Facebook advertising’s influence on intention-to-purchase and purchase amongst Millennials

Rodney Graeme Duffett
Department of Marketing, Cape Peninsula University of Technology, Cape Town, South Africa

Abstract

Purpose – The purpose of this paper is to investigate the influence of behavioural attitudes towards the most popular social medium in the world, Facebook, amongst Millennials in South Africa (SA), and to determine whether various usage and demographic variables have an impact on intention-to-purchase and purchase perceptions.

Design/methodology/approach – Quantitative research was conducted by means of a survey among a sample of over 3,500 respondents via self-administered structured questionnaires in SA. A generalised linear model was used to analyse the data.

Findings – The results confirm that advertising on Facebook has a positive influence on the behavioural attitudes (intention-to-purchase and purchase) of Millennials who reside in SA. The usage characteristics, log on duration and profile update incidence, as well as the demographic influence of ethnic orientation also resulted in more favourable perceptions of Facebook advertising.

Research limitations/implications – Research on Facebook advertising was only conducted in SA, whereas other emerging countries warrant further investigation to establish if they share the slight positive sentiment towards intention-to-purchase and purchase. This inquiry only provides a “snapshot” of behavioural attitudes, usage and demographic factors towards social media advertising, whereas future research could consider the development of cognitive, affective and behavioural attitudes towards Facebook advertising by employing longitudinal and qualitative research designs.

Practical implications – Organisations and managers should consider that their existing Facebook advertising strategies may only have a limited effect on intention-to-purchase and purchase in SA. However, certain usage characteristics, namely the more time spent logged on to Facebook and the greater frequency of profile update incidence, as well as the demographic variable, namely black and coloured Millennials, resulted in more favourable behavioural attitudes towards Facebook advertising. Hence, organisations and managers should be prepared to alter or adapt their Facebook advertising tactics accordingly when targeting the notoriously fickle Millennials.

Originality/value – This investigation found that Facebook advertising has a nominal positive influence on behavioural attitudes among Millennials, which is in congruence with the communications of the effect pyramid model that was established through traditional advertising research. This paper also makes a noteworthy contribution to attitudinal research in emerging countries where there is a dearth of research in social media advertising.

Keywords Social media, South Africa, Millennials, Behavioural attitudes, Facebook advertising, Intention-to-purchase

Paper type Research paper
1. Introduction

Technological innovation has grown at an unprecedented rate over the past couple of decades, especially in terms of online social media platforms. Accordingly, Millennials (born between 1982 and 1994) have been exposed to an explosion of online technological applications since their advent, as these have been incorporated into nearly every facet of their daily existence. In fact, this cohort has not experienced the world without digital interactive technology. Moreover, technology diversification drives universal homogeneity among Millennials, resulting in a hypothetical global cohort that purportedly displays analogous attitudes and behaviour (Lingelbach et al., 2012; Moore, 2012). Yet, many articles have characteristically concentrated on the social media attitudes and usage of Millennials who reside in developed countries with unhindered access to social media and information technology. Hence, Bolton et al. (2013) maintain that social media attitudes and usage may differ among Millennials from emerging countries when compared to their wealthier counterparts owing to technological infrastructure and different cultures. Nonetheless, Millennials’ social media usage are of particular interest to organisations and managers since it may provide an indication of how these consumers will behave in the future, as well as what their perceptions are towards their brands (Bolton et al., 2013). Consequently, this study aims to establish if Facebook advertising is effective at realising the top communication of effects pyramid objectives, intention-to-purchase and purchase (the behavioural attitude), among the Millennial cohort.

Social media has become an imperative conduit for global marketing communications and is commanding a larger share of advertising budgets, especially to reach the younger generation. Therefore, the value of advertising on social media such as Facebook, Youtube, LinkedIn, Twitter and others is of great interest to organisations, managers and academics (Saxena and Khanna, 2013). Much academic research has explored the attitudes and perceptions of online advertising (Shu and Chuang, 2011; Jalilvand and Samiei, 2012; Blasco-Arcas et al., 2014; Hsu et al., 2014) and more recently, social media (Maxwell, 2013; Persaud, 2013; Than et al., 2013; He and Zha, 2014; McCarthy et al., 2014). There is also consensus that online advertising can be appraised via elements such as brand awareness, product recall and attitudinal and behavioural changes (Bannister et al., 2013; Barreto, 2013; Hudson and Thal, 2013).

However, Bolton et al. (2013) believes that previous research on social media among Millennial users results in more questions than answers. Bolton et al. (2013) suggest that prior research predominantly focused on US social media users, disregarding other emerging regions with rapidly growing Millennial populations, where the use of social media and its determinants might differ considerably. Accordingly, this study focused on social media users in South Africa (SA), where nearly 25 per cent of the population are deemed to be Millennials (Statistics South Africa (SA), 2012). Furthermore, Bolton et al. (2013) noted that a majority of studies focused on student populations whose behaviour may change as they progress through the different stages of their life cycle. A broad spectrum of the Millennial cohort was surveyed, which comprised of young working adults and individuals who were still seeking employment from both rural and urban regions. Moreover, participants from both advantaged (suburbs) and disadvantaged (townships) communities were also included, instead of only utilising a student population. Bolton et al. (2013) also questioned whether there were noticeable differences among Millennial subgroups in their use of social media. Thus, the influence of a range of usage characteristics and demographic factors within the Millennial subgroups were also investigated in this
study. Furthermore, Facebook revenue from advertising has grown by 59 per cent during the past year to over $5.4 billion in 2014 (Facebook, 2014a), which is testament to the shift from traditional media advertising to digital interactive media advertising by organisations. It is estimated that Millennials will have a combined purchasing power of $2.45 trillion worldwide by 2015. It can be assumed that social communications in the form of online reviews, posts and word-of-mouth (WOM) will play a large part in driving purchase decisions (Priyanka, 2013). Therefore, it is imperative that organisations have a complete understanding of the behavioural attitudes of this target market, especially in terms of usage characteristics and demographic factors that can be identified by Facebook Insight metrics (Facebook, 2014b) so that they can use their marketing communications budgets effectively by targeting those Millennials that yield the greatest behavioural response.

2. Literature review

2.1 Social media background

The rapid growth of social media platforms has permanently altered the way that numerous consumers interact with each other and organisations. Hence, this has changed the way that organisations attract and retain prospective consumers (Leung et al., 2015). Previously, marketers would create captivating advertising messages and purchase space in the mass media in the hope that consumers would become aware of and develop a preference to and purchase the brand. Social media has irrevocably altered marketing communications by shifting ways in which consumers select, share and appraise information. With the advent of social media, traditional media such as television and newspapers have lost uninterrupted viewership and readership, and their influence as advertising channels may have been weakened. The speed of online communication and numerous information sources make advertising on traditional sources less relevant. Furthermore, marketers quickly realised the influence of social community in terms of interactivity that comprises of personalised sections, shopping experiences, greater convenience and widespread information search (Chandra et al., 2012; Patino et al., 2012; He and Zha, 2014).

Consequently, marketers are increasing their social media budgets with digital interactive advertising forecasted to reach $138 billion in 2014, a growth rate of nearly 15 per cent in comparison to 2013 (eMarketer, 2014a). Furthermore, the Middle East and Africa are predicted to have the highest social media advertising spend growth (64 per cent) in 2014 (eMarketer, 2014c). Business-to-consumer (B2C) ecommerce revenue is expected to reach $1.5 trillion in 2014 (an increase of 20 per cent), with growth primarily coming from emerging markets (eMarketer, 2014b). Current figures reveal that the largest online social medium in the world is Facebook, with 1.32 billion active members, and it is also the largest social commerce site that accounts for 85 per cent of all orders from social media (Facebook, 2014a; Shopify, 2014). The aforementioned evidence necessitates research into behavioural attitudes towards Facebook in an emerging country, namely, SA, which will be of interest to managers and their organisations.

2.2 Facebook marketing communication efficacy

The world wide adoption of mobile phones has driven Facebook’s mobile impetus, as the number of consumers that access the internet via mobile is closing the gap on computer-based online users. World Wide Worx indicated that there are 9.4 million
active Facebook users in SA (making it the largest social medium in the country), with 87 per cent accessing Facebook via mobile devices such as cell phones and smartphones (Wronski and Goldstruck, 2013). Additionally, 93 per cent of companies in SA use Facebook, with two-thirds using this platform as a core part of their marketing campaigns, and 47 per cent for customer lead generation (Wronski and Goldstruck, 2013). Few studies have determined whether social media advertising is effective when accessed via mobile devices, which is examined in this paper. A review of Facebook’s global advertising performance indicated that click-through rates had improved by 20 per cent from 2011 to 2012 (AYTM, 2012). Furthermore, the cost per click had risen by over a quarter and the cost per thousand increased by more than half. However, Greenlight (2012) found that 44 per cent of consumers did not ever click on Facebook advertisements, 31 per cent rarely did, 10 per cent often did and 3 per cent clicked regularly. While Associated Press and CNBC (2012) reported that over eight out of ten Facebook users never or seldom viewed Facebook advertisements or their sponsored content. However, Reuters and Ipsos (2012) revealed that one in five Facebook users had purchased products as a result of advertisements and/or comments that they viewed on Facebook. This rate increased to nearly 30 per cent who were aged 18-34. Facebook and ComScore (2012) disclosed that 4 per cent of consumers bought something within a month after being exposed to earned brand impressions from a retailer. The exposure also increased consumers’ intention-to-purchase. RichRelevance (2013) revealed that consumers who made purchases, owing to Facebook advertising, were double in comparison to Pinterest and Twitter. Facebook also had the greatest income per session. Bannister et al. (2013) found that the attitudes of US college students towards Facebook advertising were largely negative or indifferent. Respondents disclosed that Facebook advertisements were predominantly uninformative, irrelevant, uninteresting, and would, therefore, not generally click on them. Moreover, a majority of college students stated that they would not make a purchase owing to Facebook advertising. Persuad (2013) used a controlled experiment among 96 young adults to explore the impact of interactivity and product involvement on respondents’ attitudes towards brands on Facebook and their intention-to-purchase. No significant results were found for interactivity, product involvement or intention-to-purchase. However, the study revealed that high levels of interactivity on Facebook were positively correlated to intention-to-purchase and favourable attitudes towards the brand. The divergent results of Facebook’s marketing communication efficacy warrant additional investigation.

2.3 Millennials cohort
Millenial (Echo boomers, Generation Y, hip-hop, kwaito or Facebook generation) consumers are the children of the Baby Boomers or Generation X (Dotson and Hyatt, 2006; Berndt, 2007). Most of the discussion is based on international studies, with some commentary on Millenial consumers in SA, although cohort research is deemed to be transnational. Millenial consumers enjoy communication, since they are self-expressive and support freedom of speech, as well as accept change and are even deemed to be trendsetters (Lingelbach et al., 2012; Moore, 2012; Bolton et al., 2013). Millennials are always connected and connect with one another via the latest technologies (Goldenberg, 2007). The black Millennials cohort encompasses a significant portion of the South African market, especially those who are studying at tertiary institutions, as they represent a particularly lucrative target market owing to the fact that higher education is correlated with increased earning potential (Bevan-Dye et al., 2012). Most Millennials would have first encountered computers as toddlers and embraced the interconnectedness of the internet, mobile devices
and social media social network sites (SNS) as part of their interactive world. The duo of interconnectivity and being tech savvy reveals the huge influence of Millennials’ predisposition to connect continuously and easily to multiple social network channels that are embraced for purchase decisions and to initiate electronic WOM (Noble et al., 2009).

Africa has experienced exponential internet growth over the past decade, with only 4.5 million internet users at the start of 2001 that grew to over 167 million in June 2012 (Internet World Stats, 2012). A primary reason for this massive expansion in internet usage is owing to the increasing number of internet-enabled mobile and smart phone users, as mentioned in prior text. This new found connectivity has permitted more Africans to join the online world, while many are also joining SNS that allow them to interact with people around them and across the globe. SNS is the most popular online activity, with nearly 60 per cent of African users favouring it above all other online activities. Facebook is the dominant SNS, however, owing to the proliferation of smartphones, it is probable that Twitter will also gain favour as its usage has directly begun to increase exponentially (Digital Fire, 2012). Two-thirds of South Africans are 30 years old or younger and a little under 25 per cent (over 13 million individuals) are deemed to constitute the Millennials cohort (Statistics SA, 2012). However, less than 20 per cent of advertising budgets are directed at these young consumers in SA, yet Millennials spend over R100 billion per annum, which makes them a lucrative target market (Levin, 2013). JWT Intelligence (2012) revealed that Millennials display a high propensity for SNS shopping-related activities: 63 per cent of Millennial online users have requested advice from friends about brands on Facebook, six out of ten were more probable to buy a brand based on recommendations received via Facebook, and 57 per cent had displayed a status update on their Facebook page about a brand. Barreto (2013) employed eye-tracking experiments among 20 undergraduates to establish whether they perceived advertisements on Facebook. The research confirmed that Facebook advertisements resulted in lower attention levels in comparison to the recommendations of friends. Yaakop et al. (2013) examined the cognitive interactivity (awareness and knowledge) and advertising avoidance (negative sentiment towards social network advertising (SNA)) influence on attitudes towards Facebook among 357 undergraduate students. The study revealed that both cognitive interactivity and advertising had significant influence on attitudes towards Facebook advertising, thereby revealing both negative and positive attitudes towards Facebook advertising. Hence, owing to these conflicting findings, it is necessary to further explore Millennials’ attitudes towards Facebook advertising.

2.4 Attitudes and hierarchy response model

Belch and Belch (2012) assert that there are three attitudinal stages or components, which are encapsulated in the tricomponent attitude model: cognitive component (an individual’s beliefs regarding an object), affective component (an individual’s feelings towards the object that may be positive or negative) and the behavioural component (an individual’s readiness to respond to the object in the form of behaviour).

Lavidge and Steiner (1961) diverged from prior early hierarchy response model development, since they believed that immediate sales was an insufficient factor of advertising effectiveness, even if it was measurable. They posited that advertising was an enduring investment, which was mainly owing to the long-term nature of advertising effects that resulted in the development of the hierarchy-of-effects model. Hence, it was inconceivable that consumers moved from a stage of total disinterest to eager purchasers; but instead moved through a sequence of steps until purchase. These steps are as follows: unawareness of the brand’s existence, awareness,
knowledge of what the brand offers (awareness and knowledge form the cognitive attitude component), consumers like the brand (a favourable affective attitude), consumers prefer the brand over others (a favourable affective predisposition) and have a desire to purchase the brand and conviction that it would be a wise purchase that leads to purchase intent, and finally culminating in the actual purchase (behavioural attitude component). The steps of the hierarchy-of-effects model are analogous to the communications of effect pyramid (also known as the purchase funnel) that was mentioned in prior text. It becomes progressively more difficult to achieve the upper level stages and, hence, the number of prospective consumers decreases as they progress through the latter stages of the pyramid (Safko, 2010; Belch and Belch, 2012).

Chandra et al. (2012) conducted research into attitudes towards SNA among undergraduate and postgraduate students. The study found that social media advertising aided the purchase decision and resulted in more competitive prices, but held unfavourable attitudes in terms of various cognitive (information) and affective (enjoyment, entertainment value and authenticity) components (lower level pyramid activities). Powers et al. (2012) agreed with the aforementioned sentiments and disclosed that over 20 per cent of consumers believed that social media was important for their final purchase decision; while another 20 per cent stated that it helped them to decide what to purchase. Hudson and Hudson (2013) used a case study research design to explore the influence of social media (Facebook and Twitter) on music festival consumer decisions. The research confirmed that consumers were actively engaged with the companies after purchase (the top purchase funnel echelon), thereby facilitating brand development. Smith (2013) determined that Facebook users who indicated having favourable experiences with an organisation’s brand content led to an increased probability of executing a higher level communications of effect pyramid action, whereas Yadav et al. (2013) surmised that products, which require a high effort and strong social component have a strong influence on purchase decisions in terms of computer-mediated social environments. Edwards (2011) found that companies, which employed social media, enhanced the elements of the purchase funnel such as awareness, consideration and purchase, while Carrillat et al. (2014) suggested that Facebook messages must be entertaining to have a positive impact on attitudes. Hence, this study seeks to confirm whether Facebook advertising has a positive effect on the top two levels of the communications of effect model. Table I provides an overview of recent Facebook marketing communications studies, which investigated the upper communications of effect pyramid levels, namely intention-to-purchase and purchase.

In summary, there have been a number of recent studies that assessed behavioural attitudes towards SNA, but these were predominantly conducted in more developed nations; utilised students as the research population; used relatively small sample sizes; and few explored the effect of usage characteristics and demographic factors on Facebook advertising.

3. Research objectives
Consequently, this empirical investigation seeks to expound upon the following research objectives: first, to determine whether advertising on Facebook has an influence on the behavioural attitudinal component of Millennials in an emerging country such as SA. As discussed in prior text, advertising achieves communication activities in a similar manner to a pyramid, by initially attaining lower hierarchy response marketing communication objectives such as awareness and knowledge. Thereafter, companies seek to attain and move consumers to higher hierarchical level
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<td>Hamidizadeh et al. (2012)</td>
<td>The aim of the research was to establish whether e-advertising (for example, web sites and social media – including Facebook) had an influence on consumers' cognitive, affective and behavioural responses</td>
<td>Survey, quantitative, 267 consumers, and Tehran (Iran)</td>
<td>The study revealed that e-advertising had a positive influence on cognitive, affective and behavioural responses</td>
<td>Small sample size, only focused on Refah chain store consumers, no usage or demographical variable analysis</td>
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<td>Mir (2012)</td>
<td>The objectives of the study were to establish whether favourable attitudes towards social media (Facebook) advertising resulted in greater levels of clicking on the social media advertisements and, consequently, higher incidences of purchase</td>
<td>Survey, quantitative, 210 college students, and Pakistan</td>
<td>The study found that information (cognitive) lead to positive consumer attitudes towards social media advertising, which significantly influenced ad clicking and, consequently, had a favourable influence on buying behaviour</td>
<td>Small sample size, students, no usage or demographical variable analysis</td>
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<td>Yang (2012)</td>
<td>A goal of the investigation was to test the impact of Facebook advertising on consumer decision-making behaviour and attitudes</td>
<td>Survey, quantitative, 256 respondents, and Taiwan</td>
<td>The enquiry revealed that advertising messages provided by Facebook enhances consumers’ attitudes towards the brand and purchase intentions</td>
<td>Small sample, students, no usage or demographical variable analysis</td>
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<td>Haigh et al. (2013)</td>
<td>The study investigated organisations’ Facebook pages in terms of the impact on stakeholders’ attitudes, and purchase intent</td>
<td>Controlled experiment, quantitative, 275 participants, and USA</td>
<td>The research disclosed that Facebook pages had a positive influence on stakeholders’ attitudes and purchase intention</td>
<td>Small sample, students, USA, no usage or demographical variable analysis</td>
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<td>Leung et al. (2015)</td>
<td>This study investigated the effectiveness of social media sites in terms of the attitude-towards-the-ad model in the hotel industry</td>
<td>Online survey, quantitative, 408 respondents, and USA</td>
<td>The survey found that social media experiences affect attitudes towards Facebook and Twitter, and influenced attitudes towards the organisation, which in turn impacted on purchase intentions. Furthermore, no significant difference was found between the effectiveness of Facebook and Twitter advertising</td>
<td>Small sample, USA, no usage or demographical variable analysis</td>
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<td>Ruane and Wallace (2013)</td>
<td>The objective of the research was to understand relationships, which Generation Y females have with fashion brands online (social media and internet)</td>
<td>Inductive thematic analysis, qualitative, 14 participants, and Ireland</td>
<td>The study found that social media (Facebook and Twitter) created an awareness of needs and was used as an information source (cognitive), while it also drove consumption (behavioural) among Generation Y women</td>
<td>Small sample, students and working professionals, Ireland, no usage variable analysis</td>
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<td>Kodjamanis and Angelopoulos (2013)</td>
<td>The objective of the research was to establish to what extent Facebook advertising generated purchasing intentions, and to influence buying habits</td>
<td>Survey, quantitative, 364 respondents, and UK</td>
<td>The results of the survey disclosed that over half (53%) of the respondents believed that Facebook advertising had no impact on their purchasing intentions and buying habits, whereas 34% felt that it had a low influence; 11% average and only 3% high or very high</td>
<td>Small sample, students, UK, no usage or demographical variable analysis</td>
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<td>Rohm et al. (2013)</td>
<td>The goal of the research was to analyse the role of social media among Generation Y's interactions with brands</td>
<td>Mixed-method, qualitative (diary) and latent cross-analysis, 58 respondents, and USA</td>
<td>The findings disclosed that consumer motives via social media (Facebook and Twitter) marketing included: product information (cognitive); entertainment (affective); and incentives and promotions to encourage purchase (behavioural)</td>
<td>Small sample, USA, no usage or demographical variable analysis</td>
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objectives such as liking, preference and intention-to-purchase until the ultimate purchase. However, this model was based on traditional advertising, whereas this research focuses on new digital interactive media to determine consumers’ behavioural attitudes as they pass the upper echelons of the aforementioned model. Consequently, this research is important for managers, since a majority of organisations have invested significant portions of their promotion budgets on Facebook marketing communications, and need to establish if advertising on Facebook has a positive impact on the aforementioned behavioural attitudes. This empirical study is also important for academics and researchers, since, as mandated by Bolton et al. (2013) and Okazaki and Taylor (2013), there is a dearth of social media advertising usage and attitude research among Millennials in emerging countries and, accordingly, this will contribute to attitude theory. Additionally, Facebook’s growth has begun to reach saturation in many first-world countries; whereas it is steadily growing at an incremental rate in many emerging countries. Facebook use has grown by almost 40 per cent over the past year in SA (Wronski and Goldstruck, 2013). Furthermore, a number of studies have yielded divergent behavioural attitudinal responses. Bannister et al. (2013), Kodjamanis and Angelopoulos (2013), Maxwell (2013) and Persuad (2013) suggest that attitudes towards Facebook marketing communications were mainly negative or indifferent, whereas Chandra et al. (2012), Mir (2012), Leung et al. (2015) and Rohm et al. (2013) found a largely positive behavioural predisposition. Accordingly, the research questions (RQ) for the first objective are:

RQ1. Does Facebook advertising have an effect on intention-to-purchase among South African Millennials?

RQ2. What impact does advertising on Facebook have on purchase amid Millennials in SA?

Second, to establish if usage factors, which include how Facebook is accessed (as mentioned previously, 87 per cent of Facebook users in SA access this social medium via mobile phones; Wronski and Goldstruck, 2013), length of usage, log on duration, log on frequency and profile update incidence, have an influence on Millennials’ intention-to-purchase and purchase perceptions of advertising on Facebook. This research objective is of interest to both managers and academics, since it will provide insight into Millennials’ social media usage characteristics, and whether these affect their behavioural attitudes. Ultimately, this objective will provide a greater understanding of Millennials’ future consumer behaviour. Moreover, little research has been conducted to determine if the various usage characteristics have an influence on the impact of Facebook advertising behavioural attitudes among Millennial users, which will add to the conceptual framework of attitudinal research in social media. Chandra et al. (2012) determined that more frequent social media users exhibited a favourable attitude towards SNA, as it assisted with buying decisions; Punj (2011) found that internet usage levels influenced belief-behavioural responses; and Taylor et al. (2011) established that many social media users utilise SNS as part of their everyday routine, which may result in an elevated prospect of consumers perceiving SNA more favourably. Therefore, the RQ for the second objective are as follows:

RQ3. What influence do South African Millennial usage variables have on intention-to-purchase owing to Facebook advertising?

RQ4. Do usage characteristics of Millennials in SA have an impact on purchase as a result of Facebook advertising?
Third, to determine if demographic factors (gender, age and ethnic orientation) have an impact on Millennials’ intention-to-purchase and purchase perceptions of Facebook advertising. This objective will reveal whether there are noticeable differences within Millennial subgroups, as mandated by Bolton et al. (2013), with regard to their attitudes towards Facebook advertising. Additionally, the ethic orientation analysis is of particular interest to managers and academics owing to the well-known injustices of the past that took place in SA, which resulted in a substantial economic divide. Furthermore, few studies have investigated the effect of demographic factors, especially age (within a particular cohort) and ethnic orientation, on attitudinal research. Ruane and Wallace (2013) established that Facebook yielded favourable behavioural attitudinal responses among Millennial women; while Punj (2011) determined that different demographic characteristics influenced behavioural activities; and Wang and Sun (2010) revealed that ethnic factors had an impact on behavioural responses. Hence, the RQ for the third objective include the following:

RQ5. Do demographic factors have an effect on intention-to-purchase among South African Millennials owing to Facebook advertising?

RQ6. What effect do demographic variables have on purchases that are attributable to advertising on Facebook amongst Millennials in SA?

4. Methodology
4.1 Research design
A research design is a plan, structure and strategy of investigation, which is conceived to obtain answers to RQ or problems. A research design is a procedural plan that is adopted by the researcher to answer questions validly, objectively, accurately and economically (Kumar, 2011). Descriptive research is concerned with the current status of the phenomena to acquire a better understanding of the existing situation, but disregards the cause of the research problem (Tustin et al., 2005). As implied by its name, this research method describes the characteristics of groups and people (Zikmund and Babin, 2007). Descriptive research typically takes a cross-section of a population, in this instance Millennials who reside in the Western Cape, and reveals their predisposition at a given point in time (behavioural attitudes towards Facebook advertising) on which the research can be built. Survey methods are typically associated with descriptive research (Hair et al., 2009). A measurement instrument (typically a questionnaire) is employed to take a snap shot (cross-section) of independent (usage characteristics and demographic factors) and dependent (intention-to-purchase and purchase) variables of a given research population by means of a sample at a given point in time. The main advantage of a survey is its capability of collecting a large quantity of data (Bhattacherjee, 2012), whereas the main disadvantages are its high cost and that fieldworkers should be well trained (Maree, 2007). Hence, structured self-administered questionnaires were distributed on a face-to-face basis to collect the required data for this study.

4.2 Sampling
Young adults (Millennials) are the predominant users of online digital applications such as SNS (Du Chenne, 2011; Smith, 2012; Bolton et al., 2013; Wronski and Goldstruck, 2013). Students were selected to investigate attitudes towards SNA and attitudes by a majority studies (Molnár, 2011; Orpana and Tera, 2011; Vanden Bergh et al., 2011; Bannister et al., 2013; Persuad, 2013). Yet, the researcher believed that
it was imperative to select a sample that included a broader spectrum of Millennials, as mandated by Bolton et al. (2013) owing to the consumer behavioural changes that occur as young adults pass through the phases of their natural life cycle. Hence, the research population comprised of young employed individuals, students and young adults who were still seeking employment. The unemployment rate in SA is in the region of 30 per cent, and is much higher among young adults (up to 50 per cent) (Statistics SA, 2012). Furthermore, young adults were surveyed in both rural and urban areas, which encompassed wealthy suburbs and disadvantaged township communities to ensure a representative sample.

A sample frame is a record of all the sample units that are available for selection at a given stage in the sampling process (Martins et al., 1996; Zikmund, 2003; Aaker et al., 2004). The Western Cape was selected to collect data, which represents a little over 11 per cent of the South African population (Statistics SA, 2012). The study utilised a quasi-probability sample in the form of a multi-stage sampling technique, whereby, as mentioned in prior text, the Western Cape was selected from the nine provinces in SA. Various geographic areas (clusters), which included suburban (characteristically wealthier areas) and townships (which includes informal settlements) in both urban and rural locations, were identified by means of a map. Thereafter, commercial and community organisations (sports clubs, youth groups, churches and other local groups), as well as tertiary education institutions, were randomly selected via listings in a regional telephone directory. Next, these organisations were telephoned to obtain approval to carry out the empirical research and to ascertain whether there were an adequate number of Millennials to survey. Systematic sampling is a process whereby a random starting place is determined, followed by every \( k \)th element being selected by moving through the sample frame (Maree, 2007; Bhattacherjee, 2012). This sampling technique was used to survey participants in the aforementioned organisations, with every third participant invited to voluntarily partake in the research.

4.3 Design of research instrument and data collection

A self-administered survey allows respondents to complete a survey instrument on their own, which has the benefits of eliminating interviewer bias, the ability to reach large research populations and attain an acceptable response rate (Denscombe, 2010; Burns and Bush, 2012; Haydam and Mostert, 2013). The main disadvantage of self-administered questionnaires is the low-response rate if disseminated via mail, e-mail or online (Bhattacherjee, 2012), however, to counteract this drawback, the researcher administered the questionnaires on a face-to-face basis. Another disadvantage is that it may be difficult to obtain large quantities of information from respondents if the research instrument was too long or complex (Blumberg et al., 2011). However, the researcher assured respondents that the questionnaire took no longer than ten minutes to complete and the face-to-face administration once again ensured a high-survey participation rate in spite of no incentive being offered. Two pre-screening questions were asked in order to identify possible respondents, hence only respondents who used Facebook and had noticed advertising on Facebook qualified to participate in the study. However, respondents did not need to identify or list any of the companies and their brands that were featured in the advertisements, and no distinction was made between the different forms of Facebook advertising, since the main object of the research was only to evaluate the behavioural impact of Facebook advertising on Millennials' attitudes.

The first section of the research instrument comprised of five multiple-choice questions that asked respondents about their Facebook usage characteristics in
terms of access, period of usage, usage frequency, log-in duration and profile update. The second section focused on the two dimensions of the behavioural attitudes, namely intention-to-purchase and purchase, owing to exposure to Facebook advertising. The nine-item scale that was used to measure intention-to-purchase was largely adapted from Putrevu and Lord (1994), Taylor and Hunter (2002) and Wu et al. (2008), and was employed to measure this construct using a five-point Likert scale that ranged from strongly disagree to strongly agree. The nine-item scale that was used to assess purchase was mainly adapted from Martinez-Lopez et al. (2005), Patwardhan and Ramaprasad (2005) and Hamidizadeh et al. (2012) with a five-point Likert scale also being utilised. The last section of the questionnaire consisted of three multiple-choice questions on the demographic physiognomies that included gender, age and population group. Pre-test and pilot studies are used to survey a small subset of the population to determine whether the research instrument and method to collect data are relevant, reliable and valid (Du Plooy, 2009; Bhattacherjee, 2012). The questionnaire was pre-tested among 100 respondents to check the reliability of the scales, wording and question order and the ability of respondents to understand the meaning of the questions. Some of the questions were reworded and a couple of the Likert scale statements were tweaked. Subsequently, a pilot study of an additional 100 respondents was conducted to check that other research elements were well-organised, and also to double check that the research questionnaire was optimal, especially in terms of scale reliability. The primary research was conducted by 22 students (reading for their bachelor marketing degree at the Cape Peninsula University of Technology, and who received six months of rigorous training and practical application by the head of research of the marketing department), who were sent to the various locations to conduct the empirical survey on a face-to-face basis. A total of 3,521 useable questionnaires were collected over a three-month period from April to June 2013.

4.4 Data analysis
Data analysis typically entails the editing and reduction of data into more manageable portions in order to create summaries, detect patterns and apply statistical methods with the express purpose of interpreting data to answer the RQ at hand (Blumberg et al., 2011; Bhattacherjee, 2012). The data were captured and examined via statistical software known as SPSS (version 21). However, all of the questionnaires were first meticulously examined in terms of correctness and completeness to establish whether they should be incorporated in the statistical analysis – the Likert scale statements were organised in such a manner that alternated positive and negative statements so as to circumvent participants from choosing a single column. These questions were reversed via SPSS before the reliability of the responses was established for the measurement scales. Reliability signifies the internal consistency of the items that were developed to measure a specific construct with a high level of reliability, in other words, the intention-to-purchase and purchase measurement scales. The coefficient mechanism that was used to determine reliability is known as Cronbach’s $\alpha$, and reliability estimates of 0.7 and above are deemed to be acceptable (George and Mallery, 2003; Hair et al., 2009; Maree, 2007). Hence, items that are negatively worded in the scales must have their scores reversed; otherwise they would have an adverse effect on Cronbach’s $\alpha$ result (Field, 2009). Simple descriptive statistical analysis measures (means, standard deviations, frequencies and non-parametric standardised tests) were employed to provide a basic description of the results (Tables II, III and IV). Validity refers to the extent to which an instrument
measures the construct that it is supposed to measure (Blumberg et al., 2011; Bhattacherjee, 2012). To ensure validity, existing measurement scales, as mentioned in prior text, were adapted and then tested before being utilised to assess the constructs. Furthermore, Pearson’s correlation coefficient analysis (Tables III and IV) was used to examine and measure the linear strength of relationships between quantitative variables (Maree, 2007, Field, 2009). Analysis of variance (ANOVA) is utilised when two independent variables or more need to be compared to an individual quantitative score (Maree, 2007). ANOVA used Wald’s $\chi^2$ and was conceptualised as a Generalised Linear Model (GLM) to establish if there were significant differences between the usage

<table>
<thead>
<tr>
<th>Facebook usage characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile device</td>
<td>732</td>
<td>20.8</td>
</tr>
<tr>
<td>PC</td>
<td>518</td>
<td>14.7</td>
</tr>
<tr>
<td>Mobile device and PC</td>
<td>2,271</td>
<td>64.5</td>
</tr>
<tr>
<td><strong>Length of usage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\leq$1 year</td>
<td>463</td>
<td>13.1</td>
</tr>
<tr>
<td>2 years</td>
<td>780</td>
<td>22.2</td>
</tr>
<tr>
<td>3 years</td>
<td>849</td>
<td>24.1</td>
</tr>
<tr>
<td>4 years</td>
<td>710</td>
<td>20.2</td>
</tr>
<tr>
<td>$\geq$5 years</td>
<td>719</td>
<td>20.4</td>
</tr>
<tr>
<td><strong>Log on frequency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>2,132</td>
<td>60.5</td>
</tr>
<tr>
<td>2-4 a week</td>
<td>814</td>
<td>23.1</td>
</tr>
<tr>
<td>Once a week</td>
<td>390</td>
<td>11.1</td>
</tr>
<tr>
<td>2-4 a month</td>
<td>116</td>
<td>3.3</td>
</tr>
<tr>
<td>Once a month</td>
<td>69</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Log on duration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\leq$1 hour</td>
<td>2,059</td>
<td>58.5</td>
</tr>
<tr>
<td>2 hours</td>
<td>804</td>
<td>22.8</td>
</tr>
<tr>
<td>3 hours</td>
<td>332</td>
<td>9.4</td>
</tr>
<tr>
<td>4 hours</td>
<td>151</td>
<td>4.3</td>
</tr>
<tr>
<td>$\geq$5 hours</td>
<td>175</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Profile update incidence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>1,044</td>
<td>29.6</td>
</tr>
<tr>
<td>2-4 a week</td>
<td>837</td>
<td>23.8</td>
</tr>
<tr>
<td>Once a week</td>
<td>662</td>
<td>18.8</td>
</tr>
<tr>
<td>2-4 a month</td>
<td>372</td>
<td>10.6</td>
</tr>
<tr>
<td>Once a month</td>
<td>606</td>
<td>17.2</td>
</tr>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1,593</td>
<td>45.2</td>
</tr>
<tr>
<td>Female</td>
<td>1,928</td>
<td>54.8</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>1,322</td>
<td>37.5</td>
</tr>
<tr>
<td>21-24</td>
<td>1,441</td>
<td>40.9</td>
</tr>
<tr>
<td>25-30</td>
<td>758</td>
<td>21.6</td>
</tr>
<tr>
<td><strong>Ethnic group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>807</td>
<td>22.9</td>
</tr>
<tr>
<td>Black</td>
<td>1,238</td>
<td>35.2</td>
</tr>
<tr>
<td>Coloured</td>
<td>1,283</td>
<td>36.4</td>
</tr>
<tr>
<td>Indian/Asian</td>
<td>193</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Table II.

Facebook usage characteristics and demographics
<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>(p)</th>
<th>Standardised test statistic</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will buy products that are advertised on FB in the near future (1)</td>
<td>2.82</td>
<td>1.317</td>
<td>0.000</td>
<td>7.644</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I desire to buy products that are promoted on FB (2)</td>
<td>2.82</td>
<td>1.299</td>
<td>0.000</td>
<td>9.071</td>
<td>0.733**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertisements on FB do not increase purchase intent of featured brands(^a) (3)</td>
<td>3.05</td>
<td>1.317</td>
<td>0.061</td>
<td>1.872</td>
<td>0.298**</td>
<td>0.288**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertisements on FB have a positive influence on my purchase decisions (4)</td>
<td>2.87</td>
<td>1.173</td>
<td>0.000</td>
<td>5.889</td>
<td>0.765**</td>
<td>0.602**</td>
<td>0.273**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would buy the products that are advertised on FB if I had the money (5)</td>
<td>2.95</td>
<td>1.233</td>
<td>0.031</td>
<td>2.156</td>
<td>0.607**</td>
<td>0.819**</td>
<td>0.247**</td>
<td>0.639**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not intend to acquire products that are promoted on FB(^b) (6)</td>
<td>3.12</td>
<td>1.228</td>
<td>0.000</td>
<td>6.567</td>
<td>0.333**</td>
<td>0.291**</td>
<td>0.683**</td>
<td>0.268**</td>
<td>0.295**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am likely to buy some of the products that are promoted on FB (7)</td>
<td>2.87</td>
<td>1.068</td>
<td>0.000</td>
<td>4.779</td>
<td>0.750**</td>
<td>0.597**</td>
<td>0.278**</td>
<td>0.784**</td>
<td>0.632**</td>
<td>0.295**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I plan to purchase the products that are advertised on FB (8)</td>
<td>2.72</td>
<td>1.107</td>
<td>0.000</td>
<td>13.136</td>
<td>0.584**</td>
<td>0.773**</td>
<td>0.237**</td>
<td>0.548**</td>
<td>0.756**</td>
<td>0.275**</td>
<td>0.592**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Advertisements on FB have a negative influence on buying decisions(^a) (9)</td>
<td>3.26</td>
<td>1.122</td>
<td>0.000</td>
<td>14.791</td>
<td>0.324**</td>
<td>0.232**</td>
<td>0.653**</td>
<td>0.332**</td>
<td>0.291**</td>
<td>0.750**</td>
<td>0.302**</td>
<td>0.158**</td>
<td>1</td>
</tr>
</tbody>
</table>

**Notes:** Means, standard deviations, one-sample bi-nominal standardised test and Pearson’s correlation coefficient. \(^a\)Negatively phrased statement scores were recoded. **Correlation is significant at the 0.01 levels (two-tailed)
### Table IV. Facebook (FB) advertising purchase scale

|                          | Mean  | SD    | \( p \) | Standardised test statistic |\( \text{10} \) |\( \text{11} \) |\( \text{12} \) |\( \text{13} \) |\( \text{14} \) |\( \text{15} \) |\( \text{16} \) |\( \text{17} \) |\( \text{18} \) |
|--------------------------|-------|-------|---------|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Advertisements on FB make me less loyal to brands\(^a\) (10) | 3.57  | 1.185 | 0.000   | 27.182                     | 1        |          |          |          |          |          |          |          |          |
| I buy products that are advertised on FB (11)             | 2.55  | 1.202 | 0.000   | 21.604                     | 0.069**  | 1        |          |          |          |          |          |          |          |
| I use many of the products that are promoted on FB (12)   | 2.76  | 1.274 | 0.000   | 11.918                     | 0.006    | 0.527**  | 1        |          |          |          |          |          |          |
| I do not purchase products that are featured on FB\(^a\) (13) | 3.34  | 1.194 | 0.000   | 16.783                     | 0.553**  | 0.098**  | 0.104**  | 1        |          |          |          |          |          |
| Advertisements on FB affect my purchase behaviour positively (14) | 2.68  | 1.143 | 0.000   | 16.078                     | 0.015    | 0.708**  | 0.441**  | 0.014    | 1        |          |          |          |          |
| Advertisements on FB help make me loyal to the promoted products (15) | 2.81  | 1.137 | 0.000   | 10.212                     | 0.051*   | 0.525**  | 0.701**  | 0.066**  | 0.542**  | 1        |          |          |          |
| Advertisements on FB affect my purchase behaviour negatively\(^a\) (16) | 3.40  | 1.021 | 0.000   | 21.864                     | 0.655**  | 0.012    | 0.029    | 0.575**  | 0.006    | 0.008    | 1        |          |          |
| I purchase products that are promoted on FB (17)            | 2.56  | 1.083 | 0.000   | 21.032                     | 0.050*   | 0.806**  | 0.483**  | 0.101**  | 0.684**  | 0.523**  | 0.007    | 1        |          |
| Advertisements on FB affect my buying actions positively (18) | 2.76  | 1.069 | 0.000   | 10.998                     | 0.039    | 0.515**  | 0.714**  | 0.075**  | 0.507**  | 0.778**  | 0.028    | 0.530**  | 1        |

**Notes:** Means, standard deviations, one-sample binomial standardised test and Pearson’s correlation coefficient. \(^a\)Negatively phrased statement scores were recoded; *,**Correlation is significant at the 0.05 and 0.01 level (two-tailed), respectively.
characteristics and demographic factors (predictor variables) and behavioural attitude
components (dependent variables). The post-ad-hoc Bonferroni pairwise comparison was
utilised to establish where the differences were, so that the findings could be interpreted
conclusively (Field, 2009; Bhattacherjee, 2012).

5. Results
The survey included 3,521 members of the Millennials cohort in the Western Cape. Facebook was accessed by a majority of respondents (64.5 per cent) via both
PC and mobile device; over 60 per cent logged on to Facebook everyday; spent one
(58.5 per cent) to two (22.8 per cent) hours per log on; and more than 72 per cent updated
their profile at least of once a week. The sample included a slight majority of females
(54.8 per cent); and the ethnic groups accurately portrayed the ethnicity of the Western
Cape, including primarily black (35.2 per cent) and coloured (36.4 per cent) ethnic
groups (Statistics SA, 2012). Table II offers a full overview of the usage characteristics
and demographics of Millennials respondents that use Facebook.

As previously mentioned, the respondents’ behavioural attitude towards Facebook advertising was computed by nine-item scales for each of the hierarchy response levels
(Tables III and IV).

Cronbach’s $\alpha$ was 0.843 for the Facebook advertising intention-to-purchase scale (Table III) and 0.742 for the Facebook advertising purchase scale (Table IV), which indicated good internal consistencies. A non-parametric one-sample bi-nominal standardised test was utilised to determine if there was a significant difference. The test showed that for both of the nine-item scales, there was a significant difference at $p < 0.001$ and $p < 0.05$, with the exception of one item in the intention-to-purchase scale. Pearson’s correlation coefficient analysis (Tables III and IV) showed a positive medium ($r > 0.3$) to strong ($r > 0.5$) relationship between a majority of the variables for the intention-to-purchase and purchase measurement scales, but there was weak positive correlation between a minority of the variables, especially in terms of the negatively reversed variables that were recoded.

The GLM ANOVA, as discussed in prior text, was used since the data contains a different number of observations for certain independent variables, which can be seen by the larger standard errors (an example of this is the low number of respondents that logged on to Facebook at least once a month). Van Schalkwyk (2012) discloses that the GLM takes this into consideration and “normalises” the outcomes. Tables V and VI show the effect in terms of Wald $\chi^2$ test, which is based on the Bonferroni correction pairwise post hoc test among the estimated marginal means.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Wald $\chi^2$</th>
<th>Type III $\chi^2$ df</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>1.663</td>
<td>2</td>
<td>0.435</td>
</tr>
<tr>
<td>Length of usage</td>
<td>4.422</td>
<td>4</td>
<td>0.352</td>
</tr>
<tr>
<td>Log on frequency</td>
<td>4.699</td>
<td>4</td>
<td>0.320</td>
</tr>
<tr>
<td>Log on duration</td>
<td>28.598</td>
<td>4</td>
<td>0.000*</td>
</tr>
<tr>
<td>Profile update incidence</td>
<td>42.095</td>
<td>4</td>
<td>0.000*</td>
</tr>
<tr>
<td>Gender</td>
<td>0.105</td>
<td>1</td>
<td>0.746</td>
</tr>
<tr>
<td>Age</td>
<td>0.256</td>
<td>2</td>
<td>0.880</td>
</tr>
<tr>
<td>Ethnic group</td>
<td>34.287</td>
<td>3</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

Note: *Wald $\chi^2$ test showed a significant difference at $p < 0.001$
The Wald $\chi^2$ test revealed that there was a significant difference at $p < 0.001$ for intention-to-purchase ($M = 2.94$, $SD = 0.805$) because of Facebook advertising. No significant differences were found for access, length of usage, log on frequency, gender and age, whereas Bonferroni correction pairwise comparisons of estimated marginal means disclosed the significant difference between the next variables.

*Log on duration* ($p < 0.001$): respondents who logged on for $\leq 1$ hour ($M = 2.82$, $SE = 0.033$) resulted in lower intention-to-purchase levels in comparison to those who logged on for two hours ($M = 2.98$, $SE = 0.039$).

*Profile update incidence* ($p < 0.001$): respondents who updated their Facebook status daily ($M = 3.06$, $SE = 0.041$) resulted in greater intention-to-purchase compared to those who updated once a week ($M = 2.93$, $SE = 0.044$), two to four times a month ($M = 2.81$, $SE = 0.050$) and once a month ($M = 2.81$, $SE = 0.042$); those who updated their Facebook status two to four times a week ($M = 2.98$, $SE = 0.043$) showed an increase in intention-to-purchase compared to those who updated it two to four times a month ($M = 2.81$, $SE = 0.050$) and once a month ($M = 2.81$, $SE = 0.042$).

*Ethnic group* ($p < 0.001$): white respondents ($M = 2.79$, $SE = 0.035$) exhibited lower intention-to-purchase levels than black ($M = 3.01$, $SE = 0.035$) and coloured ($M = 2.96$, $SE = 0.037$) respondents.

The Wald $\chi^2$ test disclosed that there was a significant difference at $p < 0.001$ for purchase ($M = 2.94$, $SD = 0.656$), which was caused by Facebook advertising. No significant differences were found for access, length of usage, log on frequency, age, gender and race; however, Bonferroni correction pairwise comparisons of estimated marginal means showed significant difference amongst the following variables.

*Log on duration* ($p < 0.001$): respondents who logged on for one hour ($M = 2.85$, $SE = 0.027$) exhibited lower purchase levels compared to those who remained logged on for two hours ($M = 3.01$, $SE = 0.032$) and four hours ($M = 3.06$, $SE = 0.056$).

*Profile update incidence* ($p < 0.001$): respondents who updated their Facebook status daily ($M = 3.07$, $SE = 0.034$) resulted in higher purchase incidence in comparison to those who updated once a week ($M = 2.97$, $SE = 0.036$), two to four times a month ($M = 2.88$, $SE = 0.041$) and once a month ($M = 2.86$, $SE = 0.035$); those who updated their Facebook status two to four times a week ($M = 3.01$, $SE = 0.035$) showed increased intention-to-purchase levels compared to those who updated two to four times a month ($M = 2.88$, $SE = 0.041$) and once a month ($M = 2.86$, $SE = 0.035$).

In summary, a comparison between the usage characteristics (Tables V and VI) reveals that log on duration and profile update incidence show the largest degree of

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Wald $\chi^2$</th>
<th>df</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>0.838</td>
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<td>0.658</td>
</tr>
<tr>
<td>Length of usage</td>
<td>0.326</td>
<td>4</td>
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<tr>
<td>Log on frequency</td>
<td>3.481</td>
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<td>0.481</td>
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<tr>
<td>Log on duration</td>
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<td>0.000*</td>
</tr>
<tr>
<td>Profile update incidence</td>
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<td>4</td>
<td>0.000*</td>
</tr>
<tr>
<td>Gender</td>
<td>1.771</td>
<td>1</td>
<td>0.183</td>
</tr>
<tr>
<td>Age</td>
<td>0.550</td>
<td>2</td>
<td>0.690</td>
</tr>
<tr>
<td>Ethnic group</td>
<td>5.465</td>
<td>3</td>
<td>0.141</td>
</tr>
</tbody>
</table>

Note: *Wald $\chi^2$ test showed a significant difference at $p < 0.001
influence on Facebook advertising intention-to-purchase and purchase, whereas access, length of usage and log on frequency had little effect on the behavioural attitudinal component. A comparison between the demographic factors (Tables V and VI) shows that ethnicity displayed the greatest amount of influence on Facebook advertising intention-to-purchase and had some effect on purchase, but not at a significant level. Gender also had some impact on Facebook advertising purchase, but again not at a significant level, whereas gender had little effect on intention-to-purchase. The demographical variable age had no influence on Facebook advertising intention-to-purchase and purchase. A more detailed discourse on the effect of usage characteristics and demographical factors on Facebook advertising intention-to-purchase and purchase ensue in the following section.

6. Discussion and implications

6.1 Key findings

The first objective of this study was to establish if Facebook advertising had a favourable impact on the behavioural attitudes of Millennials in SA. The analysis indicates that Facebook advertising has a positive attitudinal influence on intention-to-purchase and purchase among Millennials, although at a marginal level, which supports the communications of the effect pyramid model. These findings are in agreement with a number of authors: Leung et al. (2015) revealed that a positive experience with Facebook would lead to a favourable attitude towards the Facebook page, which increased the consumers’ intention-to-purchase; Yang (2012) reported that advertising messages provided by Facebook enhances consumers’ attitudes towards brand and purchase intentions, while advertising messages that were provided by organisations had a greater impact than those sent by friends; and eMarketer (2012) found that consumers who were exposed to both paid and earned media could assist organisations with purchase consideration and brand liking/preference. These results could also be explained by the fact that Facebook has a diverse range of interactive and elements such as walls newsfeeds, albums, blogs, discussion forums and so forth, which enable organisations to generate relations with consumers. Therefore, with the longstanding exposure of Facebook applications, incentives and interaction, consumers tend to establish more favourable brand attitudes and greater purchase intentions pertaining to brand advertising on this platform (Rau et al., 2008). Ha and Janda (2014) postulated that positive attitudes had an influence on online behavioural intentions. However, Hudson and Thal (2013) disclosed that marketers were not effectively interacting with consumers who used social media. The research suggested that organisations focus on an array of consumer decision stages, instead of information and knowledge (cognitive) and purchase (behavioural) stages. Maxwell (2013) also revealed that many online consumers conduct research on the internet and SNS, but still favour purchasing products and brands at retailer stores.

The second objective of the research was to determine if certain usage characteristics had an effect on Millennials behavioural attitudes towards Facebook advertising. The research revealed that advertising on Facebook was most effective when Millennials spent two or more hours on Facebook per log-in session, which is a logical perception, as they would have more opportunity to interact with the advertising. Young adults have a high propensity towards multi-tasking and mobile devices, which enable them to be continuously on the move, while accessing the internet; SNS; television; and communication via text, graphics and verbally; as well as searching for consumer-related information to make purchase decisions (Crosman, 2008).
This study confirmed that Millenial members who update their profile on Facebook more prolifically facilitated increased positive behavioural attitudes. This is a reasonable notion, since increased activity on Facebook should lead to greater activity with other elements such as advertising. This finding is also congruent with Chandra et al. (2012) who found that regular users displayed a positive attitude towards SNA, since it aided purchasing decisions.

No significant differences were revealed in terms of length of usage, log on frequency and how Facebook was accessed. This is an unexpected result, since Wronski and Goldstruck (2013) disclosed that almost nine out of ten Facebook users access Facebook via mobile phones. Facebook mobile advertising was launched in 2012 and received click-through rates of up to 13 times greater than other advertisements on Facebook (Bischoff, 2012). Dynamic Logic (2012) indicated that intention-to-purchase was almost four times higher for mobile advertising that resulted in higher average click-through rates. Hence, it is apparent that Millennials in SA have divergent sentiments in comparison to their international counterparts.

The third objective of this investigation was to examine whether particular demographic factors had an impact on Millennials’ behavioural attitudes towards Facebook advertising. This investigation discovered that the white population group exhibited lower levels of intention-to-purchase compared to the black and coloured ethnic groups. Internet access has grown significantly among the coloured (35.7 per cent) and black (29.4 per cent) ethnic groups in recent years, but they are still catching up to the white (70.3 per cent) ethnic group (Statistics SA, 2012). The proliferation of the black middle class, categorised as the Black Diamonds by TNS Research Surveys and the UCT Unilever Institute of Strategic Marketing (Olivier, 2007), has resulted in greater spending power (R400 billion per annum), with the monthly income of black households increasing by 34 per cent since 2004. SA’s black middle class has risen by nearly 250 per cent from 1.7 million in 2004 to 4.2 million in 2012 (Shevel, 2013). Consequently, a large proportion of black middle class young adults have gained internet access over the past decade, whereas many white young adults grew up with the internet and, subsequently, had more exposure and experience to SNS advertising.

No significant differences were found in terms of age and gender having an impact on Millennials’ intention-to-purchase and purchase perceptions of Facebook advertising. Bannister et al. (2013) reported that women had a slightly more positive attitude to Facebook advertising, whereas Taylor et al. (2011) found that young adults (aged 19-24 years old) maintained the most positive attitudes to SNS advertisements. Hence, it is apparent that there are not many noticeable differences within the South African Millennial cohort besides ethnic orientation.

6.2 Implications for theory
Attitudes towards advertising have been broadly researched over the past few decades and it was found that consumers’ attitudes towards advertising have a direct influence on attitudes towards the brand that impacts intention-to-purchase and purchase. Additionally, attitudes towards advertising have also been deemed to be an efficient measure of advertising effectiveness (Yoo et al., 2010). The appropriateness of traditional advertising theories to online advertising has been an area of interest to academics and advertising scholars since the arrival of online advertising. Traditional methods continue to be applicable to the environment of online advertising, as the basic objectives of online advertising are inclined to be comparable to the objectives of traditional advertising, and theoretical models created for traditional advertising have effectively been transferred to online advertising (Rodgers and Thorson, 2000). From
both an academic and marketing practitioner perspective, the hierarchy-of-effects
model has received extensive attention as a detailed explanation of how advertising
works, and hence is a base for measuring advertising effectiveness (Yoo et al., 2010).
Although, little research has been conducted concerning the effects of SNA in terms of
this recognised theoretical framework. Consequently, this study attempted to assess
the effects of SNA within the framework of the hierarchy-of-effects model. The results
reveal that advertising on Facebook has a favourable impact on behavioural attitudes
among Millennials, but at a minimal level, which supports the communications of effect
pyramid model that was developed via traditional advertising research. This model
posits that it becomes increasingly more challenging to accomplish the higher level
hierarchical objectives, namely intention-to-purchase and purchase; consequently, the
number of potential consumers decline as they move up the pyramid. A more positive
attitude towards advertising is correlated to more favourable advertising judgments in
terms of entertainment, information and acceptance, which result in greater
advertisement recall and higher purchase intention (Wang and Sun, 2010). Stevenson
et al. (2000) disclosed that an unfavourable attitude towards online advertising was
related to low purchase intention, whereas Wolin et al. (2002) proposed that
a favourable attitude towards online advertising usually resulted in more recurrent
online purchasing and greater online spending. Mir (2012) revealed that a positive
attitude towards social media advertising influences consumers' advertising clicking
behaviour and, consequently, has an impact on their online purchasing behaviour,
which is congruent with the findings of Wolin et al. (2002) and Wang and Sun (2010).
Furthermore, Powers et al. (2012) disclosed that over 20 per cent of consumers
believed that social media was important for their final purchase decision and
Moore (2012) found that Millennial consumers purchase brands online with
greater frequency in comparison to prior generations. Hence, it can be concluded
that advertising on Facebook adheres to the same notions of traditional advertising
in terms of the communications of effect pyramid model. This study has made
a valuable contribution to attitudinal research and theory development among
Millennials.

This inquiry found that log on duration and profile update incidence had an
influence on South African Millennials’ intention-to-purchase and purchase perceptions
of advertising on Facebook, whereas how Facebook was accessed, length of usage and
log on frequency had no influence. Punj (2011) established that internet usage
frequency affected behavioural activities; and Taylor et al. (2011) observed that many
consumers use SNS to overcome boredom or to use up time between activities; they also
frequently use SNS as part of their everyday routine. This habitual activity may
increase the prospect that consumers would perceive would SNA positively, since it
may provide an added diversion and an extra means of form of time structuring, which
is in consensus with the results of this investigation. Wang and Sun (2010) determined
that ethnic variables had an influence on behavioural attitudinal responses; and
Jordaan et al. (2011) advocate that different ethnic groups in SA should be investigated
to establish whether there was a difference in terms of online intent and purchase.
Consequently, this study found that ethnic orientation had a positive impact on the
behavioural attitudes of black Millennials in SA, but no effect on age and gender. These
results make a noteworthy contribution to the theoretical framework of attitudinal
research in SNS marketing communications, since there is a dearth of research on the
effect of abovementioned usage and demographic factors on the upper levels of
communications of effect pyramid model.
6.3 Managerial implications

In terms of the first RQ, this inquiry showed that Facebook advertising had a marginal, but a significant positive attitudinal effect on intention-to-purchase amongst South African Millennials. Maxwell (2013) also concluded that brands are needed to create stimulating content, interaction and advocacy via their social conduits in order to establish relationships that would instigate intention-to-purchase. Persuad (2013) found that high levels of interactivity on Facebook were positively correlated to intention-to-purchase and favourable attitudes towards the brand. Barreto (2013) determined that Facebook advertising resulted in lower purchase consideration levels in comparison to the WOM by friends. Hence, marketers should attempt to stimulate interactivity and WOM by proactively endorsing the sharing of marketing communication content between Facebook users by linking it to competitions, discounts, giveaways and other sales promotions, which would stimulate an increase in behavioural activities. Marketing should consider the use of the pre-roll video, which is incorporated into flash banner advertisements that increased purchase intent by up to four times in comparison to simple static banner, rich and video advertisements (Millward Brown, 2012). Hence, South African organisations and managers should take the aforementioned findings into consideration in an attempt to increase purchase intent levels among Millennials.

\textit{Vis-à-vis} the second research, this investigation revealed that advertising on Facebook resulted in a diminutive, but noteworthy favourable attitudes towards purchase among the Millenial cohort. Marketers should take into consideration that cheap costs, fast service, high quality and an “experience” are important factors that influence Millennials’ purchase considerations. Facebook advertisements that are connected to a physical in store promotion may actively draw SA Millennials who are not inclined to make online purchases to the actual store to purchase. Facebook’s location point tracking systems can also be used to display local stores’ promotions based on the interests of the Millennials’ location. Chandra et al. (2012) revealed that SNS assists in making the final purchase decision and resulted in lowering prices. However, it should be noted that Millennials have generally not yet established enduring consumer behaviour patterns and do spend freely, since many are students or unemployed who have limited resources, with 45 per cent agreeing that they purchase brands on sale as opposed to their preferred brands, which would dampen their purchase sentiments (Symphony, 2013). This finding vindicates the decision by South African organisations and managers to spend large percentages of their advertising budgets on Facebook marketing communications.

In respect of the third and fourth research questions, this study determined that Facebook advertising had the greatest influence on behavioural attitudes on Millennials who spent longer periods of time on the SNS. However, this survey confirmed that nearly six out of ten Millennials spent one hour or less on Facebook per log on session, which is detrimental to marketing communication efforts. Therefore, organisations and managers should attempt to incorporate a selection of Facebook’s vast array of social plugins and apps to keep the young consumer entertained on the SNS for a longer period of time, which will, in turn, lead to a positive influence on purchase decisions. Advertisements on Facebook should be changed regularly to prevent advertising wear out, especially those that are directed at Millennials who easily become bored with a static digital environment that they frequent on a daily basis. Also concerning the third and fourth research questions, this investigation established that Millennials who regularly updated their Facebook profile resulted in favourable behavioural attitudes.
South African organisations and managers could use the metrics that are available on Facebook to target the most active users, as well as Facebook’s apps and social plugins in their marketing communications that could have an influence on their profile updating incidence (Facebook, 2014b). Marketers should also consider the use of Facebook applications, including contests, games, photo up-loaders, virtual gifting and other interactive tools, which permit organisations to create branded experiences and sharing among Facebook friends that would increase behavioural activities (Stokes, 2013). The researcher expected that Facebook advertising accessed by mobile devices would deliver more favourable behavioural attitudes than desktops. However, no difference was found, nevertheless organisations and managers still need to consider mobile marketing as an online purchasing resource owing to the rapid adoption rate of mobile devices. Furthermore, the more mobile friendly and the easier advertisements on Facebook are to access, the greater the outcome will be when Millennials want to purchase products of a particular brand. With reference to the fifth research question, this study revealed that black and coloured ethnic groups displayed more favourable purchase intent tendencies than their white counterparts, however, not in terms of the sixth research question, namely purchase. Nevertheless, black young adults represent a potentially profitable target market, because in recent years the black middle class consumers spend in SA has surpassed their white counterparts (Petzer and De Meyer, 2013), which has also received increased exposure to Facebook advertising that should be exploited by savvy organisations and managers. Carrillat et al. (2014) indicate that Facebook marketing communication messages must be entertaining to have a favourable effect on attitudes. The use of humorous and creative advertisements is more likely to stimulate interaction with Millennials that may result in behavioural activities across different cultural groups. Facebook Insights provides data on usage and demographic information in terms of how users have interacted with an organisation’s Facebook page and marketing communications (Facebook, 2014b). Hence, marketers could increase their efficiency in targeting Millennials by using the usage and demographic factors identified in this study, which resulted in the most favourable behavioural attitudes.

SNS is a rapidly growing marketing communication tool, but it is up to marketers to recognise that the expectations, needs and wants of Millennial consumers are continually changing and hence this should be taken into consideration when using SNA to favourably influence this cohort’s behavioural predisposition.

6.4 Conclusion
Many organisations hold the mistaken belief that they can simply establish a Facebook page and post-content occasionally that will result in an incremental increase in sales. However, this is far from the truth, as social media must become a fundamental part of the organisation’s overall marketing communication strategy and activities in order for it to yield full potential. Furthermore, Millennial consumers have tremendous purchase power and influence on the other cohorts, so their media usage and attitudes towards various media are important to organisations and their brands. A thorough knowledge of this cohort will allow marketers to increase their marketing communication efficiency. This research has generated important new insights about a relatively new topic, specifically in terms of the African context, which is of benefit to organisations that utilise or intend to use Facebook social media as a marketing communication platform, and to academics who are scholars of attitudinal theory development. The study specifically provides valuable insights into the behavioural attitudes of South African Millennials towards Facebook advertising, as well as several usage characteristics
and demographic variables that have a favourable influence on intention-to-purchase and purchase perceptions, which have received limited prior empirical investigation. Advertisements should be carefully created to be interactive and stimulating in order to appeal to Millennials who are notoriously fickle and difficult to reach. Furthermore, Hadija et al. (2012) proposed that organisations and managers must also understand what consumers and prospective consumers are doing on SNS such as Facebook; hence, should be prepared to alter or adapt their SNA strategies owing to changes that occur in the environment, and as a result of consumer feedback and academic research in order to increase the effectiveness. This study has assisted to reduce the aforementioned mandated academic-practitioner gap.

7. Limitations and directions for future research

This investigation has some limitations and also lends itself to additional research. The inquiry did not take the various types of Facebook advertising into consideration; therefore, it is suggested that further research should be conducted to determine whether there was a difference in attitudinal effectiveness between the various advertising forms. Only the behavioural attitude and a single SNS was surveyed, whereas future studies could examine other attitude components, as well as other widely used SNS such as YouTube, Google+, LinkedIn and Twitter. Cognitive and affective attitudes warrant further research, since consumers’ first need to become aware and be informed of an organisation’s products and develop favourable emotional bonds before they can progress to behavioural activities. Like this study, surveys, which constituted a cross-section of attitudes were previously used in cognitive and affective attitudinal research. Hence, a longitudinal approach would yield more complete results, as inferred by Kalampokis et al. (2013) and Schoen et al. (2013). This study utilised quantitative data, as have past inquiries on cognitive and affective attitudinal components, whereas qualitative research would provide greater insight into Millennials’ attitudes. Future research could also take other countries into consideration, since a developing country with a diverse and rich culture such as SA, may differ from other developing nations.

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About the author
Dr Rodney Graeme Duffett is a Senior Lecturer at the Faculty of Business, Cape Peninsula University of Technology (CPUT), Cape Town, South Africa. He is currently reading for the Doctor Technologiae Degree in Marketing at CPUT. He has published in African Journal of Business Management, Southern African Business Review and Journal of Contemporary Management. His research interests focus on any form of e-advertising, social media and black economic empowerment in the advertising industry. Dr Rodney Graeme Duffett can be contacted at: duffetr@cput.ac.za

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