

Measuring the effectiveness of out-of-home advertising campaigns in South Africa

ABSTRACT

Out-of-home advertisers demand measurable and reliable results to better determine and control the success both before and after the launch of an advertising campaign. The evaluation of out-of-home media effectiveness as part of advertising campaigns remains a largely unexplored field of study, especially in an emerging market like South Africa's. By analysing the contents of out-of-home advertising campaigns' media planning strategies and results, this study aimed to investigate whether the effectiveness of out-of-home media formats are evaluated and validly confirmed by South African advertisers. Findings of the study revealed the general lack of effective evaluation techniques for reliably measuring out-of-home media formats' effectiveness in achieving stated communication objectives. Furthermore, results confirm the significant campaign evaluation opportunities provided by the integration of out-of-home media with technology and other mechanisms to receive on- or offline interactivity from audiences with advertised brands. This is particularly useful while the development of reliable out-of-home media measurement metrics is still underway across the globe.

INTRODUCTION

Out-of-home (OOH) advertising media evolved from simple outdoor advertising signs or billboards aimed at vehicular traffic (Biraghi, Gambetti & Graffigna, 2015), to an increasingly wide variety of advertising on building- and construction-site wraps, vehicles, train stations, bus shelters, dustbins, escalators, park benches, side-walks, shopping bags, restroom mirrors, eggs and even drinking straws (Roux, 2018a). Nowadays just about any structure, platform or object imaginable

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is used to communicate with consumers in the OOH environment (Martinson & Semenescu, 2012). Contemporary OOH advertising has become one of the fastest-growing mediums across the globe (Swisher, 2017), whereas media spending in traditional advertising media such as television, print, and radio is declining (OAAA, 2017b). Significant growth in OOH advertising has also been seen in sub-Saharan Africa (PwC, 2018). Investment in digital out-of-home (DOOH) advertising is one of the key drivers behind this growth (Mokwena, 2019). The DOOH advertising inventory is expected to denote 40% of the total OOH advertising expenditure in the next four years (Grek, 2019).

Unfortunately, the increasingly fragmented media environment and the ever-expansive OOH landscape have introduced some challenges. Despite their progression and rising popularity, OOH media remain undervalued, underutilised and underappreciated, from both an academic and practical standpoint (Joseph, Davey, & Soman, 2016; Veloutsou & O'Donnell, 2005; Wilson & Till, 2011). One of the main reasons is that OOH advertising media tend to provide very few means for marketers to effectively and reliably predict and track OOH advertising performance (Joseph et al., 2016:1). Compared to other media, OOH advertising remains one of the least researched media classes (Khang et al., 2016). This may be as a result of the high costs and extended time involved in conducting field experiments or surveys with a mobile audience. Only a handful of researchers have overcome this by liaising with the industry to sponsor large-scale field experiments and national surveys to study this medium (Donthu & Bhargava 1999; Bhargava, Donthu & Caron 1994). Other contributing factors are the wide variety of formats in this media class and the supporting role these typically play in campaigns (Belch & Belch, 2012; Du Plessis et al., 2010), which tends to complicate the assessment of their performance and overall contribution to campaign success (Joseph et al., 2016).

Furthermore, research on the effects of advertising over the past decade has focused predominately on new media such as mobile advertising (Chowdhury et al., 2006; Grewal et al., 2016) and in-game advertising (Terlutter & Capella, 2013), while disregarding the progress and practices in assessing OOH advertising media effectiveness (Taylor 2015). Earlier studies predominantly examined factors influencing the effectiveness of outdoor advertising boards (Bhargava, Donthu & Caron, 1994; Donthu, Cherian & Bhargava, 1993; Taylor & Franke, 2003; Taylor, Franke & Bang, 2006). More recently, some researchers have begun to examine contemporary OOH advertising types such as transit advertising (Veloutsou & O'Donnell, 2005; Wilson & Till, 2008, Roux, 2015; Van Meurs & Aristoff, 2009), DOOH advertising (Roggeveen, Nordfält & Grewal, 2015) and ambient OOH advertising (e.g. Jurca & Madlberger, 2015; Gambetti, 2010; Hutter, 2015; Wu, Arora & Arora, 2016).

However, these studies measured consumers' responses and attitudes towards different OOH advertising types but did not examine industry measurement practices. Hence, the evaluation of OOH advertising media campaigns remains a largely unexplored field of study, especially in emerging markets. Without accurate measurement of the effectiveness of OOH advertising media, marketers will be unable to justify the resources expended on these media executions, and consequently validate their efficacy as part of their advertising campaigns.

In light of the identified insufficiency, the main purpose of this research study is to examine South African OOH advertising media campaigns' measurement practices, guided by the hierarchy-of-effects (HOE) model (Barry & Howard, 1990; Lavidge & Steiner, 1961) as a theoretical framework. This will be done by analysing the content of OOH advertising media campaigns to address the following research objectives:

- 1) Examine what level of marketing communication objectives is set in OOH advertising media campaigns
- 2) Determine whether the OOH advertising media campaign effectiveness was evaluated
- 3) Determine whether substantiating proof was provided to verify OOH advertising media campaign effectiveness
- 4) Offer some guidelines to achieve reliable evaluation metrics to assess the effectiveness of OOH advertising media campaigns.

The study is one of the first to shed light on OOH advertising industry measurement practices in South Africa. The outcome of this study could guide marketers and key industry players in critical decision-making concerning pressing investment in developing techniques to evaluate and verify the effectiveness of OOH advertising media.

This article commences with a review of relevant literature followed by a description of our quantitative research strategy, methods and procedures. The findings of the study and their implications for marketers, media owners, agencies and advertisers alike are provided, and the study concludes with a summary of the study's findings.

1. LITERATURE REVIEW

1.1 Advertising research

The advertising research process focuses on objectively and systematically collecting, analysing and interpreting data that can be used for strategic advertising decision-making (Arens et al., 2011). Advertising research consists of testing the efficiency of the advertising content and media to measure the effectiveness of the channels used to deliver these messages (Shimp, 2010). Khang et al. (2016) explored advertising research published in major journals over four decades. The results showed that the majority of studies examined advertising effects on consumers, while less than 10% concerned themselves with the industrial effects of advertising from a practitioner's perspective. Furthermore, OOH advertising was examined in only 2% of these studies, making it one of the least frequently investigated media types.

Advertising research includes pre-testing and post-testing. *Pre-testing*, also referred to as developmental research (Shimp, 2010), is done before a campaign has been implemented, while *post-testing* is done afterwards to determine whether the strategies were successfully implemented to achieve the objectives (Moriarty, Mitchell & Wells, 2012). Both business practitioners and academic scholars conduct developmental research. Practitioners use

developmental research to estimate the likelihood that the message or media components of a campaign will be effective (Sissors & Baron, 2010), and to inform decision making in all the phases of planning a campaign before large amounts of money are spent on further developments (Belch & Belch, 2012). Academic studies predicting potential advertising effects typically involve developmental research, using quantitative methodologies such as laboratory experiments and survey effects (Kim, Hayes, Avant & Reid, 2014). Scholars contributing to the advancement of science have examined consumer attitudes and public perceptions towards different types of location-based advertising such as mobile advertising (Chowdhury et al., 2006), ambient advertising (Wu et al., 2016) and outdoor advertising (Franke & Taylor, 2017).





Post-testing can be applied to understand the influence of different advertising appeals (e.g. nudity and sexual imagery) (Nelson & Paek, 2008); comparative advertising (Jain et al., 2015); spokespersons (e.g. celebrity endorsements) (Knoll & Matthes, 2017); gender and ethnic role portrayals (Prieler & Centeno, 2013); and consumers' attitudes and responses toward different types advertising and media formats (Chowdhury et al., 2006; Wu et al., 2016).

1.2. OOH advertising media formats

The wide assortment of contemporary media recognised by global OOH advertising media associations can be classified into four media formats (Roux, 2017; OAAA, 2016).

- 1) *Outdoor* advertising media aimed at vehicular traffic next to major roads and highways are placed on free-standing structures, like billboards erected specifically for advertising purposes, or on buildings and other structures (Roux, 2017).
- 2) *Transit* advertising media encompass execution possibilities on moving transit (such as on or inside buses, taxis, trains, aeroplanes, trailers and trucks), and on static transit media (such as airport terminals, taxi ranks, bus stations and train stations). Globally, transit advertising is the fastest growing OOH platform at 7% and is expanding across the African continent that is experiencing a formalisation of transit environments (Roux, 2018a).
- 3) *Street-and-retail-furniture* advertising media provide advertisers with a means to reach audiences closer to the point-of-purchase (OHMSA, 2017) either on street-furniture (e.g. bus shelters, dustbins, street-lamp poles, park benches, etc.) or retail-furniture (e.g. escalators, ceiling- and wall banners, benches, restrooms, shopping trolleys, etc.) (OAAA, 2016).
- 4) *Alternative OOH* advertising encompasses both *digital* and *ambient* OOH advertising executions. Digital OOH (DOOH) advertising use digital display technologies such as LCD, LED and plasma screens to provide commercial content in the form of videos or

electronic images. These programmatic displays are typically positioned next to roads and inside shopping malls and stores to induce behavioural effects from shoppers (Burke, 2009; Lasinger & Bauer, 2013). With ambient OOH advertising, the medium itself conveys the message, utilising the environment and its elements, such as public fountains, tee markers on a golf course, and even urinals, to elicit consumer surprise, excitement and possibly interaction (Jurca & Madlberger, 2015). Refer to Figure 1 for an example of each main OOH media format.

<p>Outdoor advertising (Billboard)</p>  <p><i>Nedbank's unique execution displays an astute use of a simple, typical rectangular billboard to get their advertising message across.</i></p>	<p>Transit (Airport terminal)</p>  <p><i>Standard Bank's portrayal of melted metal/ gold pouring into the protruding part produces illumination which makes the words 'industries flourish' clearly noticeable against the dark background of the rest of the wall mural.</i></p>
<p>Street & retail furniture (Mall escalator)</p>  <p><i>Advertising on the under-side of escalators inside high-end shopping malls, directly in the shopping pathway and close to the retail stores.</i></p>	<p>Alternative OOH (DOOH at taxi rank)</p>  <p><i>Commercial content on the large digital screen (Transit TV) can be seen by taxi and train commuters from a distance.</i></p>

Source: Modern Marketing, 2019; Primedia Outdoor, 2019a; Primedia Outdoor, 2019b; Provantage, 2019

Figure 1: Examples of OOH media formats

1.3 Hierarchy of effects in OOH advertising media communication objectives

The hierarchy-of-effects (HOE) theory is one of the most fundamental models in the appraisal and analysis of advertising effectiveness (Barry & Howard, 1990; Lavidge & Steiner, 1961). In HOE models, the aim of advertising is to move consumers through a series of cognitive, affective, and conative stages. This sequential hierarchy of effects in advertising allows advertisers to predict behaviour and guide them on which advertising media strategy to implement (Wijaya, 2015).

OOH advertising campaigns (like those depicted in Figure 2) can also be used to obtain communication objectives at each of these levels:

- *Cognitive communication objectives* focus on exposure, delivering impact, offering information and remind or maintain awareness of a brand (Du Plessis et al., 2010). For example, an OOH advertising campaign by *Emirates Airlines* (Figure 2, top) aimed to deliver impact, educate and build brand equity, assembled a vertical, growing garden (portraying all the world's continents) on an enormous billboard (Laylin, 2011), typically represents cognitive objectives.
- *Affective objectives* focus on emotions by emphasising persuasion and are aimed at stimulating feelings, attitudes, liking and excitement (Lane, King, & Reichert, 2011). For example, by fitting wheelchair wheels to cubicle toilets in Johannesburg nightclub restrooms (Figure 2, middle), *Arrive Alive* intended to emphasise the "shock factor" and evoke audiences' interest (Van Gurp, 2008). Added intentions were to create a deeper emotional association with the campaign message and encourage a change in attitudes towards the brand and what it represents and helps prevent.
- *Conative objectives* focus on behaviours and are aimed at prompting actions from consumers such as purchasing, trying, requesting information, interacting with the advertisement/medium or speaking favourably about the brand (Clow & Baack, 2010). The three-day long "*Survivor billboard*" campaign, for example, invited and featured several contestants surviving on the billboard in an endurance test; competing in both physical and mental challenges over three days (Figure 2, bottom) (JCDecaux, 2018).

Furthermore there are strong indications from consumer studies that OOH advertising media formats can be used effectively across the hierarchy of effects. Studies regarding the efficiency of OOH advertising and specific factors influencing the effectiveness on a cognitive level revealed that the creative message and spatial applications affect consumers' attention, recall, recognition and memory (Donthu et al., 1993; Bhargava et al., 1994; Klerkx & Van Meurs, 2009; Roux, 2018b; Wilson & Till, 2008).

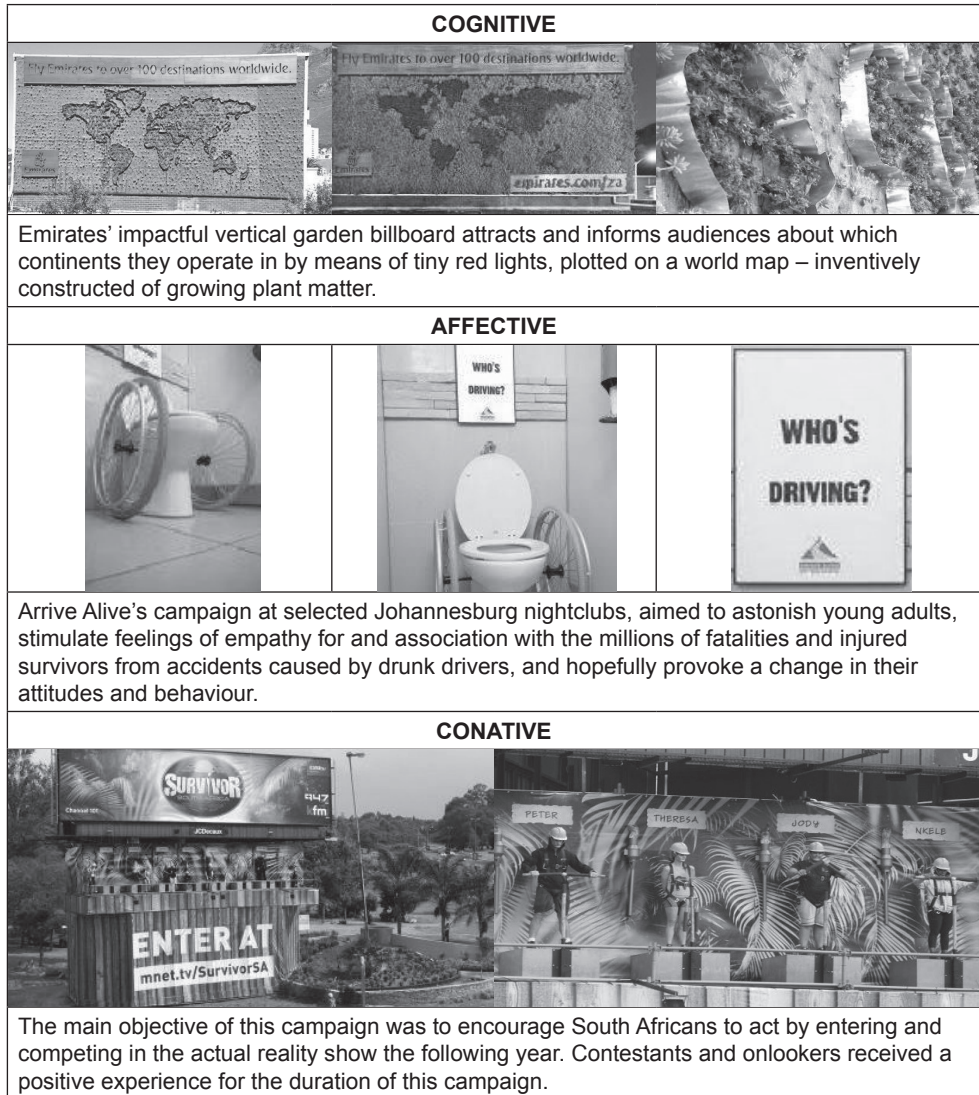


Figure 2: South African OOH advertising campaigns to obtain cognitive, affective, and conative communication objectives

Selected researchers have also examined the effects on an affective level in a South African context. Roux (2015) assessed commuters' attitudes towards minibus taxi advertising, while others focused on local communities' feelings towards outdoor advertising messages placed at specific geographic locations in the Free State (Pauwels, 2005) and semi-urban Limpopo (Nagel & Louw, 2004).

Previous academic research has also confirmed the potential of OOH advertising media to influence conative responses. Earlier studies reported that OOH advertising media campaigns are capable of driving sales (Bhargava & Donthu, 1999; Taylor, Franke & Bang, 2006) and even have post-sales effects in helping to reinforce behaviour patterns in positive contexts (Fortenberry & McGoldrick, 2019). Other studies focused on the effect of digital signage inside stores on a conative level. Burke (2009) showed that functional content is especially effective in increasing sales of hedonic food. Roggeveen et al. (2016) found that content focusing on price outperforms non-price promotions.

2. METHODOLOGY

The current study applied quantitative descriptive content analysis as a research method. Quantitative content analysis provided a summary of collected and analysed data by producing counts of key categories and measuring the number of variables (Neuendorf, 2002). Content analysis is a well-recognised research method applied in advertising and media research (Madlela, 2019; Maree 2014; Gbadegesin & Onanuga, 2018; Khunou, 2019). This method was applied since it allows for the systematic and objective count and description of the manifest content of almost any piece of writing or occurrence of recorded communication.

The research process for conducting content analysis as suggested by Neuendorf (2002:50) was applied in this study. This process is explained below.

2.1 Theory and conceptualisation

The theory and conceptualisation of content analysis refers to what will be analysed in the research study, including the reasons for the analysis (Neuendorf, 2002:50). The theoretical background to the study is reflected in the literature review on advertising research, OOH advertising media formats, and the HOE theory.

2.2 Units of analysis

Analysts need a meticulous description of which analyses are to be implemented (Scheaffer, Mendenhall & Gerow, 2012:38). According to White and Marsh (2006:29), the units of analysis refer to the variables that are under investigation – i.e. to be statistically analysed with the aim of reaching the research objectives (Riffe, Lacy, & Fico, 2014:68). The units of analysis in the proposed study consist of the variables under investigation, namely: the level of communication objectives set, the measurement of OOH advertising media campaign success and the verification of the results (see Table 1).

The levels of communication objectives were selected based on the phases in renowned consumer response hierarchy models typically used to guide the setting of communication objectives (Barry & Howard, 1990:121; Vakratsas & Ambler, 1999:26; Wijaya, 2015:73).

For the purposes of analysis, the communication objectives described in the entries were categorised as cognitive, affective or conative, based on the desired consumer responses.

It was regarded as a cognitive communication objective if the aim of the campaign was to capture attention, create awareness, inform or educate consumers, obtain brand differentiation or identification or remind consumers about the brand or its features. The communication objective of a campaign was categorised as affective if it was aimed at building a brand image or –personality, creating positive attitudes or emotional engagement; persuasive in terms of creating a desire for change and encouraging aspiration. It was considered as conative if the campaign was aimed at obtaining sales (e.g. purchasing or trial of the brand), actions (e.g. participation in competitions, actions such online word of mouth or requesting of information) and continual relationship (e.g. reinforcing or commitment of loyalty).

The effectiveness of OOH advertising campaign results was assessed by considering the measurement and verification. Measurement was evaluated by determining if the campaign results were actually compared in terms of the planned communication objectives This was done by analysing the content of each campaign entry, and comparing the objectives set for the campaign with the results obtained as described in the submitted the entry.

Verification was analysed in terms of objective evidence such as verified sales figures or tracking of audiences’ online activity in response to a campaign.

Table 1: Variables examined

Level of marketing communication objectives set in the campaign	Types of marketing communication objectives				
Cognitive Aims to deliver information to make consumers aware of a brand and its features.	Capture attention	Awareness	Inform/ educate	Brand differentiation & identity	Remind
Affective Aimed at persuasion by stimulating feelings, attitudes, liking, excitement and emotional connection	Brand image/ personality	Positive attitudes / liking	Emotional engagement	Persuade	Desire/ aspiration
Conative Aimed at behavioural responses, such as purchasing, trying, requesting information or speaking favourably about the brand.	Buying/ trial	Participate	Word of mouth	Contact (call or click)	Loyalty/ relationship
Sources used as basis to identify variables Levels of communication: Barry & Howard, 1990; Vakratsas & Ambler, 1999, Wijaya, 2015. OOH advertising effectiveness on cognitive level: Bhargava, Donthu & Caron 1994; Donthu, Cherian & Bhargava, 1993; Klerkx & Van Meurs, 2009; Roux, 2018b; Wilson & Till, 2008. OOH advertising effectiveness on affective level: Nagel & Louw, 2004; Pauwels, 2005, Roux, 2015. OOH advertising effectiveness on conative level: Bhargava & Donthu, 1999; Burke, 2009; Fortenberry & McGoldrick, 2019; Roggeveen et al., 2016; Taylor, Franke & Bang, 2006.					
Verification of OOH advertising campaign results					
Measurement	Assessing of the campaign results in terms of the stated communication objectives				
Verification	Evidence to verify the results accomplished.				
Sources for verification of OOH advertising campaign results: Belch & Belch, 2012; Moriarty, Mitchell & Wells, 2012; Shimp, 2010; Sissors & Baron, 2010.					

The texts, or sources, to be analysed in the current study were the documented OOH advertising campaigns entered in the annual AMASA Awards, presented by the Advertising Media Association of South Africa. The AMASA Awards were selected for this study since they represent a diverse collection of effective and award-winning advertising media campaigns (including OOH advertising campaigns) implemented in South Africa.

Furthermore, while awards in the communication industry typically concentrate on the creative design of the advertising executions, the AMASA Awards specifically reward the media strategy and planning behind successful campaign design, execution and evaluation. This allows the researcher to identify the specific communication objectives set for the OOH campaigns and whether the OOH media formats employed were evaluated to determine its contribution towards achieving the objectives.

2.3 Sampling

The target population under investigation for this study (i.e. the full set of cases from which a sample is drawn) (Saunders, Lewis & Thornhill, 2015:205) consisted of advertising campaigns implemented in South Africa between 2010 and 2016. The sample frame (the summarised form of the population under investigation) was the list of OOH campaigns entered to the AMASA awards within the same time-period. Through purposive sampling, an appropriate and practically feasible number of OOH advertising media campaigns (sampling units) was selected based on the researcher's judgement, to ensure the sample contained the characteristics most relevant to the research topic (Saunders et al., 2015). For this study, two criteria were used to select the documented OOH media campaigns to be analysed, while the sample size depended on the number of AMASA Award entries that met the following criteria:

- OOH advertising media must be a major part, the primary medium used, or used as a secondary medium for the advertising campaign entry.
- The campaign should be documented in enough detail to analyse whether effectiveness of OOH media formats have been evaluated in terms of achieving campaign objectives, and whether results were verified in the final phase of a typical media planning process.

More than 500 advertising campaigns were entered into the AMASA Awards during the time period. After excluding campaign entries for other advertising media classes, over a hundred OOH advertising campaigns were screened. A total of 79 campaign entries met all the criteria, and included campaigns for a variety of advertisers from the following industries: 1) retail & restaurants (e.g. Exclusive books; KFC); 2) banking & financial (e.g. Absa; Santam); 3) beauty & fashion (e.g. L'Oreal; Adidas); 4) automotive (e.g. Nissan; BMW); 5) beverages & food (e.g. Coca-Cola; Magnum ice cream); 6) travel, transport & leisure (e.g. Virgin Active Gym; Emirates Airlines); 7) household services & telecommunication media (e.g. e.TV; Vodacom), and 8) educational, governmental & charity (e.g. Success Career College; Operation Hunger).

2.4 Pilot testing

Pilot testing was conducted to enhance the quality and reliability of the measuring instrument (the coding form) (Krippendorff, 2013:127; Leedy & Ormrod, 2005). For the purposes of reliability, two independent coders coded the campaign entries according to the list of predetermined variables outlined in an established codebook and corresponding coding forms. Two coders, specialising in the field of marketing, received intensive training, detailed discussions and practical examples to ensure complete understanding before coding the data independently, as suggested by Krippendorff (2004:419).

2.5 Data analysis and reporting

Since the data was measured on nominal measurement scales and analysed by two coders, the most appropriate inter-coder agreement measure is Krippendorff's alpha (Hayes & Krippendorff, 2007; Krippendorff, 2004; Neuendorf, 2002:151). The levels of agreement between coders were analysed for ten randomly selected campaign entries using the Statistical Analysis System (SASTM) to conduct the K-alpha analysis. The reliability values for the pilot study, reported per variable in Table 2 below, verifies that the scores are above the acceptable agreement level of 80% (De Swert, 2012; Krippendorff, 2013:324) and that one coder (the main researcher) was required to perform the final coding (Leedy & Ormrod, 2013:149). After the pilot study, the final coding was conducted, and the data were analysed to determine the frequency and percentage values for each coding variable (see Table 2 below).

Table 2: Inter-coder reliability

Variable	Krippendorff's α
Level of marketing communication objectives	
Cognitive communication objectives	1.00
Affective communication objectives	0.90
Conative communication objectives	1.00
OOH advertising media campaign performance	
Measurement: Results vs stated objectives	1.00
Verification of results	1.00

3. STUDY FINDINGS

The content analysis of South African OOH advertising media campaigns discovered some key findings related to the research objectives, as presented below.

3.1 RO1: The level(s) of marketing communication objectives set in OOH advertising media campaigns

Reflected as percentages in Figure 3 are the number of campaign entries at each response level, in relation to the overall number of OOH campaign entries.

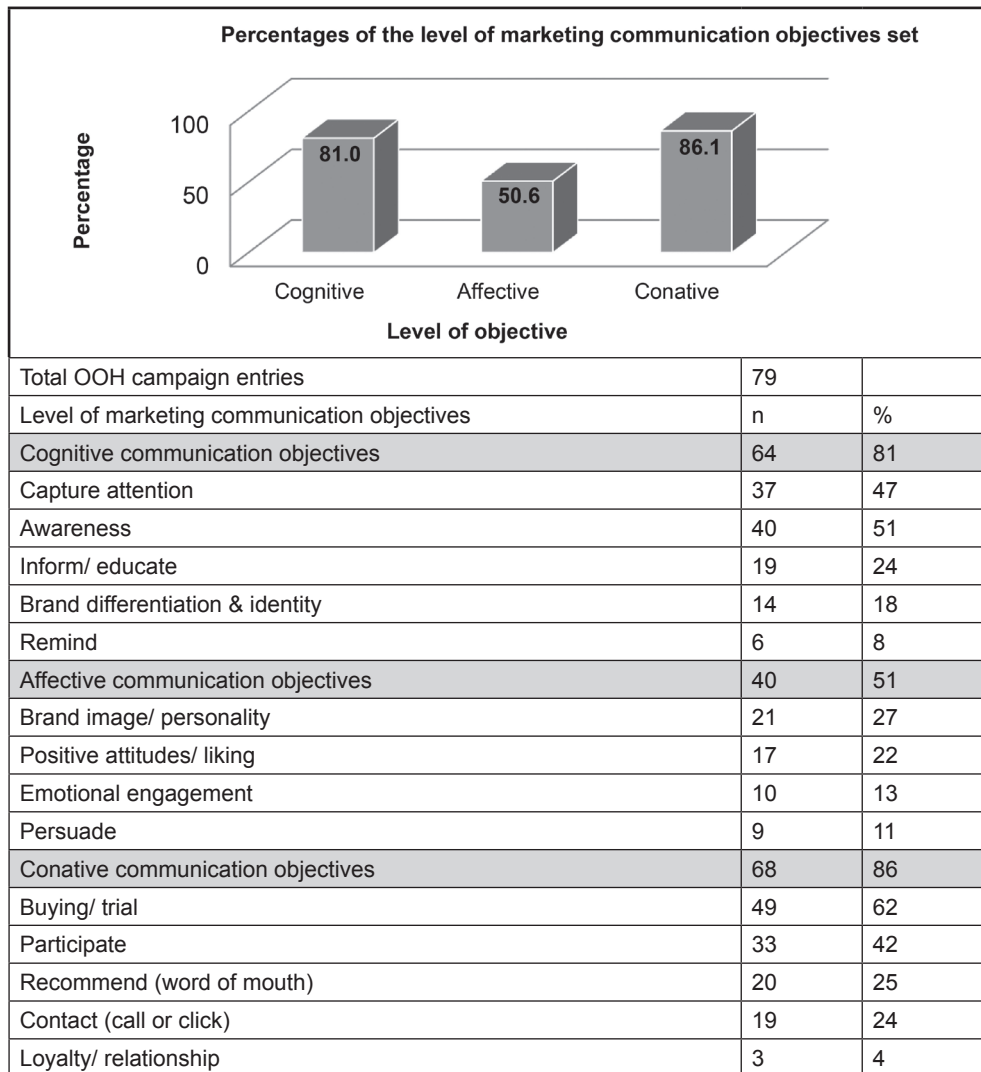


Figure 3: Marketing communication objectives set

Most of the entries set conative objectives aimed at behavioural responses such as a purchase, trial, referral and requesting more information ($n = 68$; 86%). Slightly fewer entries set cognitive objectives aimed at thinking, or processing messages ($n = 64$; 81%), while merely half ($n = 40$; 51%) set affective objectives to encourage emotional responses such as positive feelings, emotional connections or changed attitudes.

Campaign entries with cognitive communication objectives were primarily aimed at capturing attention ($n = 37$; 47%) or increasing awareness ($n = 40$; 51%). Almost half of the campaigns were aimed at brand positioning ($n = 21$; 27%) and creating positive attitudes or liking towards the advertised brand ($n = 17$, 22%). Generation of sales was the most common objective at conative level ($n = 34$; 50%). Hardly any of the campaigns were aimed at increasing customer loyalty and sustaining customer relationships ($n = 3$; 4%).

The standards against which the success of an advertising campaign should be evaluated depend primarily on the communication and media objectives set for the campaign (Clow & Baack, 2010). The last phase of the media planning process deals with measurement and evaluation of the media plan with the aim of improving the effectiveness of the strategies employed to achieve organisational objectives (Lane et al., 2011:454). For the purposes of analysis, the post-evaluation and verification were analysed to address research objective 2 of the study. The overall findings and conclusions related to the measurement and verification of the success of OOH advertising media campaigns are provided in Figures 4 and 5 and are discussed in the sections that follow.

3.2 RO2: Determine whether the OOH advertising media campaign effectiveness was evaluated

As outlined in Figure 4, most of the campaign entries provided numerous awards, indicative of the effectiveness of their campaigns ($n = 74$; 94%), but very few of these were supported by objective evidence of success. Evidence that was deemed legitimate included tables and graphs depicting the findings of the post-testing research conducted (internally or externally), images of consumer audiences' online activity and even images and/or videos of audience reactions on the site of the OOH advertising execution. Alarming, most claims of success were not substantiated with actual figures to show how the OOH advertising media campaigns contributed to the realisation of the set marketing communication objectives. Only one third ($n = 27$; 34%) of the entries provided such validation.

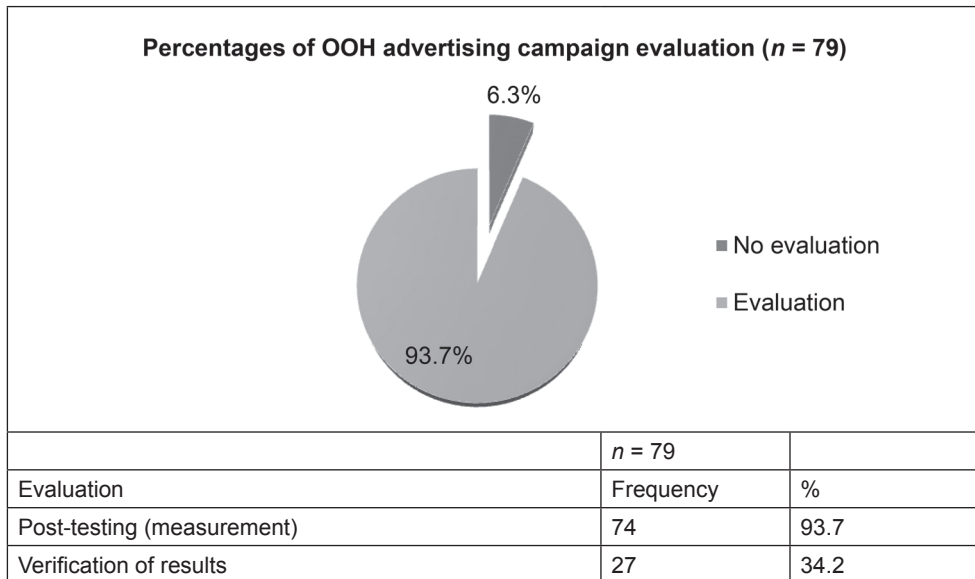


Figure 4: Measurement and verification of OOH advertising media campaign results

Advertisers have various options to conclude whether the OOH advertising media formats selected were successfully executed and helped achieve the stated campaign objectives. The success of some of the OOH campaigns analysed was verified via various post-testing techniques, including brand tracking and survey research such as onsite and telephonic interviews. Research was conducted to measure increases in levels of awareness, knowledge and understanding about a brand as well as behavioural responses such as purchasing, WOM (online and offline), website or store visits, information requests, competition entries, interactions with the advertisements or media, and the number of samples distributed for trials.

The results in Figure 4 show that most of the campaigns analysed ($n = 74$; 94%) claim to have successfully achieved their communication objectives through the execution of the selected OOH advertising media. However, not many advertisers actually provide objective evidence of the claimed successes achieved ($n = 27$; 34%). The effectiveness of these 27 campaigns was evaluated through research either conducted by professional market research companies, the OOH advertising media owners or the advertisers themselves. The evaluation (or post-testing) techniques employed depended mainly on the marketing communication objectives set for the campaign. For instance, to determine the level at which cognitive objectives (such as impact, exposure and awareness) were attained, levels of recall, recognition, awareness or media exposure were measured.

The achievement of affective objectives was generally determined through a combination of evaluation metrics including the recording and analysis of physical reactions from audiences

on the scene of the OOH executions, the extent of online activities (such as “likes”, tweets, competition entries) received on social networking platforms and company websites and the nature of comments posted online. Affective responses like changes in attitudes, perception, intention to buy and brand preference levels were determined by use of telephonic and onsite survey interviews.

Behavioural response levels seemed to be the most frequent measure of the effectiveness of the OOH advertising campaigns, especially sales/revenue increases. In today’s highly technological and interactive world, many advertisers focus on eliciting several other forms of favourable behaviours from OOH audiences in addition to increased sales and store traffic. Some of the conative objectives set for the analysed campaigns included direct-response mechanisms such as invitations to visit websites; enter competitions; play games; view, upload or download content; leave comments and retrieve coupons. Success can be established by simply counting the frequency of the desired responses obtained and comparing the results with the forecasted numbers (if any). Thus, using direct-response mechanisms such as these could allow advertisers to more accurately determine the effects of OOH advertising campaigns.

Advertisers can therefore make use of these opportunities for engagement. This was corroborated in the findings of the current study in which 24% of the analysed campaigns were aimed at stimulating online activity via mobile smartphone devices. Without requesting specific online activities from their audiences, some unique and impactful OOH advertising media executions are also able to determine the effectiveness of campaigns based on the often unexpected online publicity generated around the brands and their distinctive OOH advertising campaigns. This is especially true for campaigns that encourage interaction with the OOH advertisement for audiences to gain positive experiences with the brand.

Several analysed campaigns expressed success both in terms of marketing communication and media objectives, providing estimated reach, frequency and opportunity-to-see (OTS) figures determined through technologically sophisticated tracking systems, mechanisms, procedures and research projects. A campaign by Adidas, for example, branded hundreds of SA Taxi Media’s taxis, each equipped with devices that could capture location, mileage and movement data for the duration of the campaign. Advertised television programmes provided approximated audience ratings (AR’s) as indicative of the OOH campaign’s effectiveness.

3.3 RO3: Determine whether substantiating proof was provided to verify OOH advertising media campaign success

The study findings as depicted in Figure 5 indicated that, although many of the entries claimed that their campaign success had been evaluated, the results of only one third of the campaigns were verified with objective evidence ($n = 27$; 37%). As stated above, evidence that was deemed legitimate included tables and graphs depicting the findings of the post-testing research conducted, images of consumer audiences’ online activity and images and/or videos of audience reactions on the site of the OOH advertising execution.

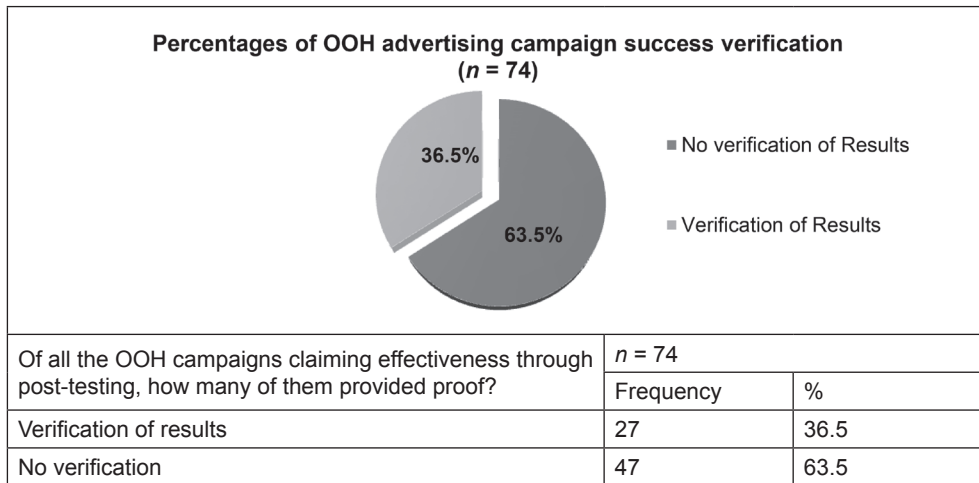


Figure 5: Verification of OOH advertising media campaign effectiveness

This findings confirm the growing concern about insufficient effective metrics for the formats in the OOH advertising media class (OAAA, 2017a:2; PwC, 2016:60). Advertisers maintain the need to ensure that their advertising budgets are spent on OOH advertising media formats with credible audience data measures appropriate for achieving the communication and media objectives of an advertising campaign. The biggest challenge facing the OOH advertising media advertising industry is the need for valid measurement tools and reliable media-audience data. These are essential for OOH advertising media buyers, owners and agencies to evaluate the effectiveness of selected OOH advertising media formats. It is critical to address this matter, because without the verification of results, advertisers have no reliable information regarding what they spend their resources on.

Recent developments in technology have provided significant possibilities for the improvement of accurate measurement tools for OOH advertising (ESOMAR, 2009:4), yet such tools still seem to be lacking in the South African OOH industry. Various innovative measuring techniques have been developed to assist in determining who, when and how many consumers are exposed to an OOH advertisement. These kinds of techniques are being further developed and adopted in more developed countries such as the UK, Australia and the USA (Brackins & Stanton, 2017:7; OAAA, 2017a:1). New measuring techniques and ongoing developments in technology are directly influencing and contributing to the global growth of OOH advertising media (Hendrix, 2015:4; Joseph et al., 2016:6; Nicklin, 2017:1). Although DOOH media represented nearly one-third of the South African OOH revenue in 2017, it is forecast to represent nearly half by 2022 (PwC, 2018:171).

3.4 RO4: Key recommendations to achieve reliable evaluation metrics to assess the effectiveness of OOH advertising media campaigns

Based on the study findings, the following recommendations on the measuring techniques to be considered for successfully evaluating OOH advertising media performance, are provided.

Recommendation 1: Employ legitimate pre-testing and post-testing techniques to improve the verification of OOH advertising performance. Advertisers should employ industry-recognised pre-testing techniques in order to assess certain elements of their OOH media mix selection before implementing an advertising campaign. Depending on the nature of the campaign and OOH advertising media formats selected, practitioners can apply pre-testing by deploying the execution in a controlled environment where reactions can be monitored and features mended if necessary. Another option is pre-testing in the actual OOH environment where the advertisement will be executed, by observing responses of a pre-selected audience representing a small sample of the brand's target audience. Following pre-testing and campaign execution, the results of the OOH advertising media platforms and formats can be determined by conducting surveys, focus groups and/or observation studies. Empirical research will require a budget to implement additional post effectiveness, efficiency and allocation analysis. Such an analysis may include providing descriptive advertising and media suggestions for each OOH media format independently.

Recommendation 2: Improve OOH advertising media measurement through collaboration between industry players with respect to resources and audience data. High levels of investment in understanding human perceptions, increasing developments in technology and the development of reliable OOH advertising media audience measurement tools could make it possible to produce more accurate and detailed measurements of OOH audiences. Decaux (2017) insists that, based upon globally recognised standards, OOH measurement will become more common in developing markets such as South Africa, as it is already widely present and used in the leading developed markets.

Recommendation 3: Major industry players in South Africa could combine their efforts and resources to design and develop a valuable and reliable currency for OOH advertising media measurement, which would allow the OOH advertising media category to compete with traditional media on an equal footing. According to Kym Frank (2018), President of Geopath – a global audience location measurement organisation that generates standard audience measurements for OOH media – there is general agreement that all countries must collaborate to advance OOH metrics and overcome shared challenges. Industry players should strive to merge data platforms, since access to data and the intellectual application thereof have become vital in this progressively location-based marketing world.

Recommendation 4: *Use DOOH advertising media to assist in real-time OOH advertising media evaluation.* The opportunities for more credible measurability of OOH advertising media are expected to increase as more digital platforms are developed and utilised by

South African advertisers (Nevillon, 2019; The Media Online, 2014). Digital displays with interactive features should be designed to collect relevant real-time digital footprints of interested parties, allowing the display to adapt to its surroundings and providing marketers with valuable data. DOOH advertising media could provide significant opportunities for the real-time measurement of advertising effectiveness using advanced techniques: for example, tracking eye-movements, facial expressions and even gender identification. Interested parties and companies should assign resources for investment in collecting data and building tools that can utilise data sets in real time for the planning, delivery and evaluation of OOH advertising media.

4. LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Like most others, the current study is not without its limitations. This study was restricted to South African OOH advertising campaigns entered for the AMASA Awards. The OOH advertising campaigns of other brands in South Africa and launched over the same time period, were not included in the sample. Furthermore, the researcher could only assume the success of the selected OOH campaigns, given the fact that they were deemed remarkable enough to be considered for an award. Finally, the amount of detail provided in each campaign entry document differed between brands and the study could only report on the details that the person who submitted the entry decided to include in the documentation.

The limitations of the current study could open pathways for many future research studies on the progressive OOH advertising industry, especially given the constant developments in technology and DOOH advertising media formats. Future research could include a broader selection of successful South African OOH advertising media campaigns randomly selected from a preselected list of popular South African brands or even OOH advertising campaigns entered into international media awards. Another approach includes conducting in-depth interviews with advertisers to investigate OOH advertising measurement and evaluation practices.

5. CONCLUSIONS

As the popularity of the OOH advertising media class grows, advertisers are realising its potential to stimulate immediate action, engage consumers through interactive platforms, as well as allowing implementation in both the physical and online landscape via mobile devices (McLarney, 2017). Research on advertising effects over the past decade has focused on a variety of contemporary advertising media. However, OOH advertising remains one of the least researched areas in the marketing communication discipline (Khang et al., 2016). A couple of studies examined consumers' responses and attitudes towards different OOH advertising types. However, they did not examine OOH advertising media industry measurement practices in South Africa. This study fills a gap in the literature by analysing actual OOH advertising campaign planning and measurement practices in South Africa. The findings revealed a lack of effective evaluation techniques for reliably measuring OOH media formats' effectiveness in achieving communication objectives. A key contribution of this study is the practical recommendations regarding reliable evaluation metrics to assess the effectiveness of OOH advertising media campaigns.

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