event.

In line with the findings of previous studies (see, for example, those of Veloutsou & O'Donnell, 2005), a positive relationship was established between commuters' attitudes towards advertising in general and their views of minibus taxi advertising. Advertisers should capitalise on these positive opinions towards advertising by supplying the target market with the information they enjoy on any new products developed, and which could guide their purchase decision-making. New brands, or new product launches, could use this medium as part of their marketing communication mix to reinforce their message.

The results indicated a significantly positive, but weak correlation between commuters' attitudes towards advertising and the

effectiveness of minibus taxi advertising. Commuters might view advertising in a positive light; but apparently, this does not really influence how the advertisements on minibus taxis could affect the audience. This concurs with previous findings by other researchers (Prendergast & Hang, 1999; Veloutsou & O'Donnell, 2005). This study also found commuters' view of minibus taxi advertising to be associated with the effectiveness of minibus taxi advertising. The reported association is in line with the direction of the hypothesis, as proposed by the findings of Veloutsou and O'Donnell (2005) and those of Donthu et al. (1993). The overall positive attitude towards minibus taxi advertising is more positive than one would expect. It is surprising to find contemporary consumers expressing positive views towards the use of any advertising medium, as it is well established that the people often make every effort to avoid the increasing number of advertising messages – attempting thereby to catch their attention (Jordaan, 2002). This medium has the potential to bring the advertiser's message straight to commuters travelling back and forth to major metropolitan areas; and it cannot be ignored as easily as other media; because it cannot be switched off, as one would normally do with a television or a radio.

The attitude towards minibus taxi advertising could be enhanced by placing the relevant and entertaining messages on new, creative and attention-grabbing formats, rather than traditional outdoor advertising, as such. The communication message of an advertising campaign must be adapted for the environment, where the audience is exposed to messages – in an attempt to maximise their effectiveness (Roux & van der Walddt, 2014). Minibus taxis covered in advertisements aimed at fast-moving traffic result in limited dwelling time and require short copy and a limited number of high-impact visual cues. Environments with a captive audience, such as advertising placed inside a minibus taxi,

typically result in more time for exposure. However, interior advertising should be highly visible and engaging, such as video displays with local content and advertising mounted above the windshield. Furthermore, synergy in multi-media campaigns, which is aimed at this market should be optimised by using a combination of different types of advertising in this environment (minibus taxis covered in advertisements, advertising placed inside the minibus taxi and radio advertisements inside the minibus taxis) and even some of the more contemporary digital options introduced in South Africa, such as Transit TV (large plasma screens inside taxis, with blue-tooth technology to broadcast tailor-made programmes with the opportunity of advertising and the sponsorship of regular features) and Rank TV (extra-large TV screens strategically placed at the largest taxi ranks across South Africa) (PMG, 2015). This would offer commuters entertaining audio-visual messages; and it would even create a sense of community – when the commuters gather together to watch the large screen, for example, during major sporting events. Since passengers in captive environment are likely use cellphones, they should be encouraged to respond to a special offer, or to participate in a promotion. Finally, the results also indicate that the minibus taxi advertising media context is positively correlated with the effectiveness of minibus taxi advertising. This is in contradiction of the results of Wilson and Till (2011); but it concurs with several other recent studies on alternative OOH advertising (Burke, 2009; Dennis et al., 2013; Dennis et al., 2014). This could be because traditional outdoor advertising boards on highways directed at broader vehicular traffic might lack the motivation or opportunity to process the context; whereas alternative types, such as digital signage in malls and minibus taxi advertisements, are aimed at more specific target audiences in a different context. Further research is necessary to find out how the media context applies to other types of OOH-advertising media.

Media planners should minimise the potential negative image and risk of becoming associated with minibus taxi advertising by dealing with reputable transit-media companies, to ensure that the vehicles with advertising are clean and well maintained, and that dangerous drivers can be reported. Not all brands, or product types, might be suitable for transit advertising. Consequently, it is, therefore, important that careful consideration should be given to the fit between the brand/product image and the media context of the type of advertising used.

Since use was made of non-probability sampling, the results from this study cannot be generalised to the broader population. It is unlikely that the current sample would be an accurate representation of the target population, especially since other metropolitan areas were not included in the study. Future studies should, therefore, incorporate a wider area, in order to be representative of this target group. Digital options have not been examined, because of the exploratory nature of the study, the effectiveness of minibus taxis as a means of support within multi-media advertising campaigns, or more contemporary locations. The study also focused exclusively on minibus taxi advertising, which may be significantly different from advertising in other transit environments. Consequently, it is recommended that the scope be extended to include alternative mobile and static advertising-media options at transit hubs, in order to better assess the validity thereof.

## CONCLUSION

The relevant theory on the OOH-advertising media is inadequate; and it does not explore the potential of transit advertising-media formats, despite their potential to reach specific mobile consumers. No academic literature on mobile transit advertising from an emerging-country perspective could be found.

The contribution of this paper is to advance the understanding of alternative OOH-advertising media, and to demonstrate the relations between constructs that might contribute to the effectiveness of minibus taxi advertising media. Considering that the study is a first-of-its kind in an emerging context, future research aimed at advancing the current theory for this type of advertising is strongly recommended.

## REFERENCES

- Bronner, F. & Neijens, P. 2006. Audience experiences of media context and embedded advertising – A comparison of eight media. *International Journal of Market Research*, 48(1): 81-100.
- Burns, A. C. & Bush, R. F. 2006. *Marketing research with SPSS 13.0 student version for windows*. USA: Pearson Education.
- Chan, K. & Fung, M. 2013. Effectiveness of subway advertising in Hong Kong. *Journalism and Mass Communication*, 3(12): 757-767.
- Cheung, F. S. L. & Leung, W. F. 2014. Cross-cultural perspectives on attitudes towards outdoor advertising in the internet era. *GSTF International Journal on Business Review*, 2 (4): 252-257.
- Cohen, J. 1969. *Statistical Power Analysis for the Behavioural Sciences*. NY: Academic Press.
- Belch, G.E. & Belch, M.A. 2012. *Advertising and promotion: an integrated marketing communications perspective*. 9<sup>th</sup> ed. Boston: McGraw Hill Higher Education.
- Bevins, V. 2010. Sao Paulo advertising goes underground. *Financial Times*, 6. Available at <http://www.ft.com/cms/s/0/5ad26f14-b9e6-11df-8804-00144feabdc0.html>
- Burke, R. R. 2009. Behavioural effects of digital signage. *Journal of Advertising Research*, 49(2): 180.
- Cannon, H. M., Leckenby, J. D. & Abernethy, A. M. 2002. Beyond effective frequency: Evaluating media schedules using frequency-value planning, *Journal of Advertising Research*, 42(6): 33-47.
- Dahlén, M. & Edenius, M. 2007. When is advertising advertising? Comparing responses to non-traditional and traditional advertising media. *Journal of Current Issues & Research in Advertising*, 29(1): 33-42.
- Dennis, C., Brakus, J. J. & Alamanos, E. 2013. The wallpaper matters: Digital signage as customer-experience provider at the Harrods (London, UK) department store. *Journal of Marketing Management*, 29(3-4): 338-355.
- Dennis, C., Brakus, J. J., Gupta, S. & Alamanos, E. 2014. The effect of digital signage on shoppers' behaviour: The role of the evoked experience. *Journal of Business Research*, 67(11): 2250-2257.
- Donthu, N., Cherian, J. & Bhargava, M. 1993. Factors influencing the recall of outdoor advertising. *Journal of Advertising Research*. 33(3): 64-72.
- Du Preez, J. 2015. Trends in Out-of-Home. Available at <http://www.theredzone.co.za/1168-trends-in-out-of-home>
- Franch, E. B., Lopes, P. & Albiol, C. B. 2014. The creativity of the outdoor advertising in the mobile sector: A Case Study in Spain and Portugal. *Anàlisi*, (51): 17-34.
- Iacobucci, D. & Churchill, G. 2010. *Marketing Research: Methodological Foundations*. South-Western Cengage Learning.
- Janssens, W. & De Pelsmacker, P. 2005. Advertising for new and existing brands: the impact of media context and the type of advertisement. *Journal of Marketing Communications*, 11(2): 113-128.
- Jordaan, P.A. 2002. A rationale for the effective management of outdoor information transfer. Thesis. University of Pretoria.
- Kaplan, K. J. & Fishbein, M. 1969. The source of beliefs, their saliency, and prediction

- of attitude. *The Journal of Social Psychology*, 78(1): 63-74.
- Lowery, B. C. & Sloane, D. C. 2014. The prevalence of harmful content on outdoor advertising in Los Angeles: land use, community characteristics, and the spatial inequality of a public health nuisance. *American Journal of Public Health*, 104(4): 658-664.
- Malthouse, E. C., Calder, B. J. & Tamhane, A. 2007. The effects of media context experiences on advertising effectiveness. *Journal of Advertising*, 36(3): 7-18.
- Mehta, A. 2000. Advertising attitudes and advertising effectiveness. *Journal of Advertising Research*, 40(3): 67-71.
- Nielsen. 2013. Nielsen Adspend Available from [www.nielsen.com](http://www.nielsen.com)
- Nunnally, J. C. 1978. *Psychometric theory*. 2nd edn. New York: McGraw-Hill.
- OMD South Africa. 2013. South African Media Facts – Blueprint 2013.
- Osborne, A. C. & Coleman, R. 2008. Outdoor advertising recall: A comparison of newer technology and traditional billboards. *Journal of Current Issues and Research in Advertising*, 30(1): 13-30.
- Prendergast, G. & Hang, C. C. 1999. The effectiveness of exterior bus advertising in Hong Kong: A preliminary investigation. *Journal of International Consumer Marketing*, 11(3), 33-50.
- PricewaterhouseCoopers. 2013. Global entertainment and media outlook. Available from <http://www.pwc.com/gx/en/global-entertainment-media-outlook/segment-insights/out-of-home.jhtml>
- Poalses, J. & Joubert, J.P.R. 2014. Advertising in the eye of the time-constrained beholder. *The Retail and Marketing Review*, 1-16
- PMG. 2015. Introduction to Provantage Media Group, online at: <http://www.provantage.co.za/#intro>
- Roux, T., van der Walddt, D. L. R. & Ehlers, L. 2013. A classification framework for out-of-home advertising media in South Africa. *Communicatio*, 39(3): 383-401.
- Roux, A.T. & van der Walddt, D.L.R. 2014. Out-of-home advertising media: theoretical and industry perspectives, *Communitas* (19): 95-115.
- Schlosser, A.E., Shavitt, S. & Kanfer, A. 1999. Survey of Internet Users' Attitudes. *Journal of interactive marketing*, 13(3): 34-54.
- StatsSA, 2013. National Household Travel Survey. Available from [http://beta2.statssa.gov.za/?page\\_id=1854&PPN=P0320&SCH=6008National](http://beta2.statssa.gov.za/?page_id=1854&PPN=P0320&SCH=6008National)
- Tan, S. J. & Chia, L. 2007. Are we measuring the same attitude? Understanding media effects on attitude towards advertising. *Marketing Theory*, 7(4): 353-377.
- Taylor, C.R., Franke, G.R. & Bang, H. 2006. Use and effectiveness of billboards: Perspectives from selective-perception theory and retail-gravity models. *Journal of Advertising*, 35(4): 21-34.
- Van Meurs, A. & Aristoff, M. 2009. Split-second recognition: What makes outdoor advertising work? *Journal of Advertising Research*, 49(1): 82-92.
- Veloutsou, C. & O'Donnell, C. 2005. Exploring the effectiveness of taxis as an advertising medium. *International Journal of Advertising*, 24(2): 217-239.
- Wilson, R. T., Baack, D. W. & Till, B. D. 2015. Creativity, attention and the memory for brands: an outdoor advertising field study. *International Journal of Advertising*, 1-30.
- Wilson, R. T. & Till, B. D. 2008. Airport advertising effectiveness. *Journal of Advertising*, 37(1): 59-72.
- World Outdoor Advertising News. 2010. Clinique on wrap for International Audiences Available at <http://www.pacificbreeze353.com/newsletters/index.cfm?y=article&company=1&article=1453&nl=262&click=web&subsection=3&langu=1>