

Marketing in the PVR Era -An exploratory study into changes in viewing habits and brand recognition of young adults in South Africa

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ABSTRACT

The Personal Video Recorder (PVR) appears to be having a profound effect on the viewing habits of young South African adults between 16 and 34 years of age. This exploratory study investigates the effect this technology is likely to have on the consumption of television content by considering both programming and advertising. If advertising becomes shunned, it may be more difficult for marketers to promote their brands through this mass media channel. The two main motivations to use PVR were found to be the desire for more control over one's television viewing, and the desire for instant gratification. Whilst the study found that respondents were very enthusiastic about 'zapping' advertisements, every cloud has a silver lining. The level of advertising awareness still remained high during fast-forwarding, therefore leading to brand recall. If the actual content within the advertisement is important, advertisers are advised to air their commercials during programming which is typically not recorded (e.g. news broadcasts or soap operas) or to strategically place their message at the start or end of the ad break. Nonetheless, it was found that new products and brands stand at a disadvantage in terms of gaining exposure within the PVR environment.

Keywords – Personal Video Recorder, brand recognition, advertising awareness, media consumption, youth, South Africa

The Personal Video Recorder (PVR) is a television set-top box that consists of a sophisticated hard disk, which provides a whole variety of functions that can influence one's television viewing habits (Pearson & Balwise, 2008). This hard drive, along with software features, allows users to record, pause, play back, rewind and fast-forward television programmes with greater ease than a video cassette recorder (VCR) (ibid). In addition, PVR allows its users to pause live television for up to 120 minutes, show instantaneous replays, and restart programmes whilst they are still being broadcast (DSTV, 2008). PVR subscriptions in South Africa have grown from 38 720 in 2006 (one year after the product launch) to 296 720 in 2009 (The Media Shop, 2009).

RESEARCH PROBLEM

The effect that the PVR is having on television viewing habits and advertising awareness has drawn attention around the world. However, the majority of studies have been conducted in high-income countries, such as the US and UK, with little research having been done in emerging markets, notably South Africa. In addition, PVR is still a relatively new technology that has yet to be properly established as a common household good. There is therefore scarce information available for advertisers in South Africa to use when trying to determine the effects that PVR is having in this country. To this end, this study aims to establish the effects that PVR is having in South Africa by profiling its users and investigating the effects that the technology is

having on their television viewing habits and advertising awareness. The focus will be on young South Africans (16-34), as they are generally deemed to be more proactive as early adopters of technologies and will likely continue to use this technology well into the future.

LITERATURE REVIEW

Basic motivation behind PVR purchase and use

In their Technology Acceptance Model (TAM), Bagozzi, Davis and Warshaw (1992) state that when consumers are deciding whether to adopt a new technology, they are faced with two decision-facilitating factors: the perceived usefulness of the technology, and the perceived ease of use of the technology. The TAM is thus in line with Rogers' (1964) Diffusion of Innovations, in which a technology's ease of use also has an important role. However, the TAM has been criticized due to its lack of explanatory and predictive power (Venkatesh & Davis, 2000).

A relatively newer model of product adoption, the Lazy Model of Solution Selection (LUM), may also be relevant to PVR technology. This model states that a user develops a *user need*, and the *user state* lays out the various solutions available to fulfill that need. Once the user has defined their various solutions to the problem, they will choose a solution from the given set, which requires the lowest level of effort. This effort is defined as monetary cost + time needed + physical or mental effort needed. Thus, according to this model, as long as PVR is not perceived as too costly by potential users, and is perceived as a quick and effortless technology to use, it is likely that it will be adopted by consumers in fulfilling their various television viewing needs (Collan & Tetard, 2007).

When PVR was first introduced in America in the late 1990's, the adoption of the technology was very limited and growth was extremely slow, primarily due to poor user education and high costs (Thurrott & Furman, 2004). In an InStat (2006) consumer survey, it was discovered that three primary reasons existed for consumers not incorporating PVR into their homes. Firstly, the technology was thought to be too expensive; secondly, many

people did not see the benefits of PVR over a VCR; while thirdly, many consumers were simply not interested in recording TV. Bagozzi *et al* (1992), the developers of the TAM, state that due to the complexity of a new technology, and the sense of uncertainty in the mind of the potential user, people form attitudes towards *trying to learn* to use the new technology as opposed to actually initiating use of the product. This fear of the unknown could therefore have negative consequences and explain the why the PVR's initial rate of adoption was sluggish.

However, since the late 1990's, more and more people have discovered the benefits of PVR, which has motivated them to adopt the technology. It is argued that a key motivator for consumers to purchase the technology is the desire to maximize leisure time (Ipsos Media, as cited by Creative Match, 2005). A current and increasing trend amongst consumers is the desire for instant gratification, an intrinsic need that refers to receiving what one wants, when one wants it. Furthermore, it has been noted that this desire for instant gratification is due to increased time pressures in today's environment. Vasquez (2007) found that when given a choice between more free time and money, 40% of respondents questioned chose time, further demonstrating that higher workloads and increased time pressures have resulted in a lack of free time. PVR aids in solving the problem of greater 'time poverty' by allowing consumers to watch their desired programmes at their own schedule, whilst creating more free time in order to undertake other leisure activities.

A further primary motivation to purchase PVR is that consumers believe that they are less likely to be subjected to advertisements (Ferguson & Perse, 2004). It has been discovered by Tivo, as cited by Harris (2007), that about 30% of people recording popular shows in America shifted their viewing by an hour or less in order to avoid interminable commercial breaks that plague US network television. Ipsos Media, as cited by Creative Match (2005), found that the number of people doing this is closer to 50%. This trend may pose as a potentially detrimental threat to advertisers in South Africa, as PVR adoption in the country increases.

Reiss (2000) found that one of the basic needs that drive human behaviour is the desire for order and an organised, stable and predictable environment. This basic need can be linked to another strong motivation for consumers to utilise PVR technology, which is the desire for control. In general, consumers have been reported as feeling more in control with their PVR, as well as being less likely to channel surf (Ferguson & Perse, 2004). Indeed, Ferguson and Perse (2004) found that consumers using PVR technology consider television viewing to be more enjoyable than those who do not use PVR, who only consider it as moderately satisfying. In an InStat survey (2003), it was discovered that the level of satisfaction linked with PVR is exceptionally high. Results found that 89% of PVR respondents reported to being either 'Extremely Satisfied' or 'Very Satisfied' with their PVR offering. The satisfaction that PVR provides, in terms of control and enjoyment, could in fact have a positive effect on advertisers. This is because many consumers use television viewing as a form of relaxation and entertainment. Greater control over their television viewing may lead to consumers spending more time watching television which may lead to greater advertising exposure and thus, result in even greater benefits for advertisers. In order to better understand the possible effects that PVR could have on television advertising awareness, it is vital that advertisers not only look at who is using the technology and why.

The effect of PVR on television viewing habits

Research that has looked into the number of PVR users who actually fast-forward through adverts has provided equally contradictory results. Next Research, as cited by Ad Age (2007), claim that viewers' likelihood of watching commercials when viewing programmes with PVRs versus live TV is nearly the same. Only 1% said they always watch the adverts when using a PVR or watching live TV, while 60% said they occasionally watch them with PVRs and 62% with live TV. This is in stark contrast to research conducted by Ipsos Media, as cited by Creative Match (2005), which found that nine out of ten PVR users, and 97% of the critical 16-34 year old audience, fast-forward through

the ads 'always' or 'almost always'. Pearson & Barwise's (2008) results were less extreme, finding that of those commercials that were time-shifted, 32% were played back at normal speed, with the remaining 68% being fast-forwarded.

Of those who do fast-forward the adverts, most do so not because they dislike the adverts but because they want to save time (Vasquez, 2007). People were also found to skip through irrelevant bits while keeping an eye out for categories that interested them. This suggests that people are willing to watch adverts that are entertaining or for products that interest them. Indeed, Next Research, as cited by Ad Age (2007), found that 92% of people watch adverts that are entertaining while 69% watch for products that they are interested in. Their research is supported by Tivo, as cited by Harris (2009), which found that the adverts least likely to be time-shifted were those for movie trailers and those that were seen to be funny.

PVR users who do fast-forward through adverts have a choice as to what speed they do so at. Not surprising then, the majority (66%) of fast-forwarded adverts in Pearson & Barwise's (2008) study were done so at the maximum speed, so as to save as much time as possible. This provides a particular challenge to advertisers who must ensure that their adverts are still distinguishable at these high speeds. However, as with Next Research, as cited by Ad Age (2007), and Tivo, as cited by Harris (2009), Pearson & Barwise (2008) noted that entertaining and relevant adverts were still likely to be noticed. They found that when viewers in control of the remote were fast-forwarding through commercials, they sometimes commented on particular commercials, watched them at slower speeds, and occasionally even rewound them to watch them again. Furthermore, they found that viewers not in control of the remote also concentrated closely on the screen and interacted with the adverts. Evidence of similar behaviour comes from Next Research, which found that during a recent Super Bowl game in the US, a 90 second Pepsi advert featuring Britney Spears was rewound more than the winning field goal in the final seconds (Ad Age, 2007).

Other reasons why people do not fast-forward through adverts include the fact that they simply forget to do so, often as a result of being distracted (Pearson & Barwise, 2008). It was also found that time-shifted adverts had particular impact when positioned next to serious programmes, as people often forget to fast-forward the adverts due to the intensity of such programmes. Findings such as these may help advertisers in deciding where to place their adverts so as to get the maximum exposure possible.

In order to better understand how to place their adverts, marketers must know when exactly PVR users are most likely to record programmes. Fortunately, the majority of studies conducted thus far have found a strong correlation between programme type and the amount of time-shifted viewing, and are in accordance with each other with regards to the types of programmes that are most likely to be time-shifted. Dramas, series, soap operas, and comedies are among the most recorded shows (Plunkett, 2009).

It is important that broadcast networks take note of the level of time shifting that is taking place on their channels. Vasquez (2007) found there to be a positive relationship between the amount of time shifting a programme receives and its popularity. Popular shows, including the most time-shifted genres of programmes, such as dramas and series, are often broadcast during prime time evening viewing when audience figures are thought to be at their highest. Not surprising then, Sky TV found that prime time evening viewing is the time of day when most time shifting occurs (Whitehead, 2007). Due to the large potential audiences at this time, prime-time commercial slots usually attract the highest revenues for broadcasters (Vasquez, 2007). Broadcasters may therefore be led to think that a high level of time shifting occurring on their channels is a good thing, as it indicates that they have many popular shows, which have the potential to attract large advertising revenues. However, advertisers may think twice about advertising on popular programmes that experience high levels of time shifting if they believe that people who time-shift such programmes will simply fast-forward through their adverts. Marketers may therefore not be the only ones to possibly lose out as a result of the PVR

technology. If marketers decide to abandon television as a means of advertising their offerings, broadcasters will also lose a lot of money and will have to find other ways to make up the lost revenue.

News and sport are the least likely programmes to be recorded, mainly due to the importance people hold in watching them as they happen (Vasquez, 2007; Plunkett, 2009). In line with this finding, The Nielsen Company, as cited by Crape (2007), confirms that sports and news programmes also have a higher than average playback occurring closer to the original broadcast. Vasquez (2007) noted that many reality programmes also experience lower levels of time-shifting, most probably due to the water cooler cachet attached to them in that people often want to see the results of such shows first hand before they become old news. Furthermore, it was found that music and cartoon channels and their related shows are not likely to be time-shifted (Plunkett, 2009). Pearson & Barwise (2008) discovered that this was due to the fact that music and cartoons are on TV all of the time. Music and cartoon shows often also do not follow on from each other, as is the case with dramas and series, leading to people not feeling the need to time-shift them.

As far as days are concerned, Vasquez (2007) says that time-shifting activity increases as the week goes on until the weekend where it drops off. Friday nights experience the most time shifting, as people are more likely to go out then. Programmes broadcast on the weekend on the other hand were less likely to be time shifted as people are more likely to be at home during this time and so have the opportunity to watch them live. These findings will further aid advertisers in deciding where and when to place their adverts so as to get the maximum possible exposure.

The effect of PVR on television advertising awareness

The main objective of advertising is to promote and raise awareness of products and services to a large audience (Gregory, 1993). Awareness refers to the first stage of the learning process about a new product, service, or idea in which the consumer has received information about the existence of the

innovation but has not yet formed an opinion (Keller, 2003). According to Radder and Huang (2008), brand awareness is the consumer's ability to identify a brand under different conditions. This can take the form of brand recognition and brand recall. Brand recognition assumes prior exposure to the brand and consumers are only likely to correctly identify the brand once they have been given a cue (Radder & Huang, 2008). However, consumers may be able to recognise many brands, but only recall a small number. Brand recognition is therefore considered as the minimum level of brand awareness and is based on aided recall. According to Keller (2003), brand awareness is created and enhanced by increasing the familiarity of the brand through repeated exposure. Once the consumer has had enough exposure to the brand, the brand will take root in memory. Advertising therefore represents an important means of increasing brand familiarity and therefore brand awareness. Furthermore, the verbal and visual effects of television (TV) advertising help entrench the brand name into the consumer's memory.

TV advertising is typically processed at a low-involvement level. Although TV advertising is able to reach a large target audience simultaneously, laboratory research shows that it has little effect on individual attitude change (Ray, 1973). Most TV viewers are not involved with either the advertising or its topics and the content is not critically analysed. Even though TV advertising may not directly change attitude, overwhelming repetition may make possible shifts in cognitive structure. Information which enters the memory through low-involvement processing is directly stored via the emotional centres of the brain straight to the long-term, implicit memory without any conscious filtering (ThinkBox, 2008). TV advertising is therefore well suited to thematic or brand messages that need to be remembered for the long-term. TV advertising also represents an effective method of increasing a set of associations around a brand. However, consumers now have more options for controlling their exposure to advertising messages with devices such as PVR (Andras, Kwak & Zinkhan, 2009). PVR allows consumers the option of fast-forwarding through commercials on time-shifted

programmes at varying speeds and therefore the level of advertising awareness may be hampered.

Previous studies conducted on the effect that PVR has on TV advertising has resulted in varied views and the true effects of PVR are still unknown. Pearson and Barwise (2008) suggest that PVR has had little affect on advertising awareness to date. According to their study, most consumers use PVR as a backup when there is nothing else to watch live. Consequently, only 30% of PVR owners use the time-shifted feature, while 70% still viewed live TV. The findings of this study suggest that the impact of PVRs on advertising exposure is limited and the proportion of commercials that are fast-forwarded are not yet significant with respect to the large number of commercials seen. Pearson and Barwise's findings coincide with a study conducted for Multichoice South Africa. In this study it was found that 51% of respondents interviewed claimed to watch more TV than before the introduction of PVR and over 70% claimed that most of their viewing was still live. Therefore, it is suggested that the impact of PVR on advertising awareness in the short to medium run has been exaggerated and that PVR is currently having little effect on commercial awareness.

Wright (2007) believes that the use of PVR actually increases advertising awareness as more attention is paid to the TV, and therefore the advert, whilst fast-forwarding. Therefore, there may be a relationship between having a PVR and attention. Attention can be defined as the cognitive process whereby a person concentrates on some features of the environment to the relative exclusion of others (Treisman & Gelade, 1980). According to a study conducted by Pearson & Barwise (2008), the participants often demonstrated high levels of attention and significant interaction with time-shifted advertisements both watched at normal speed and fast-forwarded. This may be due to the high levels of interaction with the advertisements whilst fast-forwarding and the fact that live commercial breaks are mostly used as a convenient interlude to do other things. They believe that the term 'speed-watching' may be more appropriate than fast-forwarding as the participants' visual attention often remained

high. Even though the viewer is interested in skipping the adverts, consumers may be subconsciously aware of the products and brands that are being advertised (Wright, 2007). This concept can be linked to the theory of subliminal perception which refers to the consumers' ability to perceive stimuli without being consciously aware that they are doing so (Beatty & Hawkins, 1989). Du Plessis (2009) supports this theory and believes that PVR increases viewer involvement, thereby aiding their subconscious awareness of brands displayed in the commercials, as opposed to normal TV.

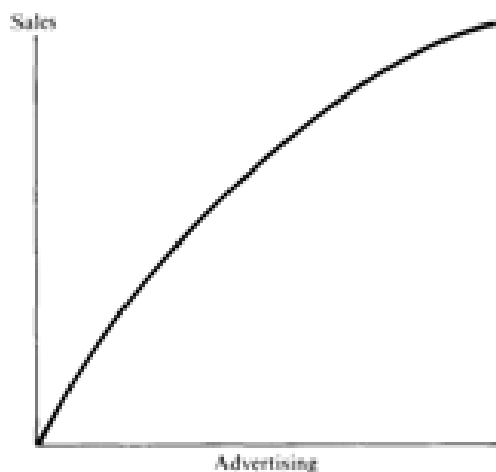
However, it is important to note that the implications of PVR on advertising are dependent on what the advertisement is supposed to achieve. Advertising objectives include the ability to inform, persuade and remind consumers about the company, product or service (BNET, 2009). Devices such as PVR only allow consumers to briefly see glimpses of an advert whilst fast-forwarding. Therefore, while PVR may help remind consumers of certain brands aiding in brand awareness, it may prove ineffective when attempting to persuade consumers to switch brands or when trying to inform them about certain product qualities (Du Plessis, 2009). Moreover, consumers must have previous knowledge of a given brand in order to recognise it whilst fast-forwarding (Kang, 2008). According to Radder and Huang (2008), brand recognition assumes prior exposure to the brand and only when given a cue will consumers be likely to correctly identify the brand as being previously heard or seen. Therefore, only once consumers are cognitive of certain brands, fast-forwarding may increase the consumers' recall of them which may lead to higher advertising awareness (Du Plessis, 2009).

Research conducted by Chicago-based Information Resources Incorporated found that PVR households purchase 5% less of new products than non-PVR households (Neff, 2008). Out of these purchases, it is evident that food brands are impacted the most, as generally more of their advertising budgets are allocated to TV (ibid). This may correspond to the fact that, although the use of PVR to fast-forward through commercials may allow consumers to recall brands they are familiar

with, it does not allow the consumer to be informed about new product offerings or to be persuaded to try new brands (Du Plessis, 2009). Therefore, new or unknown brands advertised on TV may suffer from the use of PVR by consumers.

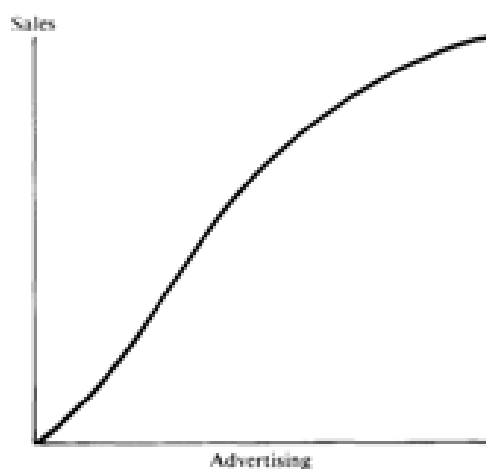
Bernoff (2004) found that PVR users report spending nearly 60% of their time watching recorded or time-shifted programmes in which 92% of commercials are fast-forwarded. This is in contrast to the study conducted by Pearson and Barwise (2008) where only 30% of PVR users reported to using the time-shifted feature. Nevertheless, Bernoff (2004) states that the average PVR user only sees 46% of the adverts in the programme being watched. Accounting for the low levels of attention ordinary viewers pay to adverts, he estimates that PVR devices reduce advertising attention by an additional 40%. However, as previously mentioned, the fast-forwarding of adverts is uneven and it has been found that viewers tend to watch more humorous adverts as well as adverts in news or sports programmes. One must also not overlook the fact that PVR enables consumers to watch more TV within a given period of time, therefore allowing more adverts to be seen during that interval (Du Plessis, 2009).

TV advertising may be threatened via viewer attention despite the advent of PVR. Du Plessis, CEO and founder of Millward Brown in South Africa, suggests that it is a growing reality that advertisers are losing the attention of their TV audiences irrespective of the effect from devices such as PVR (Du Plessis, 2009). The declining attention towards TV advertising can be illustrated by the use of a response curve. A response curve is used to refer to the qualitative relationship between some input of advertising and some output of presumed value to the advertiser (Simon & Arndt, 1980). Input measures may include the size and frequency of adverts as well as the monetary advertising expenditure, whilst output measures may include sale effects as well as indicators of consumer ad recall, attitudes, or intention to buy. The two proposed shapes of the response function include a) the convex response curve and b) the s-shaped response curve as illustrated below:

Figure 1a: The convex response curve

Source: Simon & Arndt, 1980

The convex response curve applies to products for which the first exposure of the advert produces the best return and all subsequent exposures produce slightly lower responses (Simon & Arndt, 1980).

Figure 1b: The s-shaped response curve

Source: Simon & Arndt, 1980

The s-shaped response curve, however, applies to products that require a certain number of exposures to reach a threshold of greatest response, and after that threshold is reached, the response diminishes for each subsequent exposure. Du Plessis (2009) believes that these response curves are shifting to the right implying that advertisements increasingly need more input or exposure in order to create the desired effect. The declining attention of consumers may be a result of the enormous

amounts of advertising clutter and noise that they are exposed to each day (Rotfeld, 2006). This process known as 'perceptual blocking' and involves consumers being able to protect themselves from being bombarded with advertisements by blocking such stimuli from their conscious awareness (Palmer & O'Neill, 2003). Nevertheless, a study released by the Television Bureau of Canada found that, of the respondents who use PVR to fast-forward or skip through adverts, more than half stated that they will stop to watch commercials that they find interesting or entertaining (Paul, 2008). Therefore, the survival of mass media will depend largely on the quality of content as well as the way that it is delivered (Moerdyk, 2005).

Combating the ad-elimination effect of PVR

It is evident that in the face of PVR, advertisers must become more vigilant and careful of how they present their brands to the increasingly sophisticated consumer (Watson, 2005). They must be innovative and create advertisements that consumers want to see and that will persuade PVR users to replay them in normal time (Vegter, 2005). Watson (2005) states that PVR may promote better commercials, as it allows people to save and bookmark their favourite adverts to watch again whilst unfavourable adverts are ignored. With respect to young people (16 to 35 years), a study conducted by ThinkBox (2008) found that they are far more positive about TV advertising than their older counterparts. This market is 2.5 times more likely to say they enjoy TV advertising and significantly more likely to say they want to buy the products being advertised (ThinkBox, 2008). Barnhoorn (2006) agrees and states that the youth are particularly susceptible to advertising with 59% of respondents declaring that they are more likely to buy a brand they see or hear advertised. However, the youth are only willing to listen to brands and advertising on the terms that they find interesting (MarketingMix, 2008). The Khuza Awards, South Africa's biggest youth marketing communications research-based awards programme, found that the biggest appeal driver is humour (ibid). Mike Gatti, executive vice president of the Retail Advertising & Marketing Association, also stated that marketers need to recognize and take

advantage of the fact that technology is a huge part of young peoples' lives (Kruger, 2005). It is therefore critical to have the right media mix and integrate creative television commercials with other mediums.

Creative and innovative ways of presenting adverts in the face of PVR include the use of 'teaser campaigns' (Wright, 2007). A teaser campaign involves using brief advertisements to tease the public by only offering small chunks of information to them (Adweek, 2008). This allows advertisers to grab the attention of their viewers and encourage them to engage with the communication message in-depth, preferably with the use of an alternative medium, such as the internet (Wright, 2007). An online and TV study conducted by ThinkBox and IAB found that most digitally enabled people view TV concurrently with a laptop online. These consumers (typically the youth market) are increasingly ready to use the internet to find out more about both programming and advertising content being viewed on TV (ThinkBox, 2008). Therefore, the TV and internet combination is able to give advertisers many opportunities to engage with their target audience and enable the journey from TV to purchase to be much shorter.

Other strategic opportunities are open to TV advertisers with regards to the effect that PVR has on advertising awareness. A study conducted by NBC Universal in the US found that viewers still remember certain adverts whilst fast-forwarding up to six times the speed of regular TV using devices such as PVR (Kang, 2008). In the study, biometric measures were used to track eye movements, heart rates and the sweat production of respondents in order to assess their concentration levels. It was found that the adverts concentrated on and recalled the most, shared certain characteristics. These adverts focused the action and the brand's logo in the middle of the screen, did not rely on audio or text to tell the story, and familiar characters were often used. Recall of adverts were also more likely if they were seen live before. Sporting events represent one of the few genres that are able to attract a large number of viewers simultaneously with little audience fragmentation (MarketingMix, 2008). Most sporting events are also viewed live and therefore sport is becoming an increasingly

valuable property for brands to invest in (Kang, 2008). Advertisers, therefore, should expose new adverts during live programming, such as sports events, before re-running them on programmes that are likely to be recorded. The brand's logo should also be positioned in the middle of the screen for a longer period of time. Furthermore, advertisers can plan ahead and test multiple edits of a commercial in order to see how well it performs when it is fast-forwarded.

Advertisers may also be able to strategically position their advert within commercial breaks (Wright, 2007). This may involve positioning the advert just before or just after the specific program being watched so that consumers are less likely to avoid it. Research also indicates that viewers are more likely to avoid commercials that are placed in between different programmes (i.e. in the half hour/hour mark) as opposed to commercials that appear within breaks of the main body of the programme (Chowdhury, Finn & Olsen, 2007). Advertisers are therefore able to strategize when to place their adverts so that they are most likely to be seen.

The use of different television advertising formats may also help to reduce the effect that devices such as PVR have on advertising awareness. The most common format for television advertising is that of sequential presentation. This format refers to the placement of advertisements in between programme viewing. However, the use of a simultaneous presentation format may reduce ad-avoidance intentions. This format reduces the size of the programme being viewed to fit in an advertisement with the use of split screens.

Therefore, a form of forced exposure is created which ensures that the number of people viewing the advert is equal to the number of people viewing the programme (Chowdhury *et al*, 2007). Mnet and DStv are continually exploring new ways of integrating commercial messages into and alongside content in a way that will add value to the subscriber in light of PVR technology (Wright, 2007). However, the effectiveness of this format in terms of consumer attention is still unknown (Chowdhury *et al*, 2007).

Some data also suggests that modest diversification of media plans away from TV can minimise the negative impact that PVR is having on advertising awareness (Neff, 2008). It was found that brands that spent 20% or more of their marketing budgets outside of TV were not impacted significantly by its effects (ibid). Brands may also have to find unique ways to get their message across to the consumer such as sponsorships and music festivals (Wright, 2007). Barnhoorn (2006) found that the youth are particularly susceptible to sponsorship with 56% of the respondents declaring that the chance of buying a product is significantly increased if the company sponsors a sport. An alternative method that is gaining appeal is that of product placement (Wright, 2007).

Product placement is a form of advertising where branded goods or services are integrated in a feature film, sitcoms or other television programmes that are not typically perceived to be an advertising medium (d'Astous & Seguin, 1999). The use of product placement allows advertisers to directly target their market while the viewers are effectively receiving the advertising message (Wright, 2007). However, it must be noted that implicit product placement may bring about negative ethical consumer reactions (d'Astous & Seguin, 1999).

Therefore, advertisers should assess the impact of using product placement in television programmes to ensure the disadvantages associated with negative consumer perceptions do not outweigh the benefits of advertising to a large audience.

METHODOLOGY

The population that was considered for this study consisted of young South African

people, aged between 16 and 34 years. This included all races and genders, as well as all professions and levels of education and income. However, as this was an exploratory study with a strict budget, a convenience sampling technique was used. With respect to the sample size, over 270 respondents were collected, including over 100 respondents for each group (i.e. PVR users and non-users).

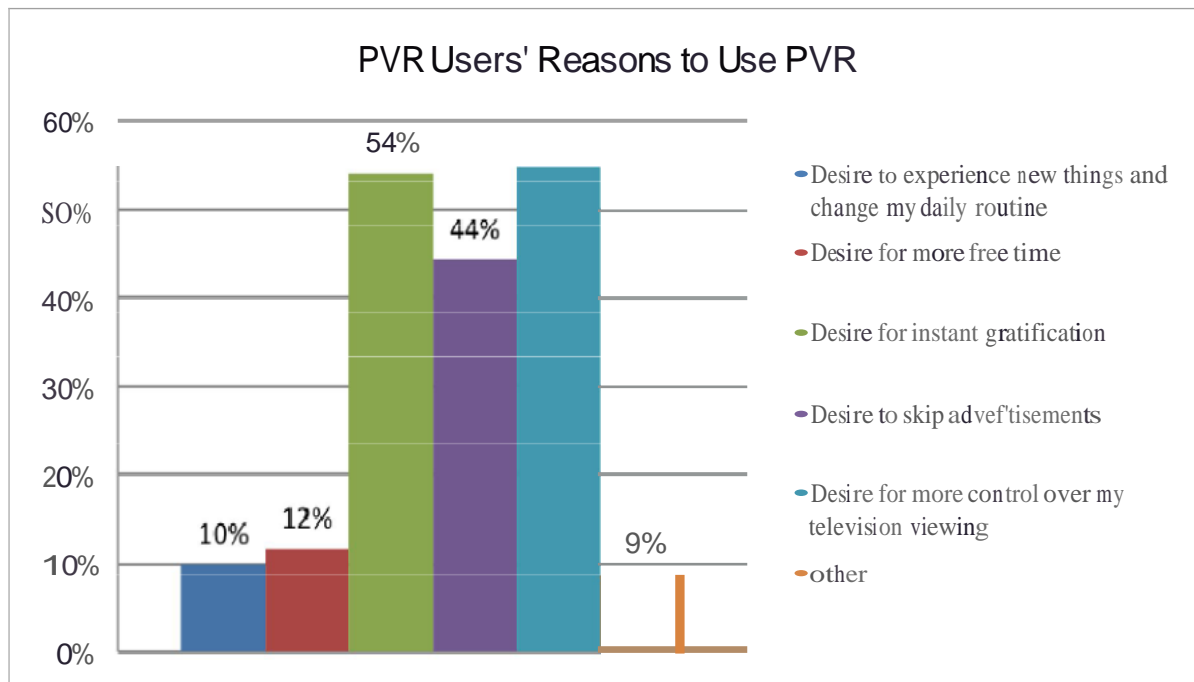
Online questionnaires were utilised due to their cost effective nature and the rapid deployment potential thereof. Descriptive statistics were used to provide an overview of the status quo, whereas Mann-Whitney U tests were conducted to determine whether material differences existed between PVR users and non-users. The non-parametric Mann-Whitney U tests were favoured to conventional t-tests as the data was not normally distributed. Throughout the analysis, a significance level of 5% was used.

RESULTS

Sample composition

The sample of 172 PVR users that was used in this study consisted primarily (58%) of 16 to 25 year olds, with the remainder of respondents being between the ages of 26 and 34. The sample was more or less evenly split between males and females, with 49% of the sample being male and 51% being female, which is very representative of the South African population as a whole. With respect to the various races found in South Africa, 57% of respondents were White South Africans, while 19% were Coloured, 16% were Black and 5% were Indian or Asian. This is somewhat within keeping of the demographics of PVR users in South Africa, as indicated by AMPS.

Figure 3: PVR users' reasons to use PVR



Adoption of, and satisfaction towards, PVR technology

Figure 3 displays the key reasons for using PVR. The three most prominent reasons were found to be a desire for instant gratification (54% of respondents), a desire to skip advertisements (44%) and a desire for enhanced viewing control (55%).

When questioned about their satisfaction with their PVR decoder, the vast majority of PVR users in the study (96%) said that they were either "very satisfied" or "satisfied". This satisfaction translated into an extremely high likelihood (95%) that they would recommend PVR to a friend.

Figure 4: PVR users' reasons to use PVR

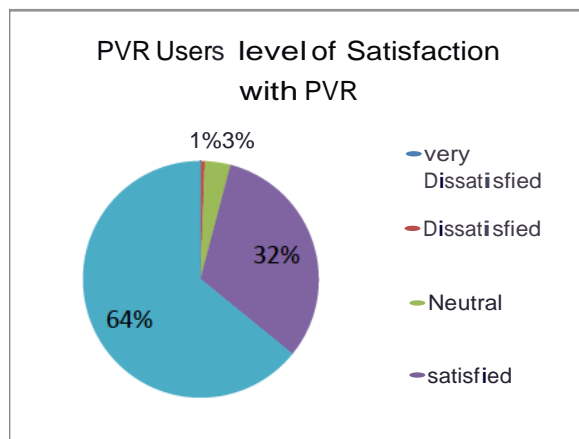
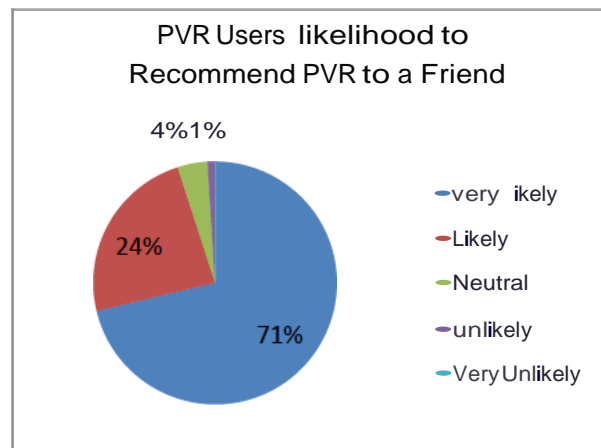


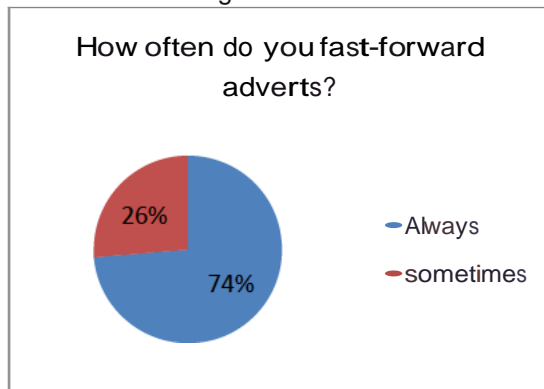
Figure 5: PVR users' likelihood to recommend PVR to a friend



The effect of PVR on South Africans' response to advertisements

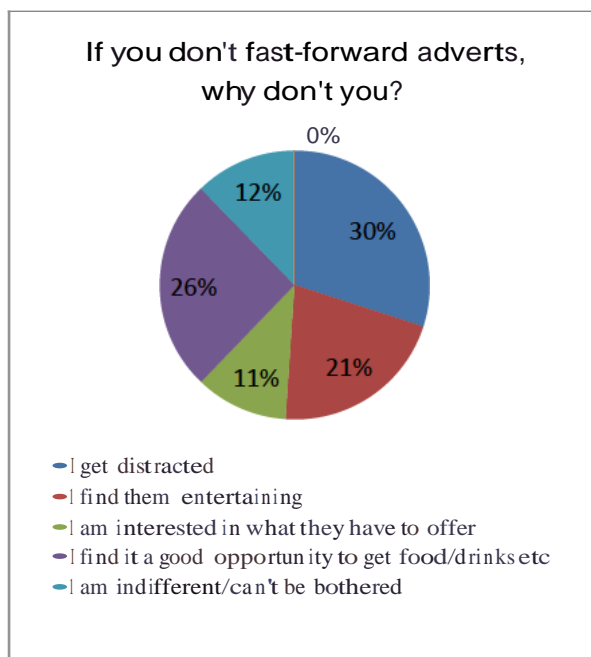
Nearly three quarters (74%) of respondents said that they "always" fast-forward adverts when watching recorded programmes. Just over a quarter of people said they "sometimes" fast-forward the adverts while no respondents said that they "never" do it. This is reflected in figure 6.

Figure 6: "How often do you fast-forward through adverts?"



Furthermore, of those who said that they only "sometimes" fast-forward the adverts, only 32% of them watch adverts because they "find them entertaining" or are "interested in what they have to offer". The rest appear not to fast-forward because they either get distracted; they find it's a good opportunity to do something else, such as go to the bathroom; or they simply just cannot be bothered. Therefore, even though these people do not always fast-forward through adverts, it doesn't mean that they necessarily watch them either. This is reflected in figure 7.

Figure 7: "If you do not fast-forward adverts, why don't you?"



The cross-tabulation below shows that White South Africans are more likely to "always" fast-forward the adverts than any other race group. Coloured South Africans are least likely to "always" fast-forward the adverts and are most likely to "sometimes" fast-forward the adverts.

Table 1: Cross tabulation – Race versus fast-forwarding frequency

	White	Coloured	Indian	Other	Total
Always	63%	87%	52%	63%	75%
Sometimes	37%	13%	48%	38%	25%
Average Column Profile	16%	59%	20%	5%	100%

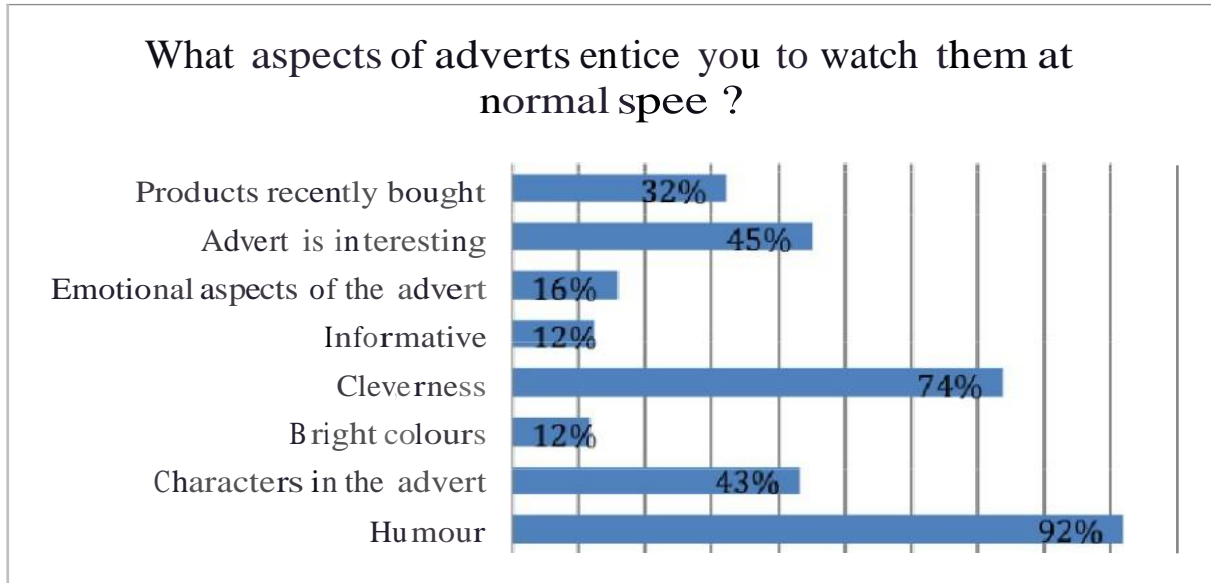
As far as gender is concerned, the cross-tabulation below (table 2) shows that males are more likely to always fast-forward through adverts than their female counterparts.

Table 2: Cross Tabulation – Gender versus fast-forwarding frequency

	Male	Female	Total
Always	81%	67%	74%
Sometimes	19%	33%	26%
Average Column Profile	49%	51%	100%

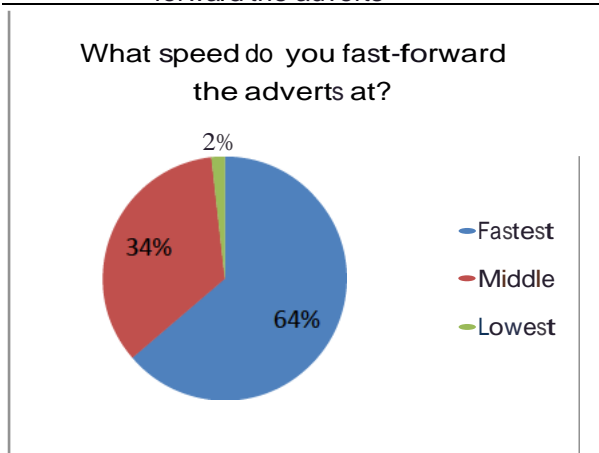
The aspects which were found to be most likely to entice people to watch the adverts at normal speed were "humour", "cleverness", and whether or not the advert was "interesting". The percentages of respondents selecting each option are depicted in figure 8.

Figure 8: Aspects of adverts which entice viewers to watch them at normal speed



In South Africa, PVR users are able to choose between three speed levels when fast-forwarding through adverts. As per figure 9, just under two thirds of respondents claim to fast-forward at the highest speed.

Figure 9: Speeds at which viewers fast-forward the adverts



As the cross-tabulation in table 3 reveals, eight out of ten respondents who fast-forward at the fastest speed also always 'zap' the advertisements.

Table 3: Cross tabulation – Speed versus fast-forwarding frequency

	Always	Sometimes	Column	Mass
Fastest	81%	19%	64%	64%
Middle	61%	39%	35%	35%
Lowest	67%	33%	1%	1%
Column	74%	26%	100%	100%

Changes to general television viewing habits

The type of programmes that respondents most often recorded on their PVR were found to be movies, comedies, and dramas. The response rates are depicted in figure 10.

Figure 10: "Which programme genres do you record with your PVR?"

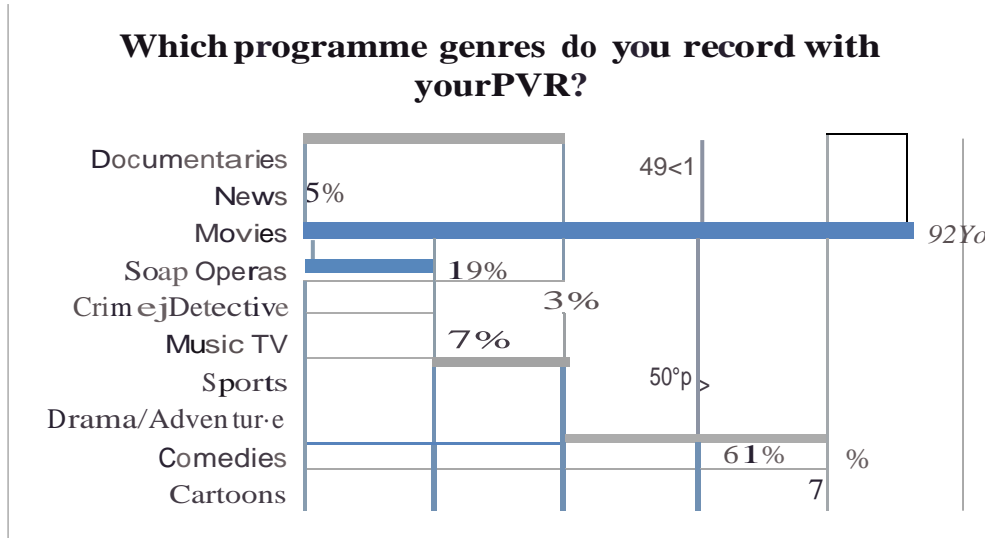


Table 4: Mann-Whitney U Test for attention paid to advertisements

Mann-Whitney U Test (Spreadsheet11)									
By variable Var2									
Marked tests are significant at p <.05000									
variable	Rank Sum PVR	Rank Sum NON-PVR	U	Z	p-level	Z adjusted	p-level	Valid N PVR	Valid N NON-PVR
Var1	24030.00	12826.00	7776.000	1.243223	0.213787	2.043727	0.040981	171	100

A Mann-Whitney U-test was conducted to ascertain whether a significant difference existed between PVR users and non-users with respect to the attention paid to adverts.

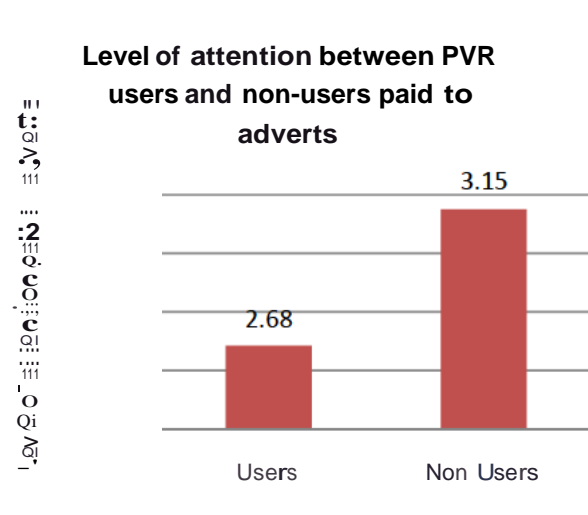
The hypotheses are stated as follows:

H₀: There is no significant difference between PVR users and non-PVR users with regards to attention paid to advertisements.

H₁: There is a significant difference between PVR users and non-PVR users with regards to attention paid to advertisements.

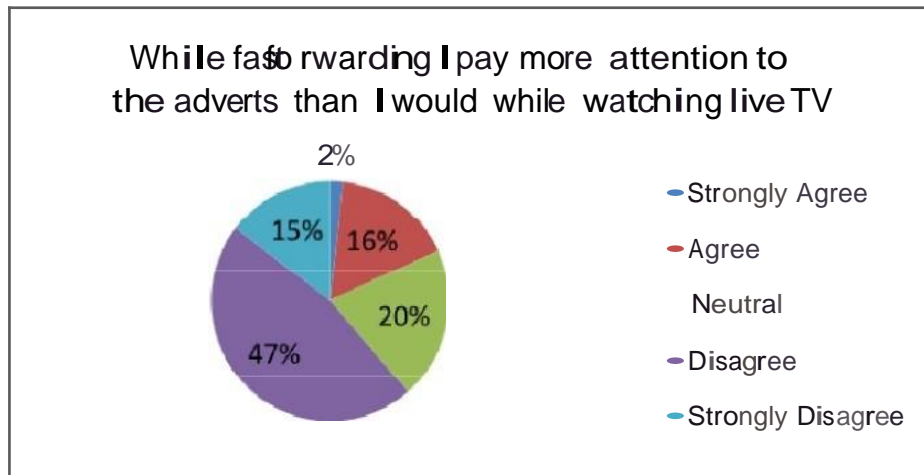
A p-value of 0.040981 was recorded. Therefore, we can reject H₀ and conclude that there is a difference (at the 5% significance level) in attention paid to advertisements between PVR users and non-PVR users. This difference can be seen from the column chart below (figure 11), which shows that non-PVR users pay considerably more attention to the adverts when watching live TV than PVR users do whilst fast-forwarding.

Figure 11: Level of attention between PVR users and non-users paid to adverts



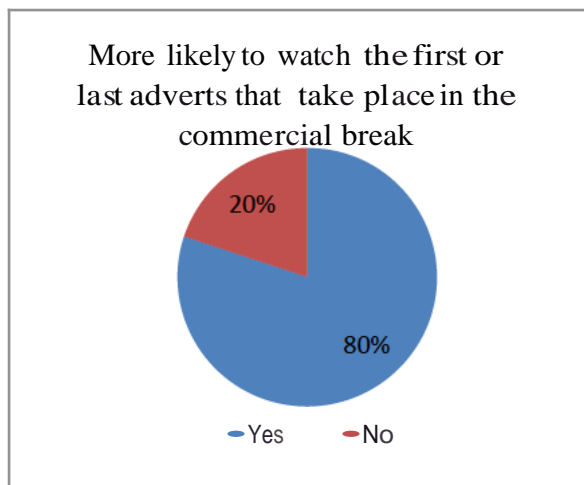
The pie chart below, figure 12, supports this claim, as it shows that the majority of PVR users (62%) believe that they pay less attention to the adverts while fast-forwarding than they would while watching live TV.

Figure 12: "While fast-forwarding, I pay more attention to the adverts than I would while watching live TV"



Nevertheless, it can be seen from the pie chart below (figure 13) that a very high number of respondents (80%) claim that they are more likely to see adverts that are placed first or last in commercial breaks (i.e. immediately after or before the programme is viewed).

Figure 13: "More likely to watch the first or last adverts that take place in the commercial break"



Recognition of brands

The study also considered whether the respondents' recognition of brands is hampered by the PVR device. A Mann-Whitney U test was used to assess the difference in the level of brand recognition between PVR users while fast-forwarding and non-PVR users while watching live TV.

The hypotheses are stated as follows:

H0: There is no significant difference between PVR users and non-PVR users with regards to recognition of brands.

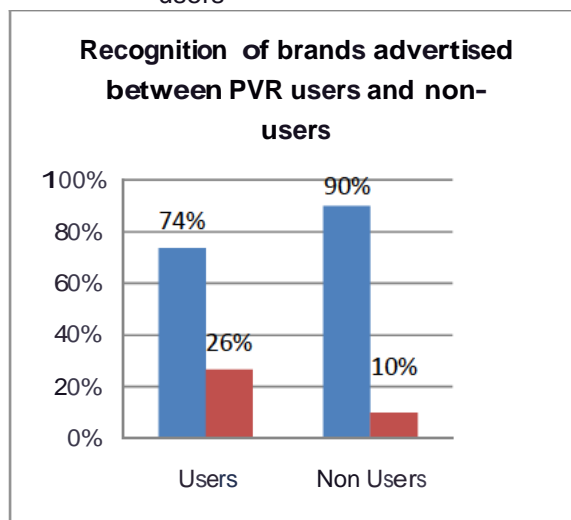
H1: There is a significant difference between PVR users and non-PVR users with regards to recognition of brands.

Table 5: Mann-Whitney U Test for recognition of brands

Mann-Whitney U Test (SpreadsheetS)									
By variable Var2									
Marked tests are significant at p < .05000									
variable	Rank Sum PVR	Rank Sum NON-PVR	U	Z	p-level	Z adjusted	p-level	Valid N PVR	Valid N NON-PVR
Var1	21218.00	15638.00	6512.000	-3.27350	0.001062	-3.44035	0.000581	171	100

A p-value of 0.000581 was recorded. Therefore, we can reject H_0 and conclude that there is a difference between PVR users and non-PVR users with regards to recognition of brands at the 5% significance level. To this end, the column chart below (figure 14) reveals that 16% more non-users recognise brands being advertised than PVR users. However, over 70% of both groups claim that they recognise the brands being advertised.

Figure 14: Recognition of brands advertised between PVR users and non-users



CONCLUDING REMARKS

South African PVR users appear similar to their counterparts in the US and UK with respect to their motivation behind PVR use. Within all three countries, it was found that the two primary reasons behind PVR use are the desire to have control over their television viewing (including 'zapping' advertisements), and the desire to watch what they want, when they want. Respondents report that this means that television viewing has become a more enjoyable experience. Nine out of ten respondents were at least "satisfied" with the technology and would be likely to recommend it to a friend.

The study found that PVR users in South Africa believe that their television viewing habits have changed substantially as a result of PVR. A considerable amount of time shifting appears to be occurring. There are, however, notable exceptions such as news bulletins and soap operas. Additionally, the study found that all

respondents fast-forward through adverts at least "sometimes" with the majority fast-forwarding "always". Furthermore, the majority of people said that they fast-forward through the adverts at the fastest speed, which may further hamper advertisers' ability to gain the attention of viewers. However, while a substantial number of people said that they did this because they dislike adverts or are not interested in them; many people said that they merely want to save time, which suggests that television advertising may still have a future. Indeed adverts that were seen to be humorous, clever or interesting have been found to be the adverts most likely to be stopped or rewound by people fast-forwarding through adverts.

Although it was found that PVR does hamper advertising awareness when compared to normal viewing, the level of brand recognition in general remains high whilst fast-forwarding. Therefore, PVR may not have such a negative effect on TV advertising. However, this is dependent on what the advertisement is meant to achieve – a deeper message may be lost if the advert is zapped. New products and brands are therefore under more of a threat as respondents are not able to recognize them immediately.

However, there are certain strategies that TV advertisers can adopt to ensure that their television adverts are able to gain the attention of PVR users. For example, adverts can be placed immediately before or after the programme being watched as it was found that viewers are more likely to see them then. The brand logo should also be positioned in the middle of the screen and for a longer period of time, as this aids in the recognition of such. More humorous adverts should be produced as this induces viewers to play them at normal speed. The use of simultaneous advertising, product placement and teaser campaigns should also be considered as these types of advertising were found to be effective in gaining the attention of viewers.

Additionally, advertisers should ensure that new adverts are first aired on programmes that are likely to be seen live, such as news or sporting events, so that people are able to recognise them at a later stage when they are fast-forwarding through the adverts.

REFERENCES

- Ad Age. 2007. *PVRs Not Necessarily the Death of TV advertising*. URL: <http://lawmeme.research.yale.edu/modules.php?name=News&file=print&sid=204> [Accessed 15 March 2009].
- Adweek. 2008. *Teaser Campaigns*. URL: http://www.adweek.com/aw/esearch/searchResult.jsp?keyword=teaser+campaign&exposeNavigation=true&kw=&action=Submit&searchInterface=keyword&applicationName=adweek&matchType=mode%2Bmatchallpartial&an=adweek&searchType=ARTICLE_SEARCH [Accessed 11 May 2009]
- AMASA. 2007. *PVR: death of the 30-second TV ad?*. URL: <http://www.bizcommunity.com/Article/196/12/14540.html>. [Accessed 9 March 2009].
- AMPS. 2008. *All Media & Products Survey*. URL: www.eighty20.co.za [Accessed 23 March 2009].
- Andras, T, Kwak, H & Zinkhan, G. 2009. 'Advertising to 'active' viewers'. *International Journal of Advertising*, vol. 28, no. 1, pp. 49-75.
- Bagozzi, P., Davis, D., & Warshaw, R. 1992. 'Development and test of a theory of technological learning and usage'. *Human Relations*, 45(7), 660-686.
- Barnhoorn, C. 2006. *The Youth: Attitudes toward Branding African Response*. URL: http://www.africanresponse.co.za/pdf/03Youth_Research_270706.pdf [Accessed 20 September 2009].
- Beatty, S. & Hawkins, D. 1989. 'Subliminal Stimulation: Some New Data and Interpretations'. *Journal of Advertising*. Vol. 18, pp4-8.
- Bernoff, J. 2004. *The Mind of the DVR User: Media and Advertising*. URL: <http://www.forrester.com/magazine/documents/0,5110,35326,00.pdf>. [Accessed 2 May 2009]
- BNET. 2009. *Determining your Advertising Objectives*. URL: http://www.bnet.com/2410-13240_23-64268.html. [Accessed 11 May 2009].
- Chowdhury, R. Finn, A. & Olsen, G. 2007. 'Investigating The Simultaneous Presentation of Advertising and Television Programming'. *Journal of Advertising*. Vol. 36, no. 3, pp 85-96
- Collan, M. and Tetard, F., 2007, Lazy User Theory of Solution Selection, in Proceedings of the CELDA 2007 Conference, pp. 273-278, Algarve, Portugal, 7-9, December, 2007
- Crape, M. 2007. *Nielsen on PVR Viewing Habits*. URL: <http://www.tvsquad.com/2007/02/16/nielsen-tells-us-about-our-pvr-viewing-habits/> [Accessed 16 March 2009].
- Creative Match. 2005. *Dart Survey Highlights Significant Growth in PVR Market*. URL: <http://www.creativematch.co.uk/viewnews/?91291> [Accessed 16 March 2009].
- d'Astous, A & Seguin, N. 1999. 'Consumer reactions to product placement strategies in television sponsorship'. *European Journal of Marketing*. Vol. 33, no. 9/10, pp 896-910.

- DSTV, 2008. SD PVR: Features and benefits. URL: http://www.dstv.com/dstvs/content/en/sa/features_benefits [Accessed on 22 March 2009].
- Du Plessis, E. 2009. *Inadvertent Attention*. Presentation held at iKhaya Lodge, Dunkley Square Cape Town on March 25 2009.
- Ferguson, E. and Perse, D. 2004. *Audience satisfaction amongst TiVo and ReplayTV users*. URL: <http://www.jiad.org/article44> [Accessed on 21 March 2009].
- Gregory, J.R. (1993), "Strong brands stick out in a crowd", *Business Marketing*, Vol. 78, August, p. 39.
- Harris, M. 2007. *Over Half of US TV Shows are Time Shifted*. URL: <http://www.techradar.com/news/television/over-half-us-tv-shows-are-time-shifted-583473>. [Accessed 16 March 2009].
- InStat. 2003. *Consumer electronics manufacturers shifting gears to boost PVR sales*. URL: <http://www.instat.com/press.asp?Sku=IN030583ME&ID=580> [Accessed on 22 March 2009]
- InStat. 2004. *PVR market growth forecast*. URL: http://colin.smillie.ca/PM/Market%20Research/PVR_Market_Growth_Forecast.html [Accessed 22 March 2009]
- InStat. 2006. *U.S. Consumer Survey: Personal Video Recorders*. URL: www.instat.com/panels/pdf/2006/feb_pvr.pdf [Accessed 20 March 2009].
- Kang, S. 2008. *Why DVR users recall some TV spots*. URL: <http://online.wsj.com/public/article/SB120398730105292237.html?mod=blog> [Accessed 12 May 2009]
- Keller, K.L. (2003), *Strategic Brand Management: Building, Measuring and Managing Brand Equity*, Pearson, Upper Saddle River, NJ.
- Kruger, J. 2005. *Marketing to the future: reaching teens and young adults requires a radically different approach*. URL: <http://www.allbusiness.com/marketing-advertising/531631-1.html> [Accessed 14 September 2009]
- MarketingMix, 2008. *Fans for your brand*. URL: <http://www.marketingmix.co.za/pebble.asp?relid=4232> [Accessed 14 September 2009].
- The Media Shop. 2009. *DSTV Subscriber Figures By Decoder Type*. Provided by Debbie Ihlenfeldt (debbie.ihlenfeldt@mediashop.co.za).
- Moerdyk, C. 2005. *PVR lands with huge implications for advertisers*. URL: <http://retail.bizcommunity.com/Article/196/11/8490.html> [Accessed 10 March 2009].
- Neff, J. 2008. 'The Tivo Effect'. *Business Source Premier*, vol. 113, no. 6 OMD. 2005. *A Brief Market Overview South Africa*. URL: www.umd.co.za/samedialandscape2005.pdf [Accessed 29 March 2009].
- Palmer, A. & O'Neill, M. 2003. 'The Effects of Perceptual Processes on the Measurement of Service Quality'. *The*

- Journal of Services Marketing*. Vol. 17, no. 2/3, pp 254-275
- Paul, J. 2008. *PVRs not a threat to advertising: TVB*. URL: http://www.mediaincanada.com/articles/mic/20080905/adskipping.html?_____s=yes [Accessed 8 March 2009].
- Pearson, S. & Barwise, P. 2008. 'PVRs and advertising exposure: a video ethnographic study'. *Qualitative Market Research: An International Journal*, vol. 11, no. 4, pp 386-399.
- Plunkett, J. 2009. *TV Ratings System To Reflect Change in Viewing Habits*. URL: <http://www.guardian.co.uk/media/2009/mar/16/television-barbs-overnight-audience-figures> [Accessed 16 March 2009].
- Radder, L. & Huang, W. 2008. 'High-involvement and low-involvement products'. *Journal of fashion marketing and management*. Vol. 12, no. 2, pp 232-243
- Ray, M. 1973. *New models for mass communication research*, Chapter 5, pp 146-175. Beverly Hills: Sage Publications.
- Reiss, S. 2000. *Who am I: The 16 basic desires that motivate our actions and define our personalities*. URL: ISBN 1-58542-045-X, <http://books.google.fr/books?id=EbOjA5oAsEUC> [Accessed on: 11 May 2009].
- Rogers, E. 1964. *Diffusion of Innovations*. Free Press of Glencoe, Macmillan Company.
- Rotfeld, H. 2006. 'Understanding advertising clutter and the real solution to declining audience attention to mass media commercial messages'. *Journal of Consumer Marketing*. Vol. 23, no. 4, pp 180-181.
- Simon, J. & Arndt, J. 1980. 'The Shape of the Advertising Response Function'. *Journal of Advertising Research*. Vol. 20, no. 4, pp 11,18
- Television Bureau of Advertising. 2008. *The importance of DVR viewing to the advertiser*. URL: www.tvb.org/ppt/selling/Timeshifted_Viewing_-_Live_plus_3_Updated_12-08.ppt [Accessed 20 March 2009].
- ThinkBox. 2008. *TV at a Glance*. URL: <http://www.thinkbox.tv/server/show/nav.113> [Accessed 14 September 2009]
- Thurrott, P. and Furman, K. 2004. *PVR market blasts off*. URL: <http://www.connectedhomemag.com/HomeTheater/Articles/Index.cfm?ArticleID=42711> [Accessed 23 March 2009].
- Vasquez, D. 2007. *Real Victims of DVRs: Newer Products*. URL: http://www.medialifemagazine.com/artman2/publish/Research_25/Real_victims_of_DVRs_Newer_products.asp [Accessed 16 March 2009].
- Vasquez, D. 2007. *Time Shifted TV: Closer Than You Think*. URL: http://www.medialifemagazine.com/artman/publish/article_10634.asp [Accessed 16 March 2009].
- Vegter, I. 2005. *Multichoice springs PVR surprise*. URL: <http://mybroadband.co.za/nephp/?m=show&id=413> [Accessed 9 March 2009].
- Venkatesh, V., & Davis, D. 2000. A theoretical extension of the technology

- acceptance model: Four longitudinal field studies. *Management Science*, (46:2), 186-204.
- Wright, T. 2007. *The death-knell for TV advertising?*. URL: <http://www.marketingweb.co.za/marketingweb/view/marketingweb/en/page72308?oid=95966&sn=Marketingweb+detail> [Accessed 8 March 2009].
- Watson, M. 2005. *DStv PVR Decoder*. URL: <http://www.brainwavez.org/tech/features/2005/20051122001-01.html> [Accessed 9 March 2009].
- Whitehead, J. 2007. *Media: Sky+ and Emerging PVR Services*. URL: <http://www.brandrepublic.com/News/625938/Media-Sky%2b-emerging-PVR-services/> [Accessed 16 March 2009].