Dr Abyshey Nhedzi

Research Fellow, Department of Department of Strategic Communication, University of Johannesburg, South Africa (abyshey1@gmail.com)

DOI: https://dx.doi.org/10.18820/24150525/Comm.v23.2

ISSN 2415-0525 (Online)

Communitas 2018 23: 18-38

© Creative Commons With Attribution (CC-BY)

OPEN ACCESS

THE RELATIONSHIP BETWEEN TRADITIONAL AND DIGITAL MEDIA AS AN INFLUENCE ON GENERATIONAL CONSUMER PREFERENCE

ABSTRACT

Marketers, advertisers and media planners often turn to reliable data on target markets to make decisions regarding the selection and use of media, allowing practitioners to communicate the message optimally and cost-effectively to the target audience. Decisions in media planning and media selection are only possible if information on media use patterns is up-to-date. Hence, understanding media consumers allows marketers to tailor specifically to a target market. This article presents an initial inquiry into preferences between traditional media and digital (online) media. With a better understanding of consumer preference between traditional and digital media platforms, practitioners could significantly improve media allocation. By applying a uses and gratifications approach to the concept of media use, the author conducted a cross-sectional questionnaire survey (n=558). A t-test analysis of the findings indicated a significant difference in time spent on traditional media (m=3.60) over time spent on digital media (m=2.63) (t(555) = 20.73, p < .05). The results revealed differential patterns across different media (traditional and digital); differences are most often based on the demographic variables. The data indicated that statistically significant differences in media consumed are more a function of whether or not people are employed and have completed their studies than age group per se. Accurate audience measurement remains complex due to media consumers' mobility and wide variety in the media environment. However, the findings can be used as a guideline for media planners and advertising agencies when planning to target an exact audience at the right time on the right platform.

Keywords: media consumption; traditional media; digital media; social media; consumer preference; media planning; generational preference

INTRODUCTION

It is fair to say that a myriad of tools and the technologically driven internet have changed the way people live. The ever-increasing complexity and changeability of the current markets is evident. This article reports on the amount of time spent by consumers on traditional and digital (new or online) media devices. An understanding of media preferences for various demographic groups could increase marketing campaign reception and indicate to media planners and marketers how marketing expenditure should be budgeted for distinct subgroups and the life-cycle stages of consumers.

For the purpose of this study, "media" refers to the technology used to access content, not the content itself. "Traditional media" refers to vehicles that are an alternative, pre-digital platform in the form of mass media directed at mass audiences: print (newspapers and magazines) and broadcast (radio and television). "New", "online" or "digital" media or "non-traditional" media refer to all digital and online vehicles accessed by individual or mass audiences (e.g. digital newspapers, online news, etc.). These can take many different forms, including internet forums, blogs, wikis, podcasts and picture, music and video sharing. Examples of social media include Google Groups, WhatsApp, Wikipedia, MySpace, Facebook, YouTube, Flickr and Twitter (Odun & Utulu 2016).

The debate on traditional and digital media remains topical. Globally, traditional media face a sharp decline in circulation. Advertisers and media management practitioners are thus faced with uncertainty. O'Guinn *et al*. (2015: 7) argue that "[m]ass media are not dead, but they are being supplemented and supported by all sorts of new ways to reach consumers. Consumer preferences and new technologies are reshaping the communication environment". Based on a survey on news consumption in the United States, Mitchelstein and Boczkowski (2010: 1087) admit to the lack of conclusive findings resulting from an analytical stance that splits the use of print, broadcast and online media. This hinders the exploration of how consumers integrate news consumption across media. The blurring of lines between traditional and social media is affecting the way consumers read, view or listen to traditional media – a phenomenon that has received attention in previous studies (Patterson 2015).

The digital threat to print media is also being experienced in South Africa, although a report by the Audit Bureau of Circulations of South Africa argued that the growth in digital media was not the cause of the decline in print circulation (Patterson 2015). This report attributes the decline to the fact that many publishers, both local and international, refocused their efforts from migration from print to digital to using both. Hence, many more people are consuming digital news rather than traditional newspapers, magazine publications, or radio and television broadcasts. If traditional media are facing their most severe challenges, as some scholars argue (Jere & Davis 2011; Patterson 2015), then understanding the consumption tendencies of its consumers should help the industry stay relevant and effective, given the seismic shifts wrought by the wired world.

The 'old' is dying; the 'new' struggling to be born

A theoretical framework for understanding the significance of traditional media is found in a combination of approaches, as applied by Nossek *et al*. (2015: 367). These authors suggest the convergence of two approaches in communication research – technological and functional. The technological approach is generally associated with Marshall McLuhan (2003), who asserts that the dominant media technologies in a given historical era are replaced by new media, if they stop fulfilling their societal functions. McLuhan (2003) stated that civilisations are shaped by their use of a particular medium of communication over a lengthy period, and that a dominant communication medium in any given historical period will eventually be replaced by a medium better able to cope with the problems of communicating knowledge across time and space. At the centre of the media displacement theory is the notion that a medium offering the same functions or gratifications replaces another medium, as new media replace old media (Wurff 2011). McLuhan (2003) took this idea of the displacement of one medium by another as his conceptual base and explored the social consequences of the invention of print and the later widespread use of electronic media.

Generational differences

Generational differences are relevant as these reflect differences in attitudes, values, ambitions and mind-sets between people. Each generation is likely to manifest its own values, attitudes, ambitions, mind-sets, worldviews and ways of communicating. This is subject to contestation as scholars disagree on the start and end dates of generational cohorts. The various labels for specific generations differ according to the researchers and consultants exploring and writing about generational differences. Hence, a great deal of variation still exists. Contemporary media research reveals the importance of empirically analysing the relationships between media and age and changing user patterns over the course of one's life (O'Guinn *et al*. 2015).

In this article generations are classified in two groups: millennials or generation Y (born between 1980 and 2000) and Generation X (born between 1965 and 1979). Marketers and media planners have shown interest in how users interact with multiple media devices and platforms, particularly as new media platforms have begun to thrive, although adoption behaviours vary by country (Jordaan *et al*. 2011).

THEORETICAL FRAMEWORK

Media consumption patterns have been a central topic of audience research in marketing and communication studies (Jordaan *et al*. 2011; Nazarov 2017; Schrøder 2015). The use of consumer goods correlates broadly with traditional and digital media consumption (Schrøder 2015). With regard to media and consumption at the most general level, it is necessary to recognise the complexity and importance of consumption as a salient feature of postmodernity.

Without twisting the argument or weakening the logic and making it difficult to see how this study frames the subject in a new way, it is necessary to note that streams of journalism and media research dominated the study of media consumption.

Journalism and media research concepts and critiques arising from studies on news consumption have come to the fore, rather than comparisons of traditional media and digital media from advertisers and marketers' perspectives. For example, researchers have shown that access to online news varies according to socioeconomic status, educational attainment and age (Mitchelstein & Boczkowski 2010). Researchers agree that groups who are older, less educated, and of lower socioeconomic status used traditional media (Mitchelstein & Boczkowski 2010). Odun and Utulu (2016) assert that advertisers need to understand the media consumption patterns of their target audiences because such knowledge enables the devising of a strategy to target a particular set of people effectively. Consequently, these authors point out that marketing and advertising management in business makes decisions on "the choice of the fastest means of getting consumers to know about the product and convince them to buy … on the list of their marketing tactics" (Odun & Utulu 2016: 63).

Theories of media consumption have different approaches to explain media consumption habits and patterns (Jordaan *et al*. 2011; Nazarov 2017; Schrøder 2015). One such an approach is through the lens of the seven "worthwhileness" dimensions, namely time spent, public connection, normative pressures, participatory potential, price, technological appeal and situational fit (Schrøder 2015), a framework that helps to compare consumer media consumption. In this framework, time spent refers to pockets of time used throughout the course of daily life. Other researchers (Damásio *et al*. 2015) followed an approach in which respondents were asked which media they had used during the previous week. One constraint common to all those approached is time – that is, it is assumed that time spent on one activity cannot simultaneously be spent on another (Nazarov 2017: 16).

The media business has an economic interest, which is a consumer delivery enterprise for advertisers (Poster 2004). On the other hand, advertising is a variable field, a second-level field, which borrows and tests theories to build knowledge in different advertising contexts (Royne 2016). In postmodernity, this is shifting from treating consumers as audiences for media content towards sustaining communities where people create value by engaging (Poster 2004). The theory of the niche assumes that media compete in a multidimensional resource space (Wurff 2011). The introduction of a new medium, therefore, reduces the amount of time individuals allocate to existing media, ultimately leading to the replacement of such media. According to Fulgoni (2018: 146), "digital commerce, enabled by digital analytics, has created and satisfied consumers' insatiable desire for immediate gratification". The variables most often identified as having a significant effect on media consumption patterns are age, sex, class, gender, ethnicity, race and region (Poster 2004).

To address the relationship between traditional and digital media in terms of consumption patterns (Jordaan *et al*. 2011) this study broadly presents representations of media consumption habits and patterns. Previous studies were based on online news and the credibility of communication (Jordaan *et al*. 2011; Nazarov 2017; Schrøder 2015); the researchers did not examine the media consumption habits and patterns in the context of device usage. For example, the researchers focused on the ways in which people use and consume different media in diverse media materialities and communicative

practices (Damásio *et al*. 2015). Although all these studies model the impact of news consumption, none of them tackled the issue of comparison between traditional and digital media over time and device usage. In addition, the majority of these studies made use of student populations.

Adopting the uses and gratifications theory, the assumption is that, as individuals, people have limited amounts of time and money and have to choose between the different media platforms by determining which one would better satisfy their particular needs (Van Cauwenberge *et al*. 2010). In their study of news media use among college students, Van Cauwenberge *et al*. (*ibid*.) found that information or surveillance gratification showed a significant positive relation with three patterns of news consumption: time spent on television news, newspapers and online news sites. This research was limited in that it analysed only the role of motivations of uses and gratifications rather than comparing traditional and digital media consumption patterns. Research has often approached the subject of old (broadcast) mass media and new (networked) media consumption patterns as two separate enterprises. Communication technology is conceived as the articulation of artefacts, practices and social arrangements (Lievrouw 2014). Lievrouw (*ibid*.) asserts that artefacts (time spent on using a specific media device) and practice (time used to perform a certain activity) are important aspects in defining consumption practices. Similar to previous studies (Damásio *et al*. 2015; Lievrouw 2014), this study considers media use, location of media use, media in daily life, and demographic patterns within a broad cross-disciplinary perspective. The media landscape process of change and innovation favours digital media. For this reason, the often-discussed shift from traditional to digital media is rarely quantified (Mander & Young 2017). From these expectations, the author advances the following hypotheses:

- H1: The higher the amount of surveillance gratification experienced with new/digital media, the more likely it is that less time will be spent with traditional media.
- H2: An increase in diversion needs (entertainment, escape, and pastime) will result in an increase in time spent with print newspapers, television and radio, and a decrease in time on new/digital media.

The main contribution of this article is to test these two hypotheses as they relate to the two different perspectives of traditional and digital media consumption patterns. Previous studies have compared the media consumption pattern (mapping of cross-media news consumption in pre-mobile 2008 is compared with replicating mappings carried out in 2011 and 2012) (Schrøder 2015) and the media use and consumption patterns (Varga & Nylrő 2014). However, these are limited in that they focused on screen-related actions and emerging new media consumption habits rather than providing an assessment of the pattern of relationships among all media consumption patterns.

Given their limited resources, people will choose between media that serve similar needs (Van Cauwenberge *et al*. 2010). Materiality and consumption practices are issues that relate to substitution and complementarity (Damásio *et al*. 2015). Hence, these authors argue that frequent users of digital media find it at least comparable with

and perhaps even superior to traditional news media or devices (Van Cauwenberge *et al*. 2010). In light of the above, this study expects the following relations between the news use of traditional and online media:

- H3: Time spent on online digital newspapers will negatively relate to time spent on print newspapers.
- H4: Time spent on online news will negatively relate to time spent on print newspapers.
- H5: Time spent reading books in the electronic version will negatively relate to time spent on reading books in the print version.

The purpose of the study is to examine the media consumption habits and patterns of South Africans in their assessments of time spent on traditional or digital media. Here, the expectation is that media use will be positively affected by age, educational attainment and socioeconomic status. Therefore, media use and consumption patterns can be an important factor for organisations, consumers and media, and in analysis of the effects of advertising (Laczniak 2016). A separate inferential analysis (a Mann-Whitney test) was performed to examine how media use varies by age, gender and education (Damásio *et al*. 2015).

By applying such an integrative approach, the researcher is able to measure the time spent on different media for different practices and analyse how different media devices and communicative practices relate to one another (whether digital media are replacing old media). In addition, the researcher is able to establish the relationship between traditional and digital as well as broadcast and networked (online) media in the context of consumption practices across demographics.

METHODOLOGY

Design, participants and procedure

The researcher considered descriptive survey design to establish socio-demographic correlations of time spent on media devices. The author made no *a priori* behavioural distinction between respondents in the sampling strategy (i.e. consumers, contributors and creators of social media content) to avoid a skewed distribution of the sample and to ensure that the final findings could be used with typical consumers independent of their level of engagement with any media. The questions were fixed-choice (except for the questions that required respondents to specify “others”). The questionnaire was divided into sections containing seven items measuring the demographic profile of the respondents and 28 questions measuring how the consumption patterns of digital media and traditional media differ between the different generational groupings of the respondents. The questionnaire was pre-tested amongst ten respondents from the target population to allow for consideration of the length of the questionnaire, clarity of instructions, layout and flow of questions.

As the sample involved media users from a diverse population, a convenience sampling approach was used. The self-completion survey (format adapted from Etikan *et al*. 2016) was administered as the population that could fit the sample (South African population of 55.7 million) is very large. Because the researchers had limited resources and time, data was collected from respondents who were intercepted in their normal daily routines at various places, including houses, flats, businesses and organisations. The selection process identified people living or working in the Gauteng Province of South Africa. Similar to the World Economic Forum (2016) report, 580 questionnaires were distributed. There were four incomplete or unusable (with errors) questionnaires and 20 unreturned. The questionnaire administrator commenced by inviting subjects to complete the questionnaire voluntarily in approximately ten minutes. During the introductory stages, all the research participants were informed that data was to be held securely and kept confidential, and that the final data was to be stored, analysed and reported completely anonymous. Additionally, they were asked to give informed consent orally with the option to decline if they were not interested. To further increase the distribution, the "drop and collect" method was used for this survey (also referred to as drop-off delivery, hand delivery and collection, or self-completion questionnaires). The procedure ensures increased anonymity for participants, which results in more reliable data. The study met the standards involving research on human beings for research ethics of the University of Johannesburg. Data was collected in person over the months of November 2016 and February 2017.

Measurements

Media use the day before responding to the survey

Owing to the lack of directly related empirically published research on the consumption of traditional or digital media (focus on credibility of communication, etc. - Jordaan *et al*. 2011; Schrøder 2015), the time dimension was applied to this study (Nazarov 2017). To assess the instrument's content validity and applicability, the first version underwent a process of engaging experts and a pilot study. Content validity was applied to ensure that it includes all the items that are essential and eliminates undesirable items to a particular construct domain (Taherdoost 2016: 30), while a literature review was conducted to allow criterion-related validity (Damásio *et al*. 2015; Mander & Young 2017).

The respondents were asked how much time they spent consuming (viewing, listening to, reading) various media. The questionnaire presented a list of media and asked, "Over the last week, how much time have you spent consuming the following media?". This part of the questionnaire was split into two sections. The first was related to traditional mass media (for example, television, radio, print newspapers) and differentiated between traditional media and the use of digital/internet-based media (via computer and cellular phone); the second considered various internet-based activities, such as the use of social network services (SNSs), blogs and online games (format adapted from Mander & Young 2017).

Types of print newspapers read and location of use

The respondents were presented with a list of newspapers (for example, daily international, national and local newspapers) and were asked to indicate which types they read. They were also given a list of at-home locations (for example, in the living room) and out-of-home locations (for example, at work, at school, public spaces) and were asked to mark all those in which they read the newspaper.

Leisure preferences

The respondents were given a list of 14 leisure and media-use activities and were asked to indicate the three they were most likely to choose if they had a few hours of free time (based on Maditinos *et al*. 2014; Nimrod & Adoni 2012).

Data analysis

In total, 566 complete surveys (out of 580 responses) were analysed using SPSS software (version 24). The author used descriptive statistics (that is frequencies, ratios, crosstabs and chi-squared tests) and parametric t-tests to compare the values to determine the position of traditional media relative to equivalent new/digital media and their use compared with that of other media (or vice versa) (Pallant 2010). Data was analysed to see if there was a significant difference in whether consumers preferred media platforms for traditional media channels over digital media channels. It compared their responses and found unique similarities and differences in terms of which types of content each generation enjoys most. The non-parametric Wilcoxon Signed-Rank Test and parametric independent samples t-tests were used to examine the relationship between the demographics and the usage of media.

RESULTS

Descriptive results

The study's response rate was 95.8%, and the completion rate was 88% (*n*=556). There were slightly more male (50.3%; *n*=272) than female (49.8%; *n*=284) respondents. The majority of respondents (80%) were millennials or Generation Y (born between 1980 and 2000 and therefore 16 to 36 years old at the time of this study), rather than Generation X (20%) (born between 1965 and 1979 and therefore 37 to 51 years old at the time of this study). Groups are significant in this study because previous researchers have argued that groups have homogeneous behaviour patterns given their common lifestyle. The study followed Brosdahl and Carpenter's (2011) grouping system and categorisation of generations. According to Bolton *et al*. (2013:246), members of Generation Y or millennials are called Digital Natives, rather than Digital Immigrants. The group are the first generation to spend their entire lives in the digital environment and information technology strongly affects how they consume media. Hence, millennials are most assuredly different from their predecessors with respect to values, preferences and behaviour that are stable over time. These demographics reflect a young population, a relevant phenomenon in African and other emerging societies, and the majority were single (58%). The sample consisted mostly of black Africans (54%), followed by whites (24%), which is in line with the demographics of the country. It further consisted

mostly of individuals in the peak productive and reproductive years. As regards the work situation of the respondents, 48% were employed by a company, 35% were students, 12% were unemployed, and the remainder self-employed (5%). South Africa has relatively high levels of poverty and a widening income inequality gap (Socio-Economic Review and Outlook 2018: 27).

The main research question sought to identify the most time spent on different media devices for conducting different practices. Most respondents (57%) had spent less than 31 minutes reading print newspapers (see Table 1) over the previous week. The second largest group (52%) had spent less than 31 minutes obtaining news online from other sources. The third largest group (48%) had spent less than 31 minutes over the previous week consuming online news from other sources. The fourth largest group (43%) had spent more than two hours over the previous week watching television on a television set and reading a print newspaper. In contrast, Table 1 shows the significant number of respondents for groups who were neither listening to a radio or a computer radio (65%), nor watching television on a mobile phone (58%).

TABLE 1: DIFFERENCES ON TIME SPENT ON TRADITIONAL VERSUS NEW MEDIA

		None at all	Up to 30 minutes	31 minutes to two hours	More than two hours	Total
Time spent on reading newspapers, print (physical)	N	119	316	99	21	555
	%	21%	57%	18%	4%	100%
Time spent on reading newspapers, online	N	122	264	128	42	556
	%	22%	48%	23%	8%	100%
Time spent on obtaining news online from other sources	N	89	287	135	44	555
	%	16%	52%	24%	8%	100%
Time spent on reading books, print (physical)	N	68	157	197	131	553
	%	12%	28%	36%	24%	100%
Time spent on reading books, digital	N	144	178	149	84	555
	%	26%	32%	27%	15%	100%
Time spent on watching TV, on a TV set	N	47	80	192	237	556
	%	9%	14%	35%	43%	100%
Time spent on watching TV, on a computer	N	226	97	124	104	551
	%	41%	18%	23%	19%	100%

Time spent on watching TV, on a mobile phone	N	320	135	58	41	554
	%	58%	24%	11%	7%	100%
Time spent on listening to a radio, on a radio set	N	149	157	141	107	554
	%	27%	28%	26%	19%	100%
Time spent on listening to a radio, on a computer radio	N	359	117	47	30	553
	%	65%	21%	9%	5%	100%
Time spent on listening to a radio, on a car radio	N	120	147	190	96	553
	%	22%	27%	34%	17%	100%
Time spent on listening to a radio, on a mobile phone	N	271	132	98	52	553
	%	49%	24%	18%	9%	100%

The question on how respondents spent time on various internet activities using a computer was a multiple-response question (total percentage will therefore exceed 100%). The majority of respondents indicated that they used Facebook (72%), YouTube (72%), WhatsApp (64%) and Google+ (50%), rather than Tumblr (7%) or Flickr (3%) (Figure 1).

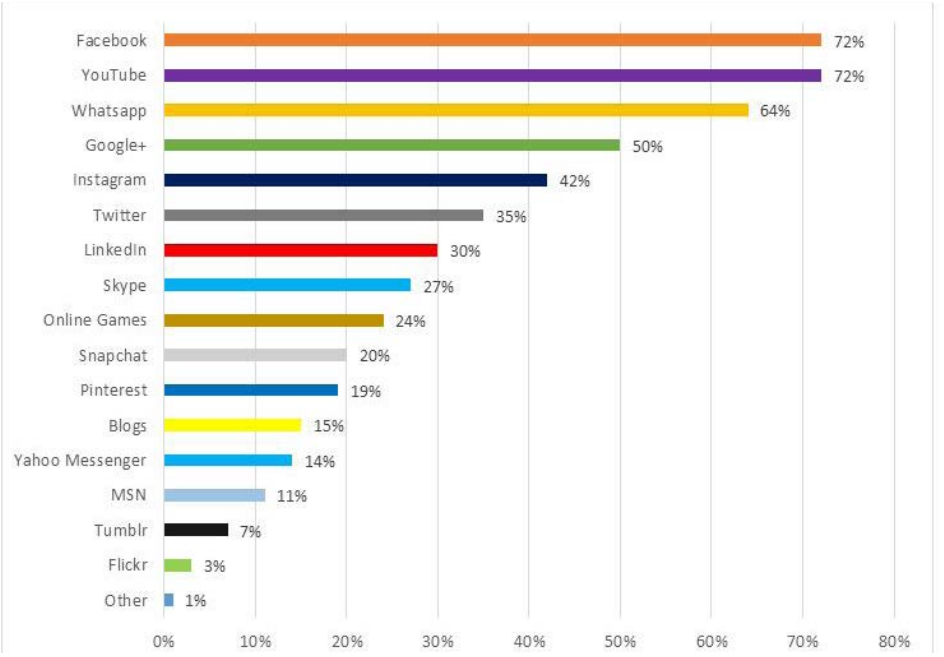

FIGURE 1: COMPUTER INTERNET-BASED ACTIVITIES

The question on the time spent by respondents on reading various types of print media and in what location was a multiple-response question (total percentage will exceed 100%). The percentage of respondents who reported that they read local

daily newspapers was highest (48%), followed closely by national daily newspapers (46%), then magazines/periodicals (43%), free newspapers (39%), international daily newspapers (18%), and international weekly newspapers (11%).

When respondents were asked to indicate at-home and out-of-home locations for reading traditional print newspapers, a significant number read in the living room at home (72%), followed by those who read at work (30%), in a public space (21%), when in transit to work (14%), at school (14%), and when in transit to school (7%). Furthermore, respondents were asked to indicate at-home and out-of-home locations for reading traditional print magazines. A significant number read them in the living room at home (75%), followed by those who read them in public spaces (31%), at work (25%), at school (17%), when in transit to work (11%), and when in transit to school (5%).

The question of how respondents spent time on leisure activities if they had a few hours of free time for such activities was a multiple-response question (total percentage will therefore exceed 100%). Data revealed that the highest number of respondents (80%) were likely to use their free time on leisure activities such as fitness, walking or shopping, watching television (78%), listening to music (68%), socialising with other people such as friends (60%), followed by mass media usage (e.g. reading newspapers) (46%), and activities on online platforms (e.g. playing online games) (22%).

Group comparison between traditional and digital media

A t-test paired samples test was used to determine whether a statistically significant difference exists between traditional and digital media preference. Traditional media included print newspapers, print books, radio sets and television sets, while new/digital media included online newspapers, online news from other sources, online radio, online videos, online television and social media sites. The mean and standard deviation scores in the study are shown in Table 2. According to Pallant (2010), the p-value should be smaller than or equal to .05 for the value of t to be significant. Consistent with hypotheses 1 and 2, analysis of variance indicated a significant amount of time spent on traditional (m=3.60) rather than new media (m=2.63) ($t(555) = 20.73$, $p < .05$), with a 95% confidence interval of the difference, along with significant time spent on watching television on a television set rather than obtaining news online from other sources ($t(554) = -18.195$, $p < .05$).

Results from the t-test found H3 consistent; analysis of variance indicated significant time spent on digital newspapers rather than print newspapers ($t(554) = -3.77$, $p < .05$). Results concur with H4, significant time spent obtaining news online from sources other than print newspapers ($t(553) = -4.91$, $p < .05$). As proposed in H5 and shown in Tables 2 and 3, more time was spent reading print books than digital books ($t(553) = 8.77$, $p < .05$). Respondents were more likely to visit social networking sites using a computer than a mobile phone ($t(499) = -15.02$, $p < .05$).

The results of the non-parametric Wilcoxon Signed-Rank Test indicate that traditional media differ significantly from digital media on mean scores in six of the nine comparisons (Table 3).

TABLE 2: T-TEST RESULTS OF TIME SPENT ON TRADITIONAL AND DIGITAL MEDIA

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Old Media - New Media	0,975	1,108	0,047	0,882	1,067	20,734	555	**0,000**
Print Newspaper - Digital Newspaper	-0,276	1,722	0,073	-0,419	-0,132	-3,771	554	**0,000**
Print Newspaper - Digital news	-0,375	1,799	0,076	-0,526	-0,225	-4,912	553	**0,000**
Print books - Digital books	0,698	1,871	0,080	0,542	0,854	8,773	552	**0,000**
Digital news - TV set	-1,683	2,179	0,092	-1,865	-1,501	-18,195	554	**0,000**
Socialnetwork phone - via computer	-1,464	2,179	0,097	-1,656	-1,272	-15,020	499	**0,000**
Online Video - Online TV	0,236	1,671	0,071	0,096	0,375	3,317	553	**0,001**
Online Video - Traditional TV	-1,887	2,244	0,095	-2,074	-1,700	-19,794	553	**0,000**
Online TV - Traditonal TV	-2,123	2,228	0,095	-2,309	-1,937	-22,423	553	**0,000**
Onlline Audio - Online Radio	0,192	1,679	0,071	0,051	0,332	2,685	552	**0,007**
Online Audio - Traditional Radio	-1,052	1,939	0,082	-1,214	-0,890	-12,762	552	**0,000**
Onlline Radio - Traditional Radio	-1,249	1,748	0,074	-1,395	-1,103	-16,793	552	**0,000**

TABLE 3: T-TEST FOR MEAN COMPARISON OF TIME SPENT ON TRADITIONAL AND DIGITAL MEDIA

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Old/Traditional Media	**3,60**	556	0,914	0,039
	New Media	2,63	556	0,884	0,038
Pair 2	Print newspaper	2,62	555	1,321	0,056
	Digital newspaper	**2,90**	555	1,526	0,065
Pair 3	Print newspaper	2,62	554	1,322	0,056
	Online news from other sources	**3,00**	554	1,473	0,063
Pair 4	Print books	**3,90**	553	1,728	0,073
	Digital books	3,20	553	1,802	0,077
Pair 5	Online news from other sources	2,99	555	1,474	0,063
	Traditional TV set	**4,68**	555	1,688	0,072
Pair 6	Mobile phone	1,74	500	1,491	0,067
	Computer	**3,21**	500	1,980	0,089
Pair 7	Online Video	**2,79**	554	1,517	0,064
	Online TV	2,55	554	1,553	0,066
Pair 8	Online Video	2,79	554	1,517	0,064
	Traditional TV	**4,67**	554	1,688	0,072
Pair 9	Online TV	2,55	554	1,553	0,066
	Traditional TV	**4,67**	554	1,688	0,072
Pair 10	Online Audio	**2,35**	553	1,353	0,058
	Online Radio	2,16	553	1,322	0,056
Pair 11	Online Audio	2,35	553	1,352	0,057
	Traditional Radio	**3,40**	553	1,435	0,061
Pair 12	Online Radio	2,16	553	1,324	0,056
	Traditional Radio	**3,41**	553	1,437	0,061

Comparison of gratification between traditional and digital media consumption

Statistical significance testing was conducted to examine whether differences existed across the following demographic measures: gender, age and education. An independent samples t-test compares the mean scores of two different groups of people (see Table 4). An independent samples t-test was conducted to compare the gender consumption scores of male and female. First, there was a significant difference in scores on digital newspapers between the two groups of media consumers, t(554) = 2.37, p < .05, two-tailed, with male (M = 3.05, SD = 1.50) scoring higher than female (M = 2.74, SD = 1.54). The magnitude of the differences in the means (mean difference = .305, 95% CI: .05 to .56) was small (eta squared < .05).

Second, there was a significant difference in scores on print books between the two groups of consumers, t(551) = -2.13, p < .05, two-tailed, with female (M = 4.05, SD = 1.68) scoring higher than male (M = 3.74, SD = 1.77). The magnitude of the differences in the means (mean difference = -0.31, 95% CI: -0.60 to -0.03) was small (eta squared < .05). Therefore, only two comparisons were statistically significant.

TABLE 4: INDEPENDENT T-TEST ON GENDER MEAN SCORES COMPARISON

		Group Statistics				t-test for Equality of Means						
											95% Confidence Interval of the Difference	
		N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Print newspaper	Male	272	**2,65**	1,314	0,080	0,476	553	0,634	0,053	0,112	-0,167	0,274
	Female	283	2,59	1,329	0,079	0,476	552,554	0,634	0,053	0,112	-0,167	0,274
Digital newspaper	Male	272	**3,05**	1,498	0,091	2,363	554	**0,018**	0,305	0,129	0,051	0,558
	Female	284	2,74	1,541	0,091	2,365	553,875	0,018	0,305	0,129	0,052	0,558
Digital news from online sources	Male	272	**3,01**	1,427	0,087	0,343	553	0,732	0,043	0,125	-0,203	0,289
	Female	283	2,97	1,520	0,090	0,343	552,695	0,731	0,043	0,125	-0,203	0,289
Print books	Male	269	3,74	1,768	0,108	-2,137	551	**0,033**	-0,313	0,147	-0,601	-0,025
	Female	284	**4,05**	1,677	0,100	-2,134	544,774	0,033	-0,313	0,147	-0,601	-0,025
Digital books	Male	271	3,11	1,799	0,109	-1,137	553	0,256	-0,174	0,153	-0,475	0,127
	Female	284	**3,29**	1,811	0,107	-1,138	552,117	0,256	-0,174	0,153	-0,475	0,127
Traditional TV set	Male	272	4,58	1,607	0,097	-1,205	554	0,229	-0,172	0,143	-0,454	0,109
	Female	284	**4,76**	1,760	0,104	-1,208	552,767	0,228	-0,172	0,143	-0,453	0,108
Computer TV	Male	269	3,13	1,972	0,120	1,048	549	0,295	0,183	0,175	-0,160	0,527
	Female	282	2,95	2,124	0,127	1,050	548,600	0,294	0,183	0,175	-0,160	0,526
Mobile phone TV	Male	271	**2,07**	1,542	0,094	0,048	552	0,962	0,007	0,136	-0,261	0,275
	Female	283	2,06	1,664	0,099	0,048	551,401	0,962	0,007	0,136	-0,261	0,274
Radio set	Male	272	3,25	1,867	0,113	-0,756	552	0,450	-0,122	0,162	-0,440	0,195
	Female	282	**3,37**	1,937	0,115	-0,757	552,000	0,449	-0,122	0,162	-0,440	0,195
Computer radio	Male	271	**1,96**	1,543	0,094	1,433	551	0,152	0,183	0,128	-0,068	0,433
	Female	282	1,78	1,457	0,087	1,431	545,914	0,153	0,183	0,128	-0,068	0,434
Car radio	Male	271	3,42	1,777	0,108	-0,968	551	0,334	-0,147	0,151	-0,444	0,151
	Female	282	**3,57**	1,785	0,106	-0,968	550,315	0,334	-0,147	0,151	-0,444	0,151
Mobile phone radio	Male	270	**2,53**	1,758	0,107	0,975	551	0,330	0,148	0,152	-0,150	0,446
	Female	283	2,38	1,807	0,107	0,975	550,786	0,330	0,148	0,152	-0,150	0,446

To compare the age mean scores the data was grouped into two: one group comprised of the millennials (36 years or younger) and the other Generation X (37 years or older). An independent samples t-test was conducted to compare the age scores of those aged 36 years or younger and those 37 years or older (see Table 5). First, there was a significant difference in scores on print newspapers between the two groups of media consumers, $t(553) = -3.34$, $p < .05$, two-tailed with those 37 years or older ($M = 2.96$, $SD = 1.35$) scoring higher than those of 36 years or younger ($M = 2.52$, $SD = 1.30$). The magnitude of the differences in the means (mean difference = -0.44, 95% CI: -0.70 to -.18) was small (eta squared < .05). Second, there was a significant difference between the two groups of media consumers in scores on watching computer television $t(549) = 6.10$, $p < .05$, two-tailed, with the group of 36 years or younger ($M = 3.29$, $SD = 2.08$) scoring higher than the group 37 years or older ($M = 2.19$, $SD = 1.69$). The magnitude of the differences in the means (mean difference = 1.10, 95% CI: 0.744 to 1.46) was small (eta squared < .05).

Third, there was a significant difference in scores on watching mobile phone television between the two groups of media consumers, $t(552) = 2.51$, $p < .05$, two-tailed, with those aged 36 years or younger ($M = 2.15$, $SD = 1.67$) scoring higher than those aged 37 years or older ($M = 1.79$, $SD = 1.35$). The magnitude of the differences in the means (mean difference = 0.36, 95% CI: 0.08 to 0.65) was small (eta squared < .05). Fourth, there was a significant difference in scores on the use of the traditional radio set between the two groups of media consumers, $t(552) = -2.26$, $p < .05$, two-tailed, with the group 37 years or older ($M = 3.66$, $SD = 2.06$) scoring higher than the group 36 years or younger ($M = 3.21$, $SD = 1.84$). The magnitude of the differences in the means (mean difference = -.046, 95% CI: -0.86 to -0.06) was small (eta squared < .05). From Table 5 the mean scores indicate that respondents, predominantly millennials, spent time reading online newspapers, obtaining news online from other sources, reading digital books, watching television on a television set, computer television, mobile phone television, and listening to radio on a computer and a car radio. On the other hand, Generation X's mean scores were high on time spent reading print newspapers, and listening to radio on a radio set and a mobile phone radio. However, the mean scores were the same for print books (see Table 5). Therefore, time spent reading print books was the same for all age groups.

The non-parametric statistics Mann-Whitney U Test and the Wilcoxon Signed-Rank Test were used (see Table 6) to compare the age mean scores. Data was grouped into four: one group was comprised of those with Grade 12 or lower, the second included those who had attained a diploma or certificate, the third group had undergraduate degree(s), and the fourth, postgraduate degree(s). The results showed that consumers with a diploma or certificate ($n = 85$) are more likely to consume digital newspapers (Mean rank = 285.54) than those with Grade 12 or lower ($n = 143$, Mean rank = 235.13). A Mann-Whitney test revealed that this difference was statistically significant: $U = 5004$, $p < .05$, $r = .15$. Second, results indicated that consumers with a diploma or certificate ($n = 85$) are more likely to listen to computer radio (Mean rank = 128.90) than the Grade 12 group or lower ($n = 143$, Mean rank = 105.94). A Mann-Whitney test revealed that this difference was statistically significant: $U = 4853.5$, $p < .05$, $r = .15$.

TABLE 5: AGE MEAN SCORES COMPARISON (MILLENNIAL VERSUS GENERATION X)

Group Statistics						Levene's Test for Equality of Variances		t-test for Equality of Means						
													95% Confidence Interval of the Difference	
		N	Mean	Std. Deviation	Std. Error Mean	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Print newspaper	36 years or younger	428	2,52	1,296	0,063	0,254	0,614	-3,341	553	**0,001**	-0,442	0,132	-0,702	-0,182
	37 years or older	127	**2,96**	1,353	0,120			-3,263	199,496	0,001	-0,442	0,135	-0,709	-0,175
Digital newspaper	36 years or younger	428	**2,91**	1,557	0,075	2,828	0,093	0,474	554	0,636	0,073	0,154	-0,229	0,375
	37 years or older	128	2,84	1,424	0,126			0,497	225,495	0,619	0,073	0,147	-0,216	0,362
Online news sources	36 years or younger	427	**3,06**	1,487	0,072	0,397	0,529	1,924	553	0,055	0,285	0,148	-0,006	0,576
	37 years or older	128	2,77	1,415	0,125			1,976	217,789	0,049	0,285	0,144	0,001	0,570
Print books	36 years or younger	426	**3,90**	1,718	0,083	0,176	0,675	0,022	551	0,983	0,004	0,175	-0,340	0,347
	37 years or older	127	**3,90**	1,768	0,157			0,021	202,176	0,983	0,004	0,178	-0,346	0,354
Digital books	36 years or younger	427	**3,25**	1,788	0,087	0,312	0,577	1,120	553	0,263	0,204	0,182	-0,154	0,561
	37 years or older	128	3,05	1,861	0,164			1,096	202,427	0,274	0,204	0,186	-0,163	0,570
Traditional TV set	36 years or younger	428	**4,71**	1,678	0,081	0,253	0,615	0,961	554	0,337	0,163	0,170	-0,171	0,497
	37 years or older	128	4,55	1,720	0,152			0,948	204,641	0,344	0,163	0,172	-0,176	0,503
Computer TV	36 years or younger	424	**3,29**	2,083	0,101	32,707	0,000	5,442	549	0,000	1,101	0,202	0,704	1,499
	37 years or older	127	2,19	1,694	0,150			6,078	250,693	**0,000**	1,101	0,181	0,744	1,458
Mobile phone TV	36 years or younger	426	**2,15**	1,665	0,081	10,023	0,002	2,242	552	0,025	0,361	0,161	0,045	0,678
	37 years or older	128	1,79	1,350	0,119			2,508	253,884	**0,013**	0,361	0,144	0,078	0,645
Radio set	36 years or younger	426	3,21	1,843	0,089	8,257	0,004	-2,396	552	0,017	-0,457	0,191	-0,833	-0,082
	37 years or older	128	**3,66**	2,055	0,182			-2,260	192,426	**0,025**	-0,457	0,202	-0,857	-0,058
Computer radio	36 years or younger	425	**1,89**	1,506	0,073	0,019	0,891	0,730	551	0,466	0,111	0,151	-0,187	0,408
	37 years or older	128	1,78	1,490	0,132			0,734	211,152	0,464	0,111	0,151	-0,186	0,407
Car radio	36 years or younger	426	**3,56**	1,737	0,084	4,512	0,034	1,500	551	0,134	0,270	0,180	-0,084	0,623
	37 years or older	127	3,29	1,911	0,170			1,424	192,276	0,156	0,270	0,189	-0,104	0,643
Mobile phone radio	36 years or younger	425	2,43	1,801	0,087	0,090	0,765	-0,586	551	0,558	-0,105	0,180	-0,459	0,248
	37 years or older	128	**2,53**	1,725	0,152			-0,600	217,119	0,549	-0,105	0,176	-0,452	0,241

TABLE 6: EDUCATION MEAN SCORES COMPARISON

Test Statistics[a,b]			
	Chi-Square	**Df**	**Asymp. Sig.**
Print newspaper	5,802	3	0,122
Digital newspaper	19,773	3	0,000
Digital news from online	7,546	3	0,056
Print books	7,579	3	0,056
Digital books	23,538	3	0,000
Traditional TV set	6,259	3	0,100
Computer TV	18,117	3	0,000
Mobile phone TV	10,002	3	0,019
Traditional radio set	4,819	3	0,186
Computer radio	9,573	3	0,023
Car radio	7,371	3	0,061
Mobile phone radio	29,340	3	0,000

a. Kruskal Wallis Test

b. Grouping Variable: rEducation

Third, the results showed that consumers with a diploma or certificate (n = 85) were more likely to listen to a mobile phone radio (Mean rank = 131.96) than the Grade 12 or lower group (n = 143, Mean rank = 104.12). A Mann-Whitney test revealed that this difference was statistically significant: U = 4593.5, $p < .05$, r = .21.

Fourth, the results revealed that consumers with undergraduate degree(s) (n = 175) were more likely to consume computer television (Mean rank = 174.10) than those with Grade 12 or lower (N = 143, Mean rank = 141.63). A Mann-Whitney test revealed that this difference was statistically significant: U = 9957.5, $p < .05$, r = .18. Fifth, results showed that consumers with postgraduate degree(s) (n = 150) were more likely to consume digital books (Mean rank = 167.22) than the Grade 12 or lower group (n = 143, Mean rank = 125.79). A Mann-Whitney test revealed that this difference was statistically significant: U = 7692.5, $p < .05$, r = .25. Sixth, the results indicated that consumers with undergraduate degree(s) (n = 177) were more likely to consume mobile phone television (Mean rank = 177.01) than those with postgraduate degree(s) (n = 149, Mean rank= 147.45). A Mann-Whitney test revealed that this difference was statistically significant: U = 10795.5, $p < .05$, r = .17.

DISCUSSION

This empirical investigation attempted, as a baseline for future research, to answer whether most South Africans consume traditional media or digital media. Contrary to expectations, even at this initial stage, the overall results of the study are that traditional media (especially print media and traditional television sets) still constitute

an important component of the wired world context for South African audiences. The results confirm the findings of Wurff (2011: 155), who found that "displacement of traditional by online media is a question of accessibility and habit formation, rather than a matter of conscious choice for (new) media that serve the same user needs better". These results should also be considered in light of the particular economic challenge faced by the majority of black people in South Africa (54% of the sample). Access to digital media may perhaps be limited because of affordability and exposure issues. Digital media remain the domain of a privileged minority in South Africa (Jordaan *et al*. 2011). The findings are consistent with the assertion of Nossek *et al*. (2010) and Odun and Utulu (2016: 64) that Africa cannot do away with traditional media because, compared with developed countries, there are more illiterate or semi-literate people who do not have access to digital media devices.

Results of sub-group comparisons showed that respondents are fragmented across various media platforms. News consumption both online and offline is led by male respondents, while more female respondents enjoy reading books. Therefore, the traditional gender division observed in mobile phone use is interesting in the light of conjectures that genders are still uneven in their use of new technology. Generally, in relation to gender, males consume more news that females do, although a healthy number of males and females still follow the news. These findings do not concur with those of Renés-Arellano *et al*. (2017).

The examination of 556 respondents showed that the most used platforms are Facebook, YouTube, WhatsApp and Google+. In line with previous studies, young consumers in South African cities spend more time interacting with friends via social networking sites than watching television (Jordaan *et al*. 2011). The finding that listening to music was the predominant leisure activity agrees with Nimrod and Adoni (2012), who found that respondents were more likely to listen to music and play video and online games.

This study provides marketers with a basic insight into the state of traditional media and the capacity to capitalise on unique opportunities posed by the media landscape. Finally, it brings a significant understanding of how the age, gender and education gap affect media usage. The findings of this research can assist advertising and marketing agencies in developing campaigns in line with the principles that guide the media allocation. The research findings will also be useful to organisations working on strategies to communicate effectively with South African audiences.

CONCLUSION

The study clearly indicates that those who have adopted digital media are typically from younger groups with a higher socio-economic status. Gender, education and age appear to be the most important factors. This implies that deeply entrenched patterns of social inequalities in the country explain the disparities in access to and use of newer media. Gender also remains divisive for the greater adoption of digital media. The updated market insights derived from a comparison of consumers' time consumption

between traditional media and digital media will inevitably have consequences for fine-tuning the targeting and engagement of consumers.

In summary, the study offers important implications for theoretical advancement and practical understanding of consumer response to time consumption on traditional media and digital media. The findings provide evidence that traditional media consumption is preferred to digital media for an older generation. For advertisers considering platforms to reach consumers, this study offers insights into the challenges of how to connect consumers with messages within the complexity of digital data. These findings imply that targeting millennials remains a challenge as respondents are fragmented across various media platforms.

Limitations are present in terms of the measurements of media consumption — the use of a standardised questionnaire may not reflect the complexity of "repertoire" (distinct media are associated with specific content and reflect the specific needs of the audience). Future studies can take a qualitative approach to examine the views of users of both traditional and digital media. In terms of traditional media, including radio and television channels, further studies could shed light on the types of channels used. This serves as a contemporary understanding of media use but change might inevitably occur. Digital media will continue to evolve; therefore, future researchers should consider similar research using a representative sample. Gauteng is the most populated province in South Africa (Socio-Economic Review and Outlook 2018). However, further studies with other provinces would be valuable to conduct a comparative study. Finally, this study considered only two types of media (i.e., traditional - print or broadcast and new media - digital or online). Media consumption, however, has been used for general media. Therefore, it would be valuable to understand if and how consumers respond differently to specific traditional and digital media platforms of local or international origin.

REFERENCES

Bolton, R.N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., Loureiro, Y.K. & Solnet, D. 2013. Understanding Gen Y and their use of social media: A review and research agenda. *Journal of Service Management* 24(3): 245-267. https://doi.org/10.1108/09564231311326987

Brosdahl, D.J. & Carpenter, J.M. 2011. Shopping orientations of US males: A generational cohort comparison. *Journal of Retailing and Consumer Services* 18(6): 548-554. https://doi.org/10.1016/j.jretconser.2011.07.005

Damásio, M.J., Henriques, S., Da Silva, M.T., Pacheco, L. & Brites, M.J. 2015. Between old broadcast media and new networked media: Materiality and media consumption practices. *International Journal of Communication* 9: 386–411.

Etikan, I., Musa, S.A. & Alkassim, R.S. 2016. Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics* 5(1): 1-4. https://doi.org/10.11648/j.ajtas.20160501.11

Fulgoni, G.M. 2018. Will digital commerce and analytics be the death of traditional brands? *Journal of Advertising Research* 58(2): 146-150. https://doi.org/10.2501/JAR-2018-023

Jere, M.G. & Davis, S.V. 2011. An application of uses and gratifications theory to compare consumer motivations for magazine and Internet usage among South African women's magazine readers. *Southern African Business Review* 15(1): 1-27.

Jordaan, Y., Ehlers, L. & Grové, J.M. 2011. Advertising credibility across media channels: Perceptions of Generation Y consumers. *Communicare* 30(1): 1-20.

Laczniak, R.N. 2016. Comment: Advertising's domain and definition. *Journal of Advertising* 45(3): 351-352. https://doi.org/10.1080/00913367.2016.1192006

Lievrouw, L. 2014. Materiality and media in communication and technology studies: An unfinished project. In: Gillespie, T., Boczkowski, P. & Foot, K. (eds.). *Media technologies: Essays on communication, materiality and society*. Cambridge, MA: MIT Press.

Maditinos, D.I., Papadopoulos, D. & Prats, L. 2014. The free time allocation and its relationship with the perceived quality of life (QoL) and satisfaction with life (SwL). *Procedia Economics and Finance* 9: 519-532. https://doi.org/10.1016/S2212-5671(14)00053-7

Mander, J. & Young, K. 2017. Global World Index Q1, Digital vs Traditional Media Consumption Summary. [Online]. Available at: https://cdn2.hubspot.net/hubfs/304927/Downloads/Digital%20vs%20Traditional%20Summary%20-%20Q1%202017.pdf [Accessed on 16 October 2018].

McLuhan, M. 2003. *Understanding media: The extensions of man*. (Critical edition). (Edited by W. Terrence Gordon). Corte Madera, CA: Gingko Press.

Mitchelstein, E. & Boczkowski, P.J. 2010. Online news consumption research: An assessment of past work and an agenda for the future. *New Media & Society* 12(7): 1085-1102. https://doi.org/10.1177/1461444809350193

Nazarov, M.M. 2017. Television and the Internet: The typology of Russian media consumption. *Russian Social Science Review* 58(1): 15-29. https://doi.org/10.1080/10611428.2017.1274995

Nimrod, G. & Adoni, H. 2012. Conceptualizing e-leisure. *Loisir et Société/Society and Leisure* 35(1): 31–56. https://doi.org/10.1080/07053436.2012.10707834

Nossek, H., Adoni, H. & Nimrod, G. 2015. Is print really dying? The state of print media use in Europe. *International Journal of Communication* 9: 365-385.

Odun, O. & Utulu, A.U. 2016. Is the new media superior to the traditional media for advertising? *Asian Journal of Economic Modelling* 4(1): 57-69. https://doi.org/10.18488/journal.8/2016.4.1/8.1.57.69

O'Guinn, T.C., Allen, C.T. & Semenik, R.J. 2015. *Advertising and integrated brand promotion.* (Seventh edition). Cincinnati, OH: South-Western Cengage Learning.

Pallant, J. 2010. *A step by step guide to data analysis using the SPSS program: SPSS survival manual.* (Fourth edition). Maidenhead, Berkshire: Open University Press.

Patterson, G. 2015. Audit Bureau of Circulations of South Africa 2015 Year-End Newsletter. [Online]. Available at: http://www.abc.org.za/Notices.aspx/Details/46 [Accessed on 19 February 2016].

Poster, M. 2004. Consumption and digital commodities in the everyday. *Cultural Studies* 18(2/3) (March/May): 409-423. https://doi.org/10.1080/0950238042000201581

Renés-Arellano, P., Hernandez-Serrano, M., Graham, G. & Greenhill, A. 2017. From prosumer to prodesigner: Participatory news consumption. *Comunicar* 25(50): 77-88. https://doi.org/10.3916/C50-2017-07

Royne, M.B. 2016. Research and publishing in the 'Journal of Advertising': Making theory relevant. *Journal of Advertising* 45(2): 269-273. https://doi.org/10.1080/00913367.2016.1156592

Schrøder, K.C. 2015. News media old and new: Fluctuating audiences, news repertoires and locations of consumption. *Journalism Studies* 16(1): 60-78. https://doi.org/10.1080/1461670X.2014.890332

Socio-Economic Review and Outlook. 2018. Socio-Economic Review and Outlook 2018: Gauteng Provincial Government. [Online]. Available at: http://www.gauteng.gov.za/government/departments/provincial-treasury/Documents/Socio-Economic%20Reveiw%20and%20Outlook%202018.pdf. [Accessed on 12 October 2018].

Taherdoost, H. 2016. Validity and reliability of the research instrument: How to test the validation of a questionnaire/survey in research. *International Journal of Academic Research in Management* (IJARM) 5(3): 28-36. https://doi.org/10.2139/ssrn.3205040

Van Cauwenberge, A., D'Haenens, L. & Beentjes, H. 2010. Emerging consumption patterns among young people of traditional and Internet news platforms in the low countries. *Observatorio (OBS) Journal* 4(3); 335-352.

Varga, Z. & Nylrő, N. 2014. Through the kaleidoscope: Media consumption patterns in the participatory cross-media era. *Vezetéstudomány / Budapest Management Review* 45(2): 4-13.

World Economic Forum. 2016. Digital media and society implications in a hyperconnected era. [Online]. Available at: http://www3.weforum.org/docs/WEFUSA_DigitalMediaAndSociety_Report2016.pdf [Accessed on 24 February 2016].

Wurff, R. 2011. Are news media substitutes? Gratifications, contents, and uses. *Journal of Media Economics* 24(1): 139-157. https://doi.org/10.1080/08997764.2011.601974