# Games as Communication: An Analysis of Advergaming in South Africa

# BIANCA MARIA-TERESA WRIGHT 196140720

2012

# Games as Communication: An Analysis of Advergaming in South Africa

By

Bianca Maria-Teresa Wright

Submitted in fulfilment of the requirements for the degree of Doctor Philosophiae in Media Studies at the Nelson Mandela Metropolitan University

2012

Promoter/Supervisor: Prof Daniel Jordaan

Co-Promoter/Co-Supervisor: Dr Janina Wozniak

#### **DECLARATION**

I, Bianca Maria-Teresa Wright 196140720, hereby declare that the thesis for Doctor Philosophiae to be awarded is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another University or for another qualification.

**SIGNED: BIANCA MARIA-TERESA WRIGHT** 

## **Contents**

DECLARATION	2
Contents	4
List of Figures	8
List of Tables	9
Abstract	10
Chapter 1: Introduction	11
1.1 Background and Context of Research	11
1.2 Research problem	14
1.3 Research Question	16
1.3.1 Sub-questions	16
1.3.2 Aim	17
1.3.3 Objectives	17
1.4 The link between gaming and advertising	18
1.4.1 The effectiveness of advergames	25
1.4.2 Games and Ideological Content	28
1.4.3 Mobile gaming	30
1.4.4 Viral marketing	33
1.4.5 Barriers to advergaming in South Africa	37
1.5 Research Design and Methods	39
1.5.1 Sampling Procedure and Inclusion Criteria	40
1.5.1.1 Survey of Advertising Agencies	40
1.5.1.2 Semi-structured Group Interviews	41
1.5.1.3 Semi-structured group interview procedure	41

1.6 Delimitations of the Study	42
1.7 Definition of Terms	42
1.8 Conclusion	43
Chapter 2 – Games as Communication: The Literature	45
2.1 The theory of game play	45
2.1.1 Narrative and Gaming	49
2.1.2 Personal Uses of Games	56
2.1.3 Engagement and gaming	60
2.1.4 Games as Education and Persuasion	63
2.1.5 Games as Persuasion	65
2.1.6 Message Integration in Gameplay	70
2.1.7 Advergames as Advertising	72
2.1.8 The effectiveness of advergames	75
2.1.9 Games and Ideological Content	79
2.2 Mobile gaming	
2.3 Viral marketing	87
2.3.1 The Hotmail Model of Viral Marketing	
2.3.2 Viral marketing in the mobile environment	
2.3.3 Community, Viral Marketing and Advergaming	
2.4 Barriers to advergaming in South Africa	
2.4.1 Access as Barrier	
2.4.2 Mobility as Barrier	
2.4.3 Cost as Barrier	
2.5 Conclusion	
Chanter 3: Research Design and Methods	101

3.1 Introduction	101
3.1.1 Research Question	101
3.1.1.1 Hypothesis, Aims and Objectives	101
3.2 Research Methods	102
3.2.1 Survey of advertising agencies	103
3.2.2 Content Analysis of South African Advergames	104
3.2.3 Semi-structured group interviews	107
3.2.3.1 Ethical Considerations	111
3.4 Constructing a model of advergaming in South Africa	112
3.5 Delimitations of the Study	112
3.6 Results of the National Survey of Advertising Agencies	113
3.6.1 Theme 1: Education	116
3.6.2 Theme 2: Mobile Networks	119
3.6.3 Other Concerns	119
3.6.4 Perceptions of Advergaming in South Africa	121
3.7 Conclusion	125
Chapter 4: Results	126
4.1 Content Analysis of Selected Advergames	126
4.2.1 Flora Seedman Love Your Heart Game	127
4.2.2 KitKat Have a Break Game Site	132
4.2.3 Police Sunglasses Be Younique Struggle for Salvation Game	138
4.2.4 BMW Pursuit Across Europe (PACE) game	145
4.3 Semi-Structured Group Interview: Media Students	149
4.3.1 Post-Game Interviews: Flora Seedman Game	155
4.3.2 Post-Game Interviews: Police Sunglasses	157

4.3.3 Post-Game Interviews: BMW PACE game	159
4.3.4 Post-game Interviews: KitKat Game	162
4.3.5 General perceptions on advertising in games	165
4.4 Semi-Structured Group Interview: Students from other Faculties	169
4.4.1 Post-Game Interviews: Flora Seedman Game	171
4.4.2 Post-Game Interviews: Police Sunglasses	174
4.4.3 Post-Game Interviews: BMW PACE game	175
4.4.4 General perceptions on advertising in games	176
4.5 Semi-Structured Group Interview: Staff Members	177
4.5.1 Post-game interview – Flora Seedman Game	181
4.5.2 Post-game interview – Police Sunglasses Struggle for Salvation Game	183
4.5.3 Post-game interview – BMW PACE Game	186
4.5.4 General perceptions of the gaming experience	189
4.6 Conclusion	194
Chapter 5 – Conclusions and recommendations	195
5.2 Recommendations	195
5.1 A model for mobile advergaming in South Africa	199
5.1.1 Limitations of the model	206

# **List of Figures**

Figure 1: Lindley's (2003) game taxonomy	52
Figure 2: Lindley (2005)'s semiotic levels	54
Figure 3: Stafford and Faber (2004)'s reasons for not playing advergames	58
Figure 4: An integrated model of game adoption (Chang, Lee and Kim 2006)	59
FIGURE 5: TAXONOMY OF SERIOUS GAMES (SAWYER AND SMITH 2008)	64
FIGURE 6: THE INDUCEMENT OF THE STATE OF FLOW (ADAPTED FROM GURĂU'S 2008)	67
FIGURE 7: AIDA MODEL APPLIED TO ADVERGAMING (GURĂU 2008)	
FIGURE 8: AAKER'S BRAND PERSONALITY SCALE AND THE PSYCHOLOGY FIVE FACTORS MODEL (AZOULEY AND I	(APFERER
2004)	75
FIGURE 9: THE ORIGINAL PACMAN (NAMCO 1980)	127
FIGURE 10: SCREENSHOT OF THE INSTRUCTION SCREEN FOR THE FLORA SEEDMAN GAME	128
FIGURE 11: SCREENSHOT OF LEVEL 1 GAME SCREEN	129
FIGURE 12: SCREENSHOT OF LEVEL 2 GAME PLAY	130
FIGURE 13: SCREENSHOT OF HOME SCREEN OF KITKAT WEB SITE (WWW.KITKAT.CO.ZA)	132
FIGURE 14: THE KITKAT GAME CHOICE SCREEN (WWW.KITKAT.CO.ZA); EACH ITEM ON THE TROPICAL ISLAND LI	NKS TO A
DIFFERENT GAME	133
FIGURE 15: SCREENSHOT OF LAVA LEAP GAME ON THE KITKAT SITE (WWW.KITKAT.CO.ZA)	135
FIGURE 16: SCREENSHOT OF YOUR BREAK PAGE (WWW.KITKAT.CO.ZA)	
FIGURE 17: THE BREAK'S TIMED ELEMENT (WWW.KITKAT.CO.ZA)	
FIGURE 18: SCREENSHOT OF THE HOME SCREEN OF THE POLICE SUNGLASSES BE YOUNIQUE STRUGGLE FOR SA	LVATION
ADVERGAME (WWW.POLICEBEYOUNIQUE.CO.UK)	139
FIGURE 19: THE USER IS INTRODUCED TO THE HERO OF THE GAME, JOHN AND THE SPY/ MYSTERY NARRATIVE B	EGINS TO
UNFOLD	140
FIGURE 20: PRODUCT PLACEMENT WITHIN THE GAME WITH LINKS TO THE POLICE CATALOGUE	
(WWW.POLICEBEYOUNIQUE.CO.UK)	141
FIGURE 21: PUZZLE GAME EMBEDDED IN THE NOIR NARRATIVE	142
FIGURE 22: PUZZLE WORD SCRAMBLE GAME PROVIDING THE FIRST CLUE (WWW.BEYOUNIQUE.CO.UK)	143
FIGURE 23: SCREENSHOT OF THE FINAL SHOWDOWN WITH MR M (WWW.BEYOUNIQUE.CO.UK)	145
FIGURE 24: THE INITIAL BMW GAME SCREEN (WWW.BMW-PACE.COM)	146
FIGURE 25: THE VIDEO TRANSITIONS INTO THE GAME PLAY SO THAT IT FEELS LIKE THE PLAYER IS TAKING OVER C	ONTROL OF
THE CAR	147
FIGURE 26: SCREENSHOT OF THE BMW GAME SCREEN (WWW.BMW-PACE.COM)	148
FIGURE 27: TIME SPENT PLAYING GAMES PER WEEK	150
FIGURE 28: BRAND AWARENESS IN THE MARGARINE PRODUCT CATEGORY	151
FIGURE 29: BRAND AWARENESS IN THE LUXURY CAR PRODUCT CATEGORY	
FIGURE 30: BRAND AWARENESS IN THE CHOCOLATE PRODUCT CATEGORY	
FIGURE 31: BRAND AWARENESS IN THE SUNGLASSES PRODUCT CATEGORY	
FIGURE 32: GRADH OF GAME ENIOVMENT OF FACH GAME	193

FIGURE 33: A MODEL FOR OPERATIONALISING GAMING AS A VIRAL COMMUNICATION TOOL IN SOUTH AFRICA	. 200
FIGURE 34: THE FACTORS REQUIRED TO CREATE A SUCCESSFUL ADVERGAME	. 204

## **List of Tables**

TABLE 1: RESPONDENT COMMENTS FOR THE BMW PACE GAME	160
TABLE 2: WHAT RESPONDENTS LEARNED ABOUT BMW FROM PLAYING THE BMW ADVERGAME	161
TABLE 3: COMMENTS ON BRAND INTEGRATION IN THE KIT KAT GAME	162
Table 5: Postgame association with Kit Kat	165
TABLE 6: CHARACTERISTICS OF A CONVINCING AND PERSUASIVE ADVERGAME	167
TABLE 8: NEGATIVE COMMENTS REGARDING THE FLORA ADVERGAME	172
TABLE 10: PERCEPTIONS OF THE FLORA SEEDMAN GAME	182
TABLE 11: PRODUCT PLACEMENT AND BRANDING IN THE POLICE SUNGLASSES ADVERGAME	184
TABLE 12: RESPONDENTS' PERCEPTIONS OF LEARNING ABOUT POLICE AS A BRAND THROUGH THE ADVERGAME	185
TABLE 13: POSITIVE RESPONSES TO THE BMW ADVERGAME	187
TABLE 14: NEGATIVE RESPONSES TO THE BMW ADVERGAME	187
TABLE 15: GAME CHARACTERISTICS OF THE BMW ADVERGAME	189
TABLE 16: PERCEPTIONS OF ADVERGAMING	191
TARLE 17: POSITIVE PERCEPTIONS OF ADVERGAMING	192

#### **Abstract**

Games as a form of communication have been examined by academics in the fields of game studies, narratology and media studies, among others, but the use of games to communicate advertising messages has not been adequately explored within the South African context. The study sought to investigate the phenomenon of advergaming, purpose-built games designed to communicate an advertising message, in South Africa, and to develop a model for the use of advergaming as a viral marketing tool in this context. Using a hybrid approach, the study examined the way that advertising agencies currently use advergames as well as the effectiveness of advergaming as a means to communicate a message. The study presents the results of a national survey of advertising agencies in South Africa, a content analysis of existing advergames and an analysis of three semi-structured group interview experiments conducted using selected advergames. The findings point to the potential of advergaming as a message communication tool, but also highlight the challenges that may hamper the widespread use of advergaming in South Africa. It proposes the use of the mobile environment as a means to reach a wider South African audience and in that way, overcome some of the obstacles to advergaming adoption. In addition, the results identify aspects of advergames that seem to correlate with the effectiveness of message communication.

## **Chapter 1: Introduction**

#### 1.1 Background and Context of Research

The study of video games as communicators of messages that influence behaviour has traditionally focused on the potential negative impact such games may have particularly on children. The link between violence portrayed in video games and aggressive behaviour in children has been of particular interest (Griffiths 1998; Lavender 2006), but digital games are able to communicate messages with a variety of purposes and to different effects depending on the type of game. This has particular implications for brand communicators.

In the digital age, the Internet looked like the ideal playing field in which to create new communication forms and draw new audiences. Advertisers quickly realized the appeal of online communication, but the promise remains unfulfilled. An analysis of traditional methods to reach specific audiences online has showed that less than 1% of users actually click on banner ads, let alone end up making a purchase as a result of a banner ad. The average click-through rate for banner ads in a 2008 study by MarketingSherpa was 0.21% (MarketingSherpa 2008).

Games can be used to communicate a variety of message types and forms, although the dominant form, and therefore the focus for this study, is their use in advertising.

As a result of the failure of banner ads to deliver conversions, as well as of changing target audience behaviour, advertisers in the United States and Europe have drawn their inspiration from one of the fastest-growing segments of the online industry: gaming. According to the

Interactive Advertising Bureau (Verklin 2007), interactive advertisements embedded in quizzes and games made up more than \$1 billion of the \$12.5 billion in online ad revenue in 2005.

The South African audience is familiar with the use of product placements in film and games, but advergaming is a relatively new concept for both audiences and advertisers alike.

Internationally, the practice of creating purpose-made games that also double as advertisements is widespread, but in the South African context, where access to the Internet is limited, advergaming has failed to attract significant interest. Apart from the short-lived Pain Relief game (www.painrelief.co.za) from Adcock Ingram and a few Website-embedded examples such as the Savannah Lemon Room games that form part of larger campaigns, few well-known South African examples exist. Similarly, research on advergaming has focused primarily on product placement rather than on purpose-built branded games and there is currently no data on advergaming in South Africa. Yet advergaming could be a useful tool for South African communicators in all spheres, from education to brand communication, if harnessed correctly and adapted to the South African context.

Essentially, advergaming is a brand communication tool that can be used as a broad category into which a number of advertising forms can fall. As Marolf (2006) explains, two different forms of advergaming can be distinguished: 'On [the] one hand, advertising a brand or product with a computer-game (done on the Internet with so-called Adgames) is often synonymously called Advergames. On the other hand, advertising in computer- and video games is a phenomenon that is emerging swiftly and is described under the term in-game advertising' (Marolf 2006).

Product placement, which is also common in film and television, is often used in video games, particularly sports games. This type of adgame, however, lacks the impact of a branded advergame in which the game play is linked to the brand in some way and the game itself is developed specifically to promote a brand. This kind of advergame offers greater engagement with the brand than static product placement, as the brand is the focus of the game. The focus of this research is on the second type of advergaming, in which a game is created by an organisation for the sole purpose of promoting their brand or conveying a message in an attempt to influence behaviour.

Marketing interest in advergames has developed partly in answer to the change in audience behaviour in the international context. As Deal (2005) says, consumers in the international context are moving away from television as their primary form of entertainment and information and increasingly turning to the Internet for these purposes. In addition, research studies have shown that Internet users are spending a significant portion of their time playing video games online (Deal 2005). In South Africa, however, Internet access is not ubiquitous, but mobile technology has the potential to fulfil that role within the SA context because of its geographical reach, accessibility and relatively low cost.

According to a study by TNS Research Surveys (2011) in South Africa, 31 per cent of urban mobile users access the internet via their mobile, compared with 25% in 2011, and 41 per cent connect to their social networks daily, up from 37% in 2010.

South Africa has already demonstrated significant interest in mobile advertising. AdMob, a mobile ad marketplace, served one billion mobile Web ads in six months and South Africa was

ranked as the second largest source of mobile Web users across AdMob's publisher base, accounting for 15% of the total or 66 million page views per month (http://www.admob.com/metrics). Greystripe, a provider of ad-supported mobile games, also ranked South Africa in its top five in terms of users in 2007. While no formal research on the sector in South Africa exists, Exactmobile, which sponsored the South African team that won gold in the mobile competition of the World Cyber Games in 2008, claims that 'mobile gaming is fast becoming one of the most popular forms of gaming in South Africa' (Mole 2008).

Mobile penetration, as compared to Internet access, is high. According to the International Telecommunications Union (ITU 2007), mobile users represent 90.1% of the total telephone subscribers in South Africa, reaching 87.08% of the population. By combining mobile advertising and gaming, advertisers in South Africa could potentially reach a much wider audience in a more engaging way than traditional advertising media and other forms of mobile advertising.

Further, advergaming has the potential to be used as part of a viral marketing campaign, offering all the benefits of increased credibility and snowball reach. The principles of viral marketing suggest that a message relayed by a trusted and known person such as a friend is more persuasive than those disseminated by an unknown or impersonal corporation. An advergame recommended by a friend would thus probably enjoy greater popularity and better brand recognition than a mobile advertisement sent directly by an advertiser.

### 1.2 Research problem

Currently, in South Africa, advergames are being used only in the online environment and only for niche audiences as part of a broader marketing campaign, because of the low Internet

penetration and teledensity rates in the country. The use of advergaming to reach mass audiences is hampered by lack of access to the Internet and cost of access for the consumer. In the context of an increasingly cluttered and competitive advertising environment, there is a need to identify advertising methods that engage consumers in a more personal way and that differentiate themselves from the plethora of advertising messages communicated daily.

Advergaming has the potential to be one of these tools, as evidenced by international case studies, but would need to be adapted for the South African context. A search of the Ebscohost, Sage, Emerald and Access Science databases reveals that currently little data on the effectiveness of advergaming as a viral marketing tool for increasing brand awareness is available.

#### This study aimed to:

- investigate the use of games to communicate messages about products and issues, with particular focus on the use of advergaming in South Africa.
- identify the elements necessary for an advergame to be effective as part of a viral marketing campaign in increasing awareness of an issue, product, service or organization;
- Investigate the relationship between narrative and message comprehension and adoption through an analysis of the types of advergames and the way the messages are communicated through the gameplay.

The thesis proposes that the mobile environment is the key to making advergaming viable in South Africa and proposes a model for operationalising advergaming as a viral communication tool in South Africa.

In so doing, communicators will learn what factors make an advergame effective as a viral communication tool and more importantly, how they can operationalise a mass viral communication advergame campaign in South Africa. This will provide valuable insight into the broader mobile communication possibilities available in South Africa and offer guidelines on how to approach communication in the mobile context. It will also provide insight into possibilities for mobile operators to develop new models for their portals, by presenting one possible model specific to advergaming, but which could be applied to other forms of content that are non-traditional.

## 1.3 Research Question

How are advergames used to communicate messages about issues, products and organisations in South Africa?

### 1.3.1 Sub-questions

- To what extent is the use of narrative to communicate messages in games more effective than the use of association alone?
- What elements in advergames positively influence message recall and retention among users?
- How are South African advertising agencies using advergames as part of advertising campaigns?

#### 1.3.2 Aim

The aim of this study is to determine the factors necessary to make advergaming viable as a social issue and brand communication tool in South Africa.

The aim is centred on the belief that advergames in which the issue, product, service or brand advertised is integrated into the game play narrative are more effective than advergames in which the link between the game and the communicated message is merely associative and are therefore the better choice in mobile viral communication. By adapting advergaming to the mobile environment, communicators will reach a wider audience and overcome the obstacles to widespread use of advergaming, if the right factors are in place.

#### 1.3.3 Objectives

The objectives of this multi-faceted study are as follows:

- To identify the ways in which advergames communicate messages about issues,
   products, services and organisations
- To investigate the effectiveness of advergaming as a tool for increasing social issue and brand awareness
- To identify the obstacles to the use of advergaming as a viral communication tool in South Africa
- To propose guidelines to manage the obstacles to the use of advergaming as a viral communication tool in South Africa

 To develop a model to operationalise the use of advergaming as a viral communication tool in South Africa

#### 1.4 The link between gaming and advertising

Since the dominant form of gaming as persuasive communication has been its use in advertising, the literature reviewed for this study will draw heavily on this discipline. However, it should be noted that the literature can be applied to other forms of gaming as communication such as social issue awareness creation and education.

The appeal of advergaming lies in its ability to immerse the user in a simulated environment in which the brand is at the forefront. This simulation draws on the theory of gaming, which proposes that the user relates to the simulation, is immersed in the game environment and therefore engages with the game at a different level than in more passive pursuits such as television. (Frasca 2004) holds the view that traditional media are representational not simulational.

In traditional academic study, games are seen as interactive narratives, procedural stories or remediated cinema (Eskelinen 2001). Parlett (1999) defines formal games as "systems of ends and means". According to Eskelinen (2001), the equipment (the 'what' of gaming) and manipulation (the 'how') of this ludology-in-progress resemble the story and discourse of narratology.

The development of computer games that increasingly used video clips to relay the narrative to gamers made the comparison with traditional narratives such as film, theatre and literature more attractive. "This would increasingly make the boundaries between films and games

blurred, the player being totally 'immersed' in the narrative as they played the new interactive films" (Bryce 2002).

Traditional narrative structure as proposed in Aristotle's dramatic arc (Aristotle 1989) is often applied to games, although this is an inexact fit in most cases. While some games follow a conventional narrative structure, others, such as the so-called casual games of Solitaire and Bejeweled, offer no plot or story as part of the game play and focus completely on diversion as entertainment.

Both Blumler and Katz (1974) and McQuail (1983) proposed that media users select specific media on the basis of their specific needs and that the media fulfil a specific role for media users. It is plausible therefore to propose that advergaming fulfils a particular need in users. It is important to understand that it can be difficult to connect a particular need with a particular type of media content since media use can supply multiple benefits at different points throughout its use (Underwood 2003).

Advergaming may fulfil two primary needs: the need for entertaining relaxation and the need to compete. Most advergames include a 'challenge a friend' and/ or high score list aspect, which may appeal to users' need to prove themselves superior to others. This aspect also tends to be used as a tactic to ensure that users continue to play the games in order to beat their previous scores. Some advertisers also link an additional competition to the high score.

Gaming as a form of advertising has another advantage over television in that it encourages prolonged engagement with the advertisement. Whereas a television advertisement lasts just 30 seconds on average, a game, if sufficiently engaging, can hold a user's attention for hours.

The level of engagement relates to the complexity and nature of the game play as well as the user's needs in relation to the game.

Kretchmar (2004: 49), citing Pintak (2001) and Rodgers (2002), claims that advergames offer "retention rates 10 times greater than for broadcast commercials, 16-45% of recipients play games received via promotional e-mail for an average of 25 minutes, 400% viral compounding with 90% of those who receive the pass-along e-mail responding". She adds that advergames transfer the emotion of the game to the brand that is powering it, creating an engaging, rather than passive, experience (Kretchmar 2004).

Far from being direct selling tools like much above-the-line advertising in traditional media, advergaming tends to focus on brand awareness. Winkler and Buckner (2006) state that most advergames aim to improve branding, boost product awareness and collect detailed data about existing and potential customers, clients and supporters. In addition, advergames can also be didactic in nature. For example, the Seattle Water Utility

(<a href="http://www2.seattle.gov/util/waterbusters/">http://www2.seattle.gov/util/waterbusters/</a>) used an advergame to teach children and adults about saving water. This aspect, when translated into the mobile environment, could play a valuable role in communicating societal values (safe sex), educating communities about safety (electricity, crime) and government services. It could be a tool for a social awareness marketing strategy.

Because in-game advertising takes different forms, ranging from static product placement to advergames where the brand takes centre stage, the message integration can take different forms, depending on the aim of the advergame.

Chen and Ringel (quoted in Winkler and Buckner 2006: 38 -39) differentiate between three different levels of product integration in advergames. They define these levels, which can be applied to message integration, as associative, illustrative and demonstrative:

The lowest level of integration is considered to be associative. In this case, the product or brand is linked to a certain lifestyle or a particular activity featured in the game. Most commonly this is realized by displaying the logo or product of a company in the background ... Illustrative integration can be considered the second level of brand incorporation. Here, the product itself plays a significant role in the game play ... the highest level of brand incorporation is represented by demonstrative integration. This concept allows the player to experience the product in its natural context that is reproduced in the gaming environment. Thus, the participant has the opportunity to interact with the features of the product, to "live and feel" it within its virtual boundaries, or to select from a range of products. (Winkler and Buckner 2006: 38 -39)

The associative level is useful for creating or increasing brand awareness at a basic level, that is, logo or slogan recognition and familiarity. The illustrative level can combine with a didactic element to teach users about the product, service or brand, or in advergames created for non-commercial purposes, to educate users about issues. It provides more depth of interaction and engagement with the brand. The last level, demonstrative, provides the most depth of experience and strives to create a virtual simulation of the product and its use.

The illustrative and demonstrative levels provide the greatest opportunities for narrative game play.

Svahn (2005), however, points out that there are gaps in Chen and Ringel's (2001) theory.

Firstly, he says, they do not take into account if the brand immersion is done on the simulation level, the game play level, or the narrative level of the game as proposed by Lindley (2005).

Secondly, Svahn (2005) argues that the three levels identified – associative, illustrative and demonstrative – are not mutually exclusive and that a game can inhabit all three levels. Svahn (2005) believes that while Chen and Ringel's (2001) work is useful for analysing basic advergames, it does not provide perspective on wider field of game types or a wider field of commercial or ideological services.

Svahn also finds fault in other taxonomies. Nelson's (Haugtvedt et al. 2005) seven-step taxonomy, which divides the field of advergaming by singling out some pieces of the games' visual and auditory interface design and showing what the brand-building effect on the consumer ought to be when those pieces are branded, only spans items designed into the medium carrying the game such as avatars, background banners, props and sounds (Svahn 2005). Svahn points out that the taxonomy does not consider the design of the play itself and therefore cannot provide a deeper understanding of what functions play-as-a-message-carrier can fulfil.

Svahn's (2005) own system for understanding advergames functions by addressing the relationship between the play and the rhetoric/brand-message integrated into the play. He proposes that a game is not the coding which underlies it but rather the "mental processes plus the real-world activities it engenders in the players" (Svahn 2005: 189).

When we understand dominance and the three levels, we can factor in the influence of the connotations of the mediums (that is the game play and the technologies carrying them) themselves on the communications strategy and make clear what place ludic activities have in an integrated communications strategy (Svahn 2005: 189).

Svahn's (2005) sliding scale postulates a continuum where at one end the play and game is the dominant part and the rhetoric/brand message incidental, and on the other end, the mirror image opposite situation exists where the whole play concept down to the media choice of play-as-a media in itself is designed to serve the rhetoric/brand message.

He created four game categories, namely:

- Like Flies To The Honey Pot: Simple online games on a portal such as MSN which draw
  users like flies to a honey pot in order to gain eyeballs for banner advertising around the
  game. This is not an advergame in the true sense of the word, but rather the use of
  gaming to attract interest in advertising around the game.
- The Invaded Reality: Refers to traditional product placements, plot placements, and script placements such as billboards in the racing game Need for Speed. This would also include versions of popular games branded by a company such as the M&Ms (Blockdot 2002) version of the Bejeweled game (Pop Cap Games 2000) mentioned earlier. In Chen and Ringel's (2001) terminology this would represent an associative level of brand integration. The use of narrative is limited in such games, except as a frame for the game play.
- No Free Lunch: These, Svahn (2005) says, are what most people associate with advergames. These are usually created by a brand as part of an integrated communication campaign and available through the brand web site, but also sometimes through games aggregators. The single brand is wholly inside the game-environment and more or less integrated so that the rhetorical message has moved well inside the

game space. However, the brand and product advertised while obviously graphically visible remains outside the actual game play. This covers a range of advergame types and most closely resembles Chen and Ringel's (2001) illustrative level of brand integration. Here the brand message is incorporated into the discourse and performance levels of the game as proposed by Lindley (2005), but may also be integrated into the simulation level, depending on the type of game.

• The persuasive universe: This is the ultimate level of Svahn's typology. At this level, everything – from the choice to produce a game at all to choosing the game medium to the type of the game used – is chosen to communicate the intended rhetorical message. Since the game itself is the rhetoric, the rhetorical message has not only moved inside the magic circle but also to some extent defines its borders. He cites America's Army as an example of this type of advergame. Within this type of advergame, the brand message integration takes place at all four of Lindley's levels, the discourse, performance, simulation and the generative substrate. In essence, it is as Marshall McLuhan said, "The medium is the message" (McLuhan and Fiore 1967). These types of games would demonstrate both the illustrative and the demonstrative level of Chen and Ringel's (2001) brand integration theory. (Svahn 2005: 189 – 191)

This research will focus primarily on games in the last two categories of Svahn's system, No Free Lunch and The Persuasive Universe and will also draw on the work of Lindley (2003 and 2005) and Chen and Ringel's (2001) levels of brand integration in analysing how advergames are currently used.

#### 1.4.1 The effectiveness of advergames

Linking advergames to overall brand messages has merit, as evidenced by the receptiveness study conducted by Winkler and Buckner (2006). The study found that those who play are receptive to the advertising message or at least to the product or company that is displayed within the game and, further, that players recall many of the details of the brand integration within the game such as the location of the logo (Winkler and Buckner 2006).

Winkler and Buckner propose that this might be because even though most advergames are engrossing and keep players immersed in the game experience, they are generally simple and straightforward. Consequently, the player can subconsciously focus better on the advertising messages communicated through the game (Winkler and Buckner 2006).

The results of the Winkler and Buckner study (2006) are significant, particularly when compared to earlier studies (Schlosser, Shavitt, and Kanfer 1999; Chaney, Lin, and Chaney 2004) which focused on product placement.

However, cognisance should be taken of the fact that younger generations tend to have a photographic memory in the visual environment but not necessarily a conceptual memory. These younger generations, born from 1978 onwards and called the Digital Natives, learn differently compared with past generations. They are held to be active experiential learners, proficient in multitasking, and dependent on communications technologies for accessing information and for interacting with others (Frand, 2000; Oblinger & Oblinger, 2005; Prensky, 2001a, b; Tapscott, 1999 cited in Bennett, Maton and Kervin 2008).

Prensky (2001) further describes Digital Natives as being used to receiving information really fast. "They like to parallel process and multitask. They prefer their graphics before their text rather than the opposite. They prefer random access (like hypertext). They function best when networked. They thrive on instant gratification and frequent rewards. They prefer games to "serious" work" (Prensky 2001). It can therefore be proposed that Digital Natives are more receptive to messages communicated through games.

But memory alone does not indicate comprehension or indeed positive perception of a message. More research needs to be conducted on the influence of advergaming on brand perceptions and associations.

Also significant for South African advertisers is these researchers' finding that suggests that advergames might work more effectively for brands that are already known to the game player in some way, indicating that advergames may be more suitable to enhance and alter the brand impression instead of building brand awareness for a product that is new to the target audience. Thus, the current strategy of using advergames as part of a broader marketing campaign makes sense.

D'Andrade (2007) performed a more complex study of implicit and explicit memory retrieval in relation to advergaming. The findings suggest that, while recognition is higher in low-object change advergames than in high-object change advergames, there was no level of difference in implicit memory retrieval for either type of advergame. Users demonstrated brand recall of both types of advergames. All of these studies point to the effectiveness of advergaming as a

tool for branding in different ways. However, none of them attempted to discern the level of brand retention over a period of time as a result of the use of advergames.

It is clear that advergaming has the potential to reach users with brand messages in an innovative and appealing way, but it is also clear that merely creating an advergame is not enough to ensure customer attention and loyalty. After all, the core purpose of any form of brand communication is to communicate a message. An advergame that merely associates a brand with a gaming experience but fails to communicate a message cannot be considered successful, for while it may create familiarity among users, it may not create positive associations or even disseminate any meaningful information about the brand. It also fails to leverage the unique nature of advergaming: its ability to simulate an environment or experience.

Frasca (2003) points out that many advertisers are still satisfied with showing an image of the product or its brand logo within the game instead of trying to convey experiences that are related with what is being sold. 'Advertisers ... use entertainment as a means but not as an end. What they want is to promote their brands and products and, because of this, they see in games a tool for persuasion' (Frasca 2003). He goes on to say that this puts them in an extremely privileged position for realising that the potential of games is not to tell a story but to simulate: to create an environment for experimentation.

Advertisements in a magazine or on television may be able to describe facets of a product or service, but within the current context, images, sound and text are not enough, especially if they want their audiences to engage with the brand (Frasca 2003). A simulated environment

provides an experience that traditional advertising cannot, in an engaging way that speaks to a digitally literate audience (Frasca 2003). He suggests that gaming literacy is an important concept in making players aware that games are not free from ideological content (Frasca 2003).

#### 1.4.2 Games and Ideological Content

For media theorists, the communication of ideological content through media has long been an area of interest. The intensely paradoxical reaction of modernism, both celebrating the technological age and condemning it, is perhaps best epitomized in the work of the group of theorists known as The Frankfurt School (Creeber 2009). Modernism demonstrated a distinct "distrust and distaste for the sort of everyday culture to be found in pulp novels, the cinema, television, comics, newspapers, magazines and so on" (Creeber 2009).

The similarities between American mass culture and the products of mass production were critiqued by The Frankfurt School. As Creeber (2009) points out "In particular, The Frankfurt School liked to perceive the media as a standardized product of industrialization, frequently connecting mass culture with aspects of Fordism," a term used to describe Henry Ford's production innovations in the motor industry. Mass production made cars cheaper and more accessible, but also limited choice and ensured that goods were identical.

The Frankfort School saw this Fordist philosophy as permeating all aspects of mass culture resulting in a system in which every television show, film, pulp novel, newspaper and magazine were identical. "Instead of stimulating audiences, these media 'products' were designed to

keep the masses deluded in their oppression by offering a form of homogenized and standardized culture" (Creeber 2009; cf. Adorno 1941).

What this school of thought discounted was the possibility of an active audience. For modernists the mass audience was perceived as "generally passive and gullible" (Creeber 2009) and therefore particularly susceptible to the influence of the media. Media Effects theory, often called the Hypodermic Needle Theory, was the result.

Postmodernism, on the other hand, has seen a move away from the "cultural pessimism" of modernism and focused on the audience not as passive voyeurs but rather as participants. The characteristics of the post-industrial age can therefore be defined as:

These cultural changes can partly be understood as the inevitable by-product of a consumer society, where consumption and leisure now determine our experiences rather than work and production. This means that 'consumer culture' comes to dominate the cultural sphere; that the market determines the texture and experiences of our everyday lives. In this 'postmodern' world there is no point of reference beyond the commodity and any sense of technology itself as separate to experience is slowly disappearing. (Creeber 2009: 15)

It is within this context that this study seeks to examine the use of advergaming to communicate messages about issues, brands, products and services. The study views users as active participants, involved in the co-creation of content in the digital sphere. As a result, the concept of digital literacy is critical for this study. As explained earlier, the generation born after 1978 are categorized as Digital Natives (Prensky 2001) and are perceived as digitally literate, comfortable with both using and creating digital media.

Teens learn to read and decode these texts [online texts] in specific ways, incorporating visual, linguistic and aural information into their interpretations. Teens can quickly decipher and interpret the relation of photos to the author of a page, or determine what the inclusion of certain quotes means about a person. (Hinchman, Sheridan-Thomas and Alvermann 2008) However, familiarity and comfort with digital media does not imply critical literacy in these areas. Loertscher and Woolls (2002 cited in Day 2005) view adolescents as overconfident in their practice of information literacy, with a tendency to not discriminate and to settle for less. This is echoed by Watson (1998), while Todd (2003) points out that teenagers need to develop their critical literacies, especially regarding the Web. These studies point to the fact that while Digital Natives are familiar and comfortable with new media technologies such as the Internet and mobile devices, they are not necessarily discerning or critical in their engagement with the information presented on those media. The extent to which Digital Natives are able to discern ideological content communicated through digital media is unclear. This must be taken into account when investigating the use of advergaming to communicate messages about issues, brands, products or services.

#### 1.4.3 Mobile gaming

To understand how advergaming can migrate to the mobile environment it is important to understand the broader mobile gaming context.

For the purposes of this research mobile gaming refers to all games played on a mobile device.

These include both online mobile games that reside on a mobile portal or server and downloaded mobile games that reside on the device itself.

A study conducted by Kreutzer (2009) found that users of mobile devices need not be the owners of those devices and that sharing of devices was common. The research was conducted among 441 grade 11 students at nine schools in low-income areas in Cape Town. More than three-quarters (77 per cent) of respondents stated that they owned a personal handset rather than using or sharing another person's phone (18 per cent). The study found that users who owned the handsets tended to use the mobile features more frequently than those who shared a mobile device with another user or who did not own a mobile phone at all. However, while 97 per cent of owners use a mobile phone for at least one activity on a typical day, 94 per cent of co-users did so as well (Kreutzer 2009). Interestingly, Kreutzer found that the difference between co-users and mobile phone owners in terms of Internet and Web access was statistically irrelevant. This points to the accessibility of mobile Internet even in low-income areas of South Africa, as well as to very effective sharing of the devices among the youth.

The Mobility 2011 study by World Wide Worx determined that there are approximately six million mobile Internet users in South Africa, of which 4.5 million also have access to a computer (World Wide Worx 2011).

Nguyen (2007), a senior research analyst at Gartner, says that 'given the ubiquity of mobile phones in many markets and the ease of game-play, mobile gaming is expected to reach more of the global population than has been the case for traditional PC and console gaming.' This translates into an appealing platform for advertisers.

Exact figures on the number of mobile gamers in South Africa are not currently available, but developments within the industry, such as the South African team winning gold in the mobile

competition at the World Cyber Games in 2008, point to increased interest in mobile gaming in the sector.

A study by Van Wyk and Van Belle (2005), in which 204 South African respondents were asked to complete questionnaires on their mobile gaming use, found that 75% played games on their mobile phones. Significantly, though, the study also found that 88% of those who played mobile games were playing only games that came pre-installed on their phone. Those that played online mobile games represented only 1% of the total, and those that played downloaded mobile games represented 11%. However, since the study was conducted in 2004/2005, it is plausible to suggest that the figures may have increased as devices have become more sophisticated and access to mobile games has become easier. The respondents were primarily youth between the ages of 16 and 25.

Van Wyk and Van Belle (2005) focused on factors that could impact on the adoption of mobile gaming in South Africa. They drew on research by Pedersen and Nysveen (2002) on the theory of planned behaviour and its application in explaining teenagers' adoption of text messaging services, as well as on Pedersen and Methlie's (2004) work on the relationship between mobile data services, business models and user adoption.

The researchers (Van Wyk and Van Belle 2005; Pedersen and Nysveen 2002; Pedersen and Methlie 2004) identify two main factors that impact the adoption of technologies, namely subjective norm and facilitating conditions. They divide subjective norm into external influence, interpersonal influence and self-control. These sub-factors deal with the way personal beliefs and perceptions as well as peer and social pressures influence the adoption of

the game. The concept of "facilitating conditions" deals with issues related to cost, awareness of a service, availability of a service, support for the service, security and service compatibility (Van Wyk and Van Belle 2005).

In traditional mobile games, puzzle and casual games tend to dominate the market because of their small size and ease of play, but more sophisticated games are slowly being adapted to the environment. The key strategy of the branding company is to ensure users are compelled to start playing and to provide a solid interactive gaming experience to keep them playing.

According to Greystripe's GameJump.com Mobile Game Consumer Insights report (2006) the top five mobile games as: Texas Hold'em (Casino); Adventure Boy in Zoozoo Land (Adventure); BlackJack (Casino); Aqualife (Action); and SuDoKu (puzzle). When designing an advergame, advertisers and game developers alike will need to investigate the appeal of successful mobile games to ensure that the advergame has appeal for its audience.

The mobile environment is attracting increased interest from advertisers. Already, rich-media animated ads have started to appear on South African mobile phones, with cellular networks leading the way. Vodacom has used its iconic Mo the Meerkat mascot in its mobile promotions which feature audio, animation and text. Advergaming could take the concept one step further.

#### 1.4.4 Viral marketing

The Subjective Norm factor identified above is of particular relevance in terms of the potential viral marketing function of advergaming in general and mobile advergaming in particular. Viral marketing, as a concept, has evolved from a traditional marketing term, Word of Mouth

(WOM), which refers to 'oral, person-to-person communication between a receiver and a communicator which the receiver perceives as a non-commercial message, regarding a brand, product or service' (Wiedemann 2007).

Research by Pruden and Vavra (2004) shows that above-the-line media, of which WOM is a part, provide the most effective way of creating awareness in many markets. Their research found that customers ranked WOM the highest in terms of the techniques used not only to gather information but also to make purchasing decisions (Pruden and Vavra 2004).

Quoting Helm (2000), Porter and Golan (2006) emphasise that viral marketing can be described as 'a communication and distribution concept that relies on customers to transmit digital products via electronic mail to other potential customers in their social sphere and to animate these contacts to also transmit the products', in a similar way to a virus, but with a positive effect for the company.

Porter and Golan (2006) expand on Helm's definition in order to make the concept applicable to non-digital products as well. Drawing on the work of Welker (2002), they define viral marketing as 'strategies that allow an easier, accelerated, and cost reduced [sic] transmission of messages by creating environments for a self-replicating, exponentially increasing diffusion, spiritualization, and impact of the message'.

The principles of viral marketing assume that a message relayed by a trusted and known person such as a friend is more persuasive than those disseminated by an unknown or impersonal corporation. An advergame recommended by a friend could thus enjoy greater popularity and better brand recognition.

The free email service Hotmail (<a href="www.hotmail.com">www.hotmail.com</a>) is often used as an example of viral marketing in practice and as the model for successful viral marketing (Porter and Golan 2006; Fattah and Paul 2001). The model proposes the need for the following five aspects: (1) free products or services, (2) easy transmission, (3) exploitation of common human motivations, (4) use of existing social networks, and (5) use of others' resources and infrastructure. Wilson (2000) added scalability to this same list of requirements for success in viral marketing, stating that businesses should be prepared for rapid growth if they are to implement viral methods.

Another example that demonstrates the success of this model is that of GMail (<a href="http://mail.google.com">http://mail.google.com</a>). Initially GMail was not available to everyone. A select few were invited to join and each was given 100 invitations with which they could invite friends to use the free service. The result was increased interest in and demand for GMail, because of the personal invitations and the sense of exclusivity that was created.

Many online advergames are small enough to be emailed from user to user, thus spreading the game and the brand message quickly and with greater credibility. M & M's Flip the Mix game is 2.34Mb, and can easily be shared among users with broadband connections. Similarly American Airlines' Chair-iots of Fire is 3Mb. However, this easy movement from user to user is impractical in the South African environment since broadband Internet access is not ubiquitous.

Current statistics on broadband use in South Africa shows that the penetration rate is currently hovering at around seven per cent, made up mainly of around two million Vodacom subscribers, 700 000 Telkom ADSL users, and 700 000 MTN broadband users (Vermeulen 2010). This shows just how far behind South Africa lags in terms of access, especially in comparison to

the statistics on broadband penetration in The Organisation for Economic Co-operation and Development (OECD) countries as of June 2010 (Vermeulen 2010). The OECD's average fixed line broadband penetration rate stands at 24.9 per cent in comparison to SA's 1.4 per cent. Even SA's wireless broadband penetration rate of just over 5.5 per cent is low in comparison to the 36.7 per cent average of the OECD countries.

Viral marketing has been extended into the mobile environment, where it is referred to as mobile viral marketing (MVM). In a study by Wiedemann (2007), 70% of the 44 experts interviewed for the study indicated that MVM as a form of interpersonal communication is an important feature of a mobile marketing campaign. The research also demonstrated that recipients were more likely to participate in a mobile campaign if they received the mobile marketing message from familiar communicators (Wiedemann 2007). This proposition is confirmed in a survey by Skopos (I-Play 2006), in which 30% of the surveyed population of 2 500 indicated that a friend's recommendation would motivate them to download a mobile application.

This aspect of viral marketing – the credibility associated with a friend's recommendation – is linked to the concept of Subjective Norm as proposed by Van Wyk and Van Belle (2005), in that social or interpersonal pressure plays a role in the adoption of new technologies such as mobile applications, just as, on a larger scale, societal pressure had served to popularise the conventional social norms promoted by Institutional State Apparatuses, according to the vivid criticisms of the Frankfurt School. This makes advergaming an attractive tool for advertisers trying to overcome the message clutter inherent in modern life, if they are able to harness the

effect of social pressure positively. Wiedemann (2007) also points out that the cost of MVM campaigns for companies is relatively low in comparison to other forms of marketing. An advergame has the potential to become a form of viral marketing, which is where the potential for mobile advergaming becomes most attractive.

Currently advergaming as an advertising tactic is being used to complement existing marketing campaigns in South Africa. By means of an informal email conversation (September 2007) with 15 advertising agencies around South Africa the researcher found that most had not heard of advergaming and those that had, were implementing it on a very limited basis. Formal research to test this was conducted as part of this study.

Advergames, which are thus just one small part of the whole, ultimately aim at increasing brand awareness and reinforcing existing brand associations. Advergames therefore need to be understood within the context of their broader marketing environment and in relation to the overall brand message being communicated.

The impact of the growth of social media, defined as sites such as Facebook that allow social networks to connect and communicate, should also not be underestimated as linking advergames to social media sites could increase the viral reach of such games (Kim 2009; Slagle 2007).

## 1.4.5 Barriers to advergaming in South Africa

As discussed above, advergaming is currently used in South African marketing campaigns on a limited basis to reach a clearly defined niche audience of affluent users. The reason for this, it could be argued, is that advergaming is an online strategy and Internet access within South

Africa is low (Goldstuck 2007). The three barriers to the use of advergaming to reach a mass audience on which this research focuses are access, mobility and cost.

Statistics on the access to Internet facilities in South Africa point to a lack of critical mass in this space (Goldstuck 2007). Less than 10% of the population has access to Internet facilities and of those, only 650 000 have access to broadband Internet. This limits the market for advergaming in the online environment substantially, particularly in terms of the effectiveness of online advergames, which are hosted on a server. Dial-up users would experience bandwidth problems trying to access advergames online and even if they were able to download the game to their machines, they would be limited in terms of their ability to distribute the game to friends and family, as proposed in viral marketing. As a result, only a small minority of the South African population can access advergaming at present, making it a mere luxury for most marketers.

Linked to this is the concept of mobility. Mobility can refer in this study both to the mobility of the device, that is, the ability of the device to move from one place to the next quickly and easily, and to the mobility of the advergame itself. The latter is important in terms of the application of advergaming to viral marketing.

In the US environment, where advergaming is more prevalent and where almost 74% of inhabitants (230 million users) have Internet access and 23.94% (73 million subscribers) have access to broadband Internet (ITU 2009), advergames are being used as viral marketing tools. Blockdot, a developer of advergames, claims a 4 - 5% click-through to a call to action at the end of a game (Hein 2006). This is significant when compared to a banner click-through rate of

0.21% as described earlier (MarketingSherpa 2008). This call to action is often linked to an incentive such as competition entry to increase interest.

While other barriers such as cost are acknowledged as impacting on the ability of advergaming to reach a mass audience, these will not be explored in this research. This literature review will be expanded on in Chapter 2.

### 1.5 Research Design and Methods

This study adopts an interpretivist approach, focusing primarily on qualitative data. However, a hybrid research design was used in order to investigate the four objectives of the study.

Using Winkler's (2006: 37) three categories of advergaming to categorise a variety of South African and international advergames and combining this with narrative theory (Aristotle 1989), this research aims to explore the effectiveness of advergaming and more specifically whether the use of narrative improves the effectiveness of advergaming or if simple association is enough.

Firstly, in order to determine how advergaming is currently being used in South Africa, a content and thematic analysis of selected South African advergames will be conducted. This data will be used to develop criteria for assessing advergames in terms of their approach to the use of narrative and to identify themes used in advergames. Given the relatively small extent of advergaming in South Africa, the selection of the advergames will be based on local availability and accessibility.

Ethical clearance for this study was approved by the Nelson Mandela Metropolitan University
RTI Higher Degrees sub-committee of the Faculty of Arts Research, Technology and Innovation
Committee. The ethics clearance reference number for this study is H10-ART-JMS-001.

### 1.5.1 Sampling Procedure and Inclusion Criteria

## 1.5.1.1 Survey of Advertising Agencies

A national survey by questionnaire of advertising agencies in South Africa was used to determine how advergames are currently being used and what the industry identifies as the primary obstacles to widespread use of advergaming as a brand technique in South Africa. The sample was drawn from the BizCommunity database (www.bizcommunity.com) of advertising agencies, which is the largest South African marketing and advertising community online, currently listing 662 advertising agencies countrywide. The survey was distributed to all 662 advertising agencies through email and a link to the survey, which was hosted on the eSurveysPro web site, was be included in the email together with an invitation to participate. It was found that only 431 of the provided email addresses were valid. Consent to participate in the survey was obtained through the participants' provision of a digital signature through the online survey site. An analysis of the data to extrapolate descriptive statistics was then conducted. The statistics were used to describe the current use of advergaming in South Africa and these advertising agencies' perceptions of advergaming as a message communication tool within the South African context. The results were also used to identify trends within the use of advergaming that was further explored in the interviews.

### 1.5.1.2 Semi-structured Group Interviews

In investigating the effectiveness of advergaming as a branding tool, a series of semi-structured group interviews of staff and students at the NMMU was used. In order to compare findings among different target audiences for products advertised, three groups were selected from the staff and students of the NMMU. Each group consisted of between 5 and 16 people.

### 1.5.1.3 Semi-structured group interview procedure

A comparison of the responses of each group was made through a qualitative analysis of the responses received.

The participants were asked to first fill in a brand awareness questionnaire, with the aim of determining the level of awareness of each product before playing the advergames. They were then asked to play a series of advergames each demonstrating different levels of brand integration. The game play took place in computer labs in the School of Language, Media and Culture on South Campus of the Nelson Mandela Metropolitan University in Port Elizabeth, South Africa. The advergames were selected on the basis of their meeting the level criteria proposed by Winkler (2006). Four games were selected, each representing either an associative, illustrative or demonstrative level of brand integration. International advergames were included in the study provided that the products advertised are familiar to a South African audience, for example Kelloggs, M&Ms or Axe. Viralchart (<a href="www.viralchart.com">www.viralchart.com</a>), which tracks the popularity of advergames internationally, as well as the responses from the advertising agencies were used to identify the games for selection. The research assistant also observed the participants during gameplay. After this the participants were asked to participate in another semi-structured interview designed to measure their level of brand awareness after

playing the advergames. Through this study, the thesis aimed to identify the elements necessary for an effective advergame that could be used in a viral communication campaign in the mobile environment.

Drawing on data from all facets of the study, a model was then constructed to assist communicators in operationalising the use of advergaming in the mobile environment in South Africa. The model was measured against Porter and Galen's criteria for viral marketing to gauge its effectiveness in overcoming the obstacles to advergaming as a viral marketing tool in South Africa. See Chapters 4 and 5.

## 1.6 Delimitations of the Study

This study focused on the recall and retention of messages communicated through selected advergames of specific groups of people drawn from the NMMU staff and student population and is therefore not representative of the broader South African population. It is, however, possible to draw certain conclusions from the study given that the participants belonged to clearly defined generational groups (baby boomers, generation X, digital natives).

While the thesis proposes one possible model for the use of mobile advergaming in South Africa, practical testing through a pilot roll-out of the model did not form part of this study.

## 1.7 Definition of Terms

For the purposes of this study, the terms used are defined as follows:

 Advergame: A purpose-made game that is used to advertise a product, service, brand or issue. It does not include product placement within commercial games.

- Viral marketing: The promotion of a brand, product, service or issue through digital
  word of mouth. It also refers to the endorsement in the digital environment of a brand,
  product, service or issue by a consumer not paid by the company that is being
  promoted.
- Mobile environment: The mobile infrastructure and services which allow consumers to make use of cellular telephones to transmit voice and data to another recipient.
- Mobile games: Digital games played using a mobile device such as a cellular telephone, a netbook or tablet PC.
- Seeding: The process of placing a digital item in the public domain for dissemination by the public.
- Stickiness: The ability of a digital site or feature such as a game to keep a user's attention and therefore retain the engagement with the customer.

### 1.8 Conclusion

This chapter has introduced the topic of the research and set the context for the study that was undertaken. A list of definitions used within the study was also included. Chapter 2 will explore the existing literature on advergaming, drawing on theorists in game studies, advertising, marketing, literature and psychology. The focus will be on mapping out a comprehensive theoretical framework for the examination of advergaming as a phenomenon in the South African context. As such, the literature explored focuses on the history of game studies as an academic discipline and the opposing viewpoints of ludologists and narratologists. It then places advergaming within the context of so-called serious games and extends into the theory

of advertising with particular reference to how games persuade, how messages are integrated into games and how viral marketing functions. The chapter identified the key theoretical constructs used in the study and provides a comprehensive overview of the multi-faceted theoretical approach used.

Chapter 3 will then discuss the research design and methodology used, provided an in-depth description of the techniques employed as well as the justification of those selected methods. As this is a hybrid study, the methodology utilises both quantitative and qualitative design attributes and the chapter discusses the appropriateness of these methods within the context of the study. In addition, chapter 3 includes a discussion of the results of the national survey of South African advertising agencies that was undertaken as part of the study. This provides the context for chapter 4, which presents the rest of the findings of the study, specifically the thematic content analysis of the selected advergames as well as the results of the three semi-structured group interviews that were conducted.

The final chapter, chapter 5, synthesises the findings and presents a detailed analysis of the use of advergames in South Africa. As per the aims of the study, it also presents a model for the operationalizing of advergaming as a viral marketing tool in the mobile environment.

# **Chapter 2 - Games as Communication: The Literature**

This chapter focuses on the literature about games and the use of games to communicate persuasive messages. It outlines the theoretical framework that forms the basis of this study and seeks to define the unique characteristics of game play as theorised by core authors in the fields of game studies, psychology, marketing and philosophy.

# 2.1 The theory of game play

The concept of game and game play is not unique to the digital world. Games have been the focus of research and thinking since the days of Plato and Aristotle. Aristotle's concept of Dramatic Play (Dinehart 2009), for example, is an interactive drama that uses interaction, rather than description, to tell a story. This concept can be applied to games. Dinehart (2009: 1) says, "These games seek to immerse the player in a dramatic role play, whereby they assume the role of character in a different time and place, and whose actions and presence having meaning in the world as designed."

Defining a game is problematic since games take so many different forms. Ryan (2001) considers Wittgenstein's idea that the concept of game is about "family resemblance" that cannot be held together by a stable core of common features. But she also cites Suits' notion that games are about rules (Ryan 2001). Ryan (2001) argues that the features of games are that they are played for pleasure and that they are governed by some set of rules, which Turkle (1984) also recognizes as being fundamental to the way that games work. She points out the need for a game to abide by the inherent logic of its rules and argues that computer games are

rule-bound rather than open-ended. "A planet can have any atmosphere, but its inhabitants must be adapted to it... You can postulate anything, but once the rules of the system have been defined they must be adhered to scrupulously" (Turkle 1984).

Aarseth (2004) argues that "games are games, a rich and extremely diverse family of practices, and share qualities with performance arts (play, dance, music, sports), material arts (sculpture, painting, architecture, gardening) and the verbal arts (drama, narrative, the epos)."

Huizinga (1955: 13) defines play, which he uses to mean formalised games, as a "free activity standing quite consciously outside 'ordinary' life as being 'not serious', but at the same time absorbing the player intensely and utterly." Huizinga (1955) further says games are played without material interest and without profit, although this view discounts gambling games such as poker from the definition. He also includes fixed rules as part of his definition and includes the formation of community, what he calls social groupings, around the game play (Huizinga 1955).

Rules play an important part in the work of both Caillois and Piaget. Caillois (1962) defined games according to the complexity of their rules, calling games governed by simple rules paidea and games whose rules are more complex as ludus. Piaget (1951) on the other hand defined three main types of games: games of exercise, where both the senses and movement are used, symbolic games, such as role-playing, and games with rules such as sports games.

Frasca (1999) and Ang (2006) also explore the relationship between rules and game play, using the work of Caillois and Piaget. According to Ang (2006), Frasca differentiated between two different types of rules within games, paidea rules which are established to play the game, and

ludus rules which are established to win or lose the game. Under this definition paidea refers to games that are not designed to offer a clear winner or loser, while ludus refers to games that are. Ang (2006) indicates that both types of rules may be present in the same game and that players can switch between these rules during the course of the game.

Ang (2006) quotes Tosca (2003), who studied quests in games, particularly role-playing games and adventure games, and the rules that govern those quests. Tosca (2003) drew a distinction between the hard and the soft rules of a game. Hard rules are the rules making up the game world, such as object properties, behaviours, and game play dynamics, such as the final goal of the game, while soft rules are the concrete objectives in smaller strings of actions. In effect, the soft rules are how the "hard rules are particularly implemented in short sequences that the players can take individually" (Ang 2006).

But game playing is not only about memorising the game rules (Ang 2006). Learning the rules establishes the ability to play, but as Lindley (2002) says successful play does not necessarily require learning all the rules.

This study focuses on digital games, played either on a PC, a gaming console or a mobile device, and more specifically on advergames, which are digital games created to promote a brand, product, service or issue. It thus draws on a variety of theoretical sources including, but not limited to, game studies, media studies, narratology, marketing and communication studies.

Gaming theory as a body of academic research enjoys a fractured theoretical framework. On the one hand, literary theorists and media studies proponents advocate the exploration of narrative through narratology as the focus of game studies. On the other hand, ludology, which

views games as simulations, is championed by others working in the field. The core difference is that ludology proposes that the focus of video games is the game play itself and that the gamer derives pleasure from that game play, while narratologists believe that the pleasure is derived from the story told within the game. Ang (2006) describes game play as the actions taken by the players and narratives as the accounts of these actions.

But as Murray (2005) says an either/or approach may be too simplistic. She adds, "Because the game essentialists want to privilege formalistic approaches above all others, they are willing to dismiss many salient aspects of the game experience, such as the feeling of immersion, the enactment of violent or sexual events, the performative dimension of game play, and even the personal experience of winning and losing" (Murray 2005: 1-2).

Within this context it is important to look at advergames from both perspectives, as simulation but also as narrative and to determine the impact of each on the message recall of users.

From a ludological perspective, one of the primary appeals of advergaming lies in its ability to immerse the user in a simulated environment in which the issue or brand is at the forefront. This simulation draws on ludology, which proposes that the user relates to the simulation, is immersed in the game environment and therefore engages with the game at a different level than more passive pursuits such as television. Frasca (2004) holds the following view:

Traditional media are representational, not simulational. They excel at producing both descriptions of traits and sequences of events (narrative). ... A flight simulator or a simple toy plane are not only signs, but machines that generate signs according to rules that model some of the behaviours of a real plane. (Frasca 2004)

In the same way that the performance of a play alters the reader's experience of it, playing a game alters a gamer's experience of the story behind the game. It is not the textual content that holds the meaning in the case of a game but rather the experience of it. By putting the gamer in the action and allowing him/ her to experience in a virtual simulation something that may or not have basis in reality, a game functions as a virtual world in which the gamer is an actor.

But as mentioned previously, in traditional academic study, games are seen as merely interactive narratives, procedural stories or remediated cinema (Eskelinen 2001). Parlett (1999) defines formal games as "systems of ends and means". Eskelinen (2001) describes the equipment and manipulation of a game resemble the story and discourse of narratology.

## 2.1.1 Narrative and Gaming

The development of computer games that increasingly used video clips to relay the narrative to gamers invites a comparison of such games with traditional narratives such as film, theatre and literature. "This would increasingly make the boundaries between films and games blurred, the player being totally 'immersed' in the narrative as they played the new interactive films" (Bryce and Rutter 2002).

Traditional narrative structure as proposed in Aristotle's dramatic arc (Aristotle 1989) is often applied to games, although this is an inexact fit in most cases. While some games follow a conventional narrative structure, others, such as the so-called casual games of Solitaire and

Bejeweled (Pop Cap Games 2000), offer no plot or story as part of the game and focus completely on diversion as entertainment.

Rouse (2000) differentiates between three types of storytelling that takes place in a game. The first is out-of-game storytelling, the type that Bryce and Rutter (2002) refer to when they mention the use of video clips. This type of storytelling occurs through cut scenes, mission briefings and documents found by the player during game play. In-game storytelling, on the other hand, occurs within the game world through the interaction of the player with other characters and situations. The last type refers to external material such as the game manual or web site, which may provide elements of the narrative of the game.

Out-of-game storytelling as proposed by Rouse (2000) is used in advergames such as Axe/ Lynx Vice (Axe 2007). As the product is known by two different names, the game is either called Axe Vice or Lynx Vice depending on which country the player selects as his/ her country of origin. The game parodies the popular Crime Scene Investigation (CSI) television series by asking the player to investigate "why nice girls are turning naughty". The game uses cut scenes and mission briefings by the Film Noir-style private detective to fill the player in on what is going on in the game and to provide the player with instructions on what to do. In-game storytelling (Rouse 2000) also occurs when the player must examine the evidence collected or interview witnesses. External material (Rouse 2000) could refer to information gleaned from complementary advertising campaigns to promote Lynx/ Axe. However, not all or even any of these types of storytelling are present in every game or advergame.

According to Dinehart (2009: 1), dramatic play, drawing from Aristotle's view, is "the new niche these games expound upon, a paradigm that is the focus of interactive narrative design, a craft that meets at the apex of ludology and narratology and conjoins the theories into functional video game development methodologies."

Lindley (2003) proposed a game taxonomy that classified games in terms of the relative degree to which they embody elements of ludic gaming, simulation and narrative. Within this framework, Lindley (2003) says action games, strategy games and role-playing games (RPGs) incorporate prominent features of all forms, being games, simulators and narratives. According to Lindley (2003), RPGs generally have more narrative content than action games, and strategy games have more simulation than narrative.

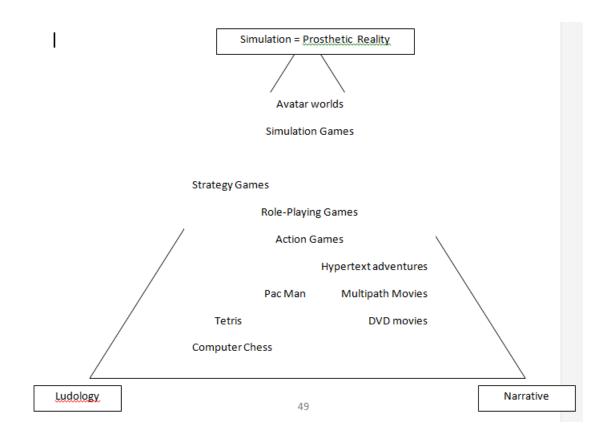


Figure 1: Lindley's (2003) game taxonomy

His later work (Lindley 2005) argues that ludic systems are fundamentally time-based, and temporal structure is a major determinant of the player's perception and experience of ludic form. He adds that "as with other temporal experiences, the time structure of ludic systems can be regarded in terms of several layers of the encoding of meaning, each being focused upon a different time scale" (Lindley 2005: 1). In Lindley's framework these layers are hierarchical, deriving from Saussure's langue/parole distinction (language versus speech), and from the Russian formalist distinction between fabula and syuzhet, which can be interpreted roughly as the difference between story and plot (Stam et al. 1992).

The four levels of temporal structure that Lindley (2005) proposes start with the temporal structure of the experience of the player, which he calls the discourse level. This, he says,

corresponds in verbal, textual and cinematic narrative systems with the level of narration (Lindley 2005). The second layer is the performance level, which relates to the actual events revealed to the player as part of the play experience. In this layer, the player moves from being a viewer to being an active participant in the game (Lindley 2005) and this level is related to the plot (syuzhet).

The simulation level is the level at which "the authored logic and parameters of a game system together with the specific interactive choices of the player determine an (implied) diegetic (i.e. represented) world, only some of which is made available to the player via the experiential zone created by a virtual camera, a virtual volume of audio reception, and a surface of virtual haptic reception (e.g. a virtual body that receives damage or health)" (Lindley 2005). The final level is the generative substrate, which is the system of functions, rules and constraints constituting a space of possible worlds of experience created by the designers of the game, which Lindley (2005) equates with Saussure's system of a language.

The table below provides a comparison of the different levels in terms of semiotics (Lindley 2005).

Semiotics of verbal language	Semiotics of computer games	Semiotics of narrative	
La parole (speech)	Narration / discourse	Narration / discourse	
	performance	plot	
La langue (language)	Model / simulation	story	
	Generative substrate	structural	
	structural substrate	substrate	

Figure 2: Lindley (2005)'s semiotic levels

Aspects of Lindley's work (2003 and 2005) will be used later in this chapter in looking at the categorization of advergames.

Other media forms such as film, television and novels have a relationship with games in the current commoditised environment in that these media often form the basis for popular games and vice versa. This is what Proffitt, Tschoi and McAllister (2007) call "corporate mediated texts". They say that, within this context, the "textual events are therefore dynamic, created by the media industry to be moved through multimedia outlets" (2007: 242).

Using the example of The Matrix (1999) franchise, the researchers (Proffitt et al. 2007) examine how the Hollywood blockbuster constructs a global film event through multi-mediated and coordinated production, distribution, and exhibition. Although their specific research focuses on the use of games and other media by film producers and marketers as an extension of the

film brand, the points can be related to the use of a game as an extension of any brand, the goal of which is to create new revenue streams and drive cross-brand purchases and interest.

Gaming is growing in popularity worldwide. Research by the Entertainment Merchant's Association (EMA) showed that 68% of all American households are now playing video games (Brightman 2009). There was a 19% total industry sales jump to almost \$23 billion in 2008, and Video game rentals increased eight per cent for 2008 to \$541 million (Brightman 2009). In America, the average gamer is 35 years old and has been playing for 12 years (Entertainment Software Association 2009). Gamers have traditionally been thought of as male, but the number of female gamers is growing (The NPD Group 2009). Women prefer word and puzzle games, while men are more interested in sport, combat or casino games (Gurău 2008).

The NPD Group (2009) study also classified gamers into different segments, namely:

- "Secondary Gamers": Gamers who play less than four hours a week. This group is composed mainly by females and they make up 33.6 million of the total.
- "Console Gamers": Gamers owning at least one or two consoles who play around 12 hours a week. They make up 32.9 million of the total gamers.
- "Heavy Portable Gamers": This group is formed by the younger people and owning at least one portable console. They make up 30 million of the total number of gamers.
- "Extreme Gamers": The smallest group of gamers, which owns several platforms and play 40 or more hours a week. They number 6.1 million of the total number of gamers.

- "Online PC Gamer": A mostly female group spending 73 per cent of their time online for around eight hours a week. They number 25.9 million.
- "Avid PC Gamers": The most hard-core PC segment, playing around 23 hours a week online and offline. There are 17.3 million avid PC gamers according to the study.
- "Offline PC Gamers": Those spending around 82 per cent of their time unconnected to the internet. There are 24.1 million in this segment. (The NPD Group 2009)

In South Africa, exact statistics on the number of gamers are not available. The AGASA Gamers League, which calls itself the largest competitive gaming league in South Africa, has 7702 players, 934 teams and 742 clans competing in over 30 games and disciplines (AGASA 2009). A search of Google South Africa lists at least six other gaming leagues, including Do Gaming League, USO Clan, LeagueofLegends, MyGaming and Intel Annihilator League.

### 2.1.2 Personal Uses of Games

Both Blumler and Katz (1974) and McQuail (1983) proposed that media users select specific media on the basis of their specific needs and that the media fulfil a specific role for media users. It is plausible therefore to propose that gaming fulfils a particular need in users. It is important to understand that it can be difficult to connect a particular need with a particular type of media content since media use can supply multiple benefits at different points throughout its use (Underwood 2003).

A study of adolescent gamers by Raney, Smith and Baker (2006) identified four main psychological appeals of video games, namely pleasure and enjoyment, excitation and arousal, mood enhancement and management and mastering the challenge. Raney et al. (2006) also

linked game content, most specifically interactivity and violent content with these appeals, and also explored the social experience of game playing.

Drawing on the work of other theorists (Nabi and Krcmer 2004; Raney 2004), Dahl, Eagle and Baez (2009) point out that enjoyment is an important aspect of why gamers play games. They use disposition theory, which states that enjoyment of media content is a product of a viewer's emotional affiliations with characters and the storyline outcomes associated with those characters (Raney 2004), to argue that enjoyment impacts on attitude towards a game and possibly by extension towards the brand associated with it (Dahl et al. 2009).

Other theorists (Myers 1990a and 1990b; Phillips, Rolls, Rouse and Griffiths 1995; Vorderer, Hartmann and Klimmt 2003) argue for a variety of uses and gratification sets, but point to competition or challenge as being the key defining trait of video games.

Advergaming may fulfil two primary needs: the need for entertaining relaxation and the need to compete as theorised above. Most advergames include a 'challenge a friend' and/ or high score list aspect, which may appeal to users' need to prove themselves superior to others. Thirty-nine per cent of the 431 food brand advergames studied invited gamers to post their high scores to a leader board (Moore 2006). This aspect also tends to be used as a tactic to ensure that users continue to play the games in order to beat their previous scores. Some advertisers also link an additional competition to the high score. Forty-five per cent of the games offered multiple levels of play, 69% awarded game points and 40% incorporated time limits of some sort to increase the challenge aspect of the advergame (Moore 2006).

Stafford and Faber (2004) identified escapism, relief of boredom, competition, fun and curiosity as being the primary uses and gratification motivations for playing advergames. Their results of the study found that the first four identified motivations correlated with a positive attitude towards an advergame, while the last motivation, curiosity correlated with a negative attitude towards the game (Stafford and Faber 2004). It further indicated that the pleasure a player experiences during game play may transfer to the positive feeling towards the site and relationship with the brand (Stafford and Faber 2004). They also identified a number of reasons why players did not play advergame. These are expressed in the table below (Stafford and Faber 2004).

Reasons for Not Playing Advergames on Commercial Web Sites

	No. of responses	% of cases*
I don't have interests for games/I don't play games.	27	31.4
I don't have time for games/I am busy for games.	23	26.7
I haven't been to a site that had games/haven't come		
across any game.	10	11.6
I don't spend much time on the Internet/I don't use		
the Internet.	9	10.5
When I am online, I'm on for a specific reason.	6	7.0
Games waste my time.	4	4.7
I haven't visited sites with online games.	4	4.7
I don't like games.	4 3 3 3	3.5
It is usually not very interesting.	3	3.5
Because games are slow due to slow connection.	3	3.5
I have better things to do with my time.	2	2.3
I haven't thought of it.	2	2.3
Companies try to sell me something.	2	2.3
I don't want to register for all of those things.	2	2.3
I stick to sites I've been to before.	1	1.2
I don't like games for the use of ads.	1	1.2
I don't have much access to the Internet.	1	1.2
Others	2	2.3
Total responses	105	122.1

Figure 3: Stafford and Faber (2004)'s reasons for not playing advergames

Interestingly, although the study pointed to an indirect relationship between favourable attitude towards the advergame and purchase intention, it did not test this relationship.

Chang, Lee and Kim (2006) uses a combination of uses and gratifications theory and diffusion of innovation to examine the differences in game adoption between groups of gamers, namely adopters (including continuers and discontinuers) and non-adopters (including potentials and resistors), continuers and discontinuers, and between potentials and resistors of online games in South Korea. They proposed a model of online game adoption which is pictured below (Chang, Lee and Kim 2006).

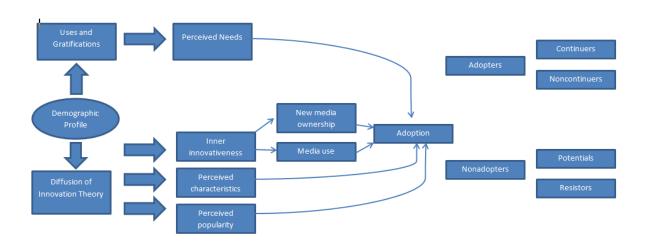


Figure 4: An integrated model of game adoption (Chang, Lee and Kim 2006)

Falstein (2004) links the fun element of a game to the survival needs of humankind's Palaeolithic ancestors, a theory he calls Natural Funativity. Falstein (2004) says that the

technology behind video games has in effect "made possible a concentrated, particularly potent play experience that is both very new in its expression and very old in its origins." He looks at games as a specialized form of play and draws an analogy with the way young animals use play to learn survival skills.

The BuzzCity Mobile Gaming Survey found that South African mobile gamers play mainly to pass the time (45 per cent), to learn something new (30 per cent) and to get the most out of their phones (17 per cent) (BuzzCity 2010).

### 2.1.3 Engagement and gaming

Gaming as a form of advertising has another advantage over television in that it encourages prolonged engagement with the advertisement. Whereas a television advertisement lasts just 30 seconds on average, a game, if sufficiently engaging, can hold a user's attention for hours. A study by Gunn (2001) found that children may play a game 100 or more times, while adults in a study by Nelson, Keum and Yaros (2004) were found to spend up to 30 hours in total playing one specific game.

The level of engagement relates to the complexity and nature of the game play as well as the user's needs in relation to the game and the length of time a user plays a game.

Brockmyer, Fox, Curtiss, McBroom, Burkhart and Pidruzny (2009) define engagement as a generic indicator of game involvement and use the more technical terms of immersion, presence, flow, psychological absorption, and dissociation as representing a progression of ever-deeper engagement in game-playing. They devised a Game Engagement Questionnaire (GEQ), which provided a psychometrically strong measure of the type of engagement elicited

while playing video games. Although the study focused on engagement in relation to the potential increase in violent behaviour as a result of playing video games, the terminology defined within the study is useful in identifying degrees of engagement within games.

Brockmyer et al. (2009) uses Wirth et al.'s (2007) concept of immersion as referring to the game's ability to induce the feeling of actually being a part of, or "present" in the game environment, which is one of the core traits of gaming. The term "spatial presence" is used by Wirth et al. (2007) to describe the experience of being integrated into a mediated environment such as a game.

Related to immersion and presence is the concept of flow. According to Brockmeyer et al. (2009), flow, a term also used in television studies, describes the "feelings of enjoyment that occur when a balance between skill and challenge is achieved in the process of performing an intrinsically rewarding activity". Csikszentmihalyi (1991) describes the 'state of flow' as a mental state in which attention is highly concentrated on a specific process and the environmental information is screened out, the person experiencing a harmonious flow of its present perception.

Beyond immersion and presence is the concept of psychological absorption which Brockmyer et al. (2009) define, adapting Irwin's (1999) definition, as total engagement in the present experience which induces an altered state of consciousness. Psychological absorption can give way to disassociation, which is a psychological term used in trauma psychology to describe "the lack of normal integration of thoughts, feelings, and experiences into the stream of consciousness and memory" (Bernstein and Putnam 1986: 727)

Brockmyer et al.'s (2009) GEQ identifies the different levels of engagement from immersion to dissociation in playing video games and could be adapted to determine the level of engagement experienced by a player playing an advergame. Within this spectrum from immersion to dissociation, brands should probably focus on eliciting reactions of immersion and presence rather than psychological absorption and dissociation, which both have negative connotations.

Moore (2006) linked engagement with the ability to personalize or customize a game. She defined personalization as giving the player the freedom to choose his game player, select an opponent, or design the game space. In Moore's (2006) study, 39% of the food advergames analysed incorporated one or more such elements, in terms of choice of players, design of game space and selecting the mode of play.

Bradzell et al. (2008) argue that in-game advertising may be better measured in terms of player engagement and context appropriateness as positive links between user engagement and brand association are constantly developing.

Far from being direct selling tools like much above-the-line advertising in traditional media, advergaming does tend to focus on brand awareness and association. Winkler and Buckner (2006) state that most advergames aim to improve branding, boost product awareness and collect detailed data about existing and potential customers, clients and supporters. In addition, advergames can also be didactic in nature. As mentioned in Chapter 1, when translated into the mobile environment, could play a valuable role in communicating societal values (safe sex), educating communities about safety (electricity, crime) and government

services in South Africa. It could be a tool for a social awareness marketing strategy for issues such as poverty and environmental consciousness in the vein of existing games such as [type].

#### 2.1.4 Games as Education and Persuasion

Advergames as a genre form part of so-called persuasive games such as edugames and news games. The core purpose of persuasive games is to communicate messages about an organisation, brand, issue or situation that persuade gamers to think, feel or act in a particular way as a result. One of the most well-known persuasive games is America's Army (www.americasarmy.com), which was created by the United States Army to "open entirely new channels for communicating with America about soldiering. It has also fostered the growth of a dynamic community of interest in the Army that encompasses hundreds of Internet fan sites and community game hosts. In the past year these virtual communities have witnessed an exchange of information about the Army and its game in several million web-forum postings, web logs, and Internet chat sessions. This has placed AMERICA'S ARMY at the forefront of attention of young Americans and their parents as a source of information about the Army." (Tomlinson 2007: 3)

Increasingly, game studies has focused on the ability of a game to be an educational or learning tool (Stapleton 2004; Norman 2001b; Norman 2001a; Stapleton and Taylor 2002).

"Certainly, the idea of using simulation and videogames for educational purposes is far from new and was already extensively explored by constructionism," Frasca (2004) explained, adding that the main concern regarding constructionism is that it was not designed for dealing with social and humanities education.

He cites the work of Yasmin Kafai, who taught her students mathematics principles through videogame design. "Certainly, Kafai's students had to research Greek mythology to create their videogames, but this was mainly a side effect, because their focus was on mathematics" (Frasca 2004).

Sawyer and Smith (2008) created a taxonomy of what they call serious games, which divided them into different categories such as games for change, games for health and advergames.

	Games for health	Advergames	Games for Training	Games for Education	Games for Science and Research	Production	Games as Work
Government and NGO	Public health education and mass casualty response	Political games	Employee training	Inform public	Data collection/ planning	Strategic and Policy Planning	Public diplomacy, opinion research
Defence	Rehabilitatio n and wellbeing	Recruitment and propaganda	Soldier/ Support Training	School house education	War-games/ planning	War planning and weapons research	Command and Control
Healthcare	Cyber therapy/ Exergaming	Public health policy and social awareness campaigns	Training games for health professionals	Games for patient education and disease management	Visualisation and Epidemiology	Biotech manufacturin g and design	Public Health response planning and logistics
Marketing and Communicati ons	Advertising Treatment	Advertising, marketing with games, product placement	Product use	Product information	Opinion Research	Machinima	Opinion Research
Education	Inform about disease/ risks	Social issue games	Train teachers/ Train workforce skills	Learning	Computer science and Recruitment	P2P Learning construction documentary ?	Teaching Distance Learning
Corporate	Occupational Safety	Customer education and awareness	Employee training	Continuing education and Certification	Advertising/ visualization	Strategic planning	Command and Control
Industry		Sales and Recruitment	Employee training	Workforce education	Process optimization simulation	Nano/ Bio- tech Design	Command and Control

Figure 5: Taxonomy of Serious Games (Sawyer and Smith 2008)

The taxonomy (Sawyer and Smith 2008) focuses on the games' ability to persuade and educate the player, but each with a different purpose from commercial applications to advocacy.

According to Stapleton (2004), digital games can provide authentic, meaningful and powerful contexts for learning. "Games provide players, as learners, with deeply satisfying challenges that require the development of skills and strategies in order to achieve the game objective" (Stapleton 2004: 5).

### 2.1.5 Games as Persuasion

The question becomes how do games persuade? Dahl et al. (2009) posit that according to the Persuasion Knowledge Model (Friestad and Wright 1984), consumers process messages clearly marked as persuasive content differently to those that are not clearly marked. Within this context they, drawing on the work of Raney (2004), argue that if gamers are unaware of the embedded brand message within the game they will process those messages differently and may therefore be more susceptible to the persuasion attempt (Dahl et al. 2009).

Studies on the effectiveness of advergames are limited, but there is some evidence that companies, particularly those in the automotive and energy drink markets, have seen awareness move to trial and actual purchase as a result of exposure through advergames (Nelson, Keum and Yaros 2004; Dahl et al. 2009).

The Kaizer Family Foundation study, (Lelchuk 2006; Moore 2006; Gurău 2008) which looked at the marketing methods embedded into food advergames that targeted children, identified characteristics of advergames that encouraged repeat playing. These included a membership

opportunity for children aged 12 or under, such as registering or joining a club to get access to special activities or secret games and incentives to get the user to buy more food so he or she can collect points, which can then be exchanged for new games, brand-related clothing or other products.

The study also found that 13% of the sites include polls or quizzes, which were used to ask personal opinions about products and nearly half the sites included a movie or TV tie-in (Gurău 2008).

Gurău (2008) draws on the work of Chen and Ringel (2001), who proposed several strategies for online game campaigns, including:

- advergaming must be developed to a baseline specification which enables it to work
   effectively on standard browsers, operating systems and hardware;
- advergaming works within the context of a media campaign whereby users are led from one medium to another (e.g., from television advertisements or printed material to online games);
- market research goals should be incorporated into the interactive environment such that requests for information from players provide valuable information;
- advergames are most successful when targeted at those most likely to enjoy online game playing (i.e., 2-12 and 18-49 year olds); and
- games should be kept simple, as complex games may deter continued interaction.
   (Gurău 2008: 107)

Gurău (2008) investigated the way advergames may persuade by using the concept of flow and the advertising principle of AIDA (Attention, Interest, Desire and Action). The figure below graphically represents Gurău's (2008) theorizing about how flow functions within an advergame. He draws a correlation between the capability of the game player and the difficulty of the game and suggests that these two need to be in equilibrium in order for the player to reach a state of flow rather than frustration or boredom. This, Gurău (2008) says, counters Chen and Ringel's (2001) earlier assertion that advergames should be kept simple.

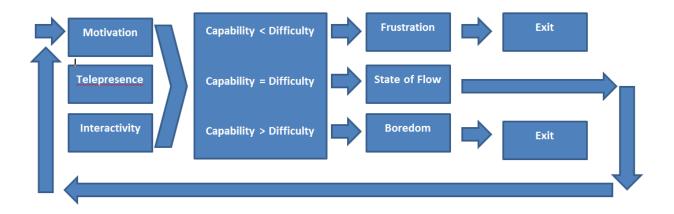


Figure 6: The inducement of the state of flow (Adapted from Gurău's model 2008)

In terms of the AIDA model, the figure on the next page indicates the relationship between AIDA and flow within an advergame (Gurău 2008).

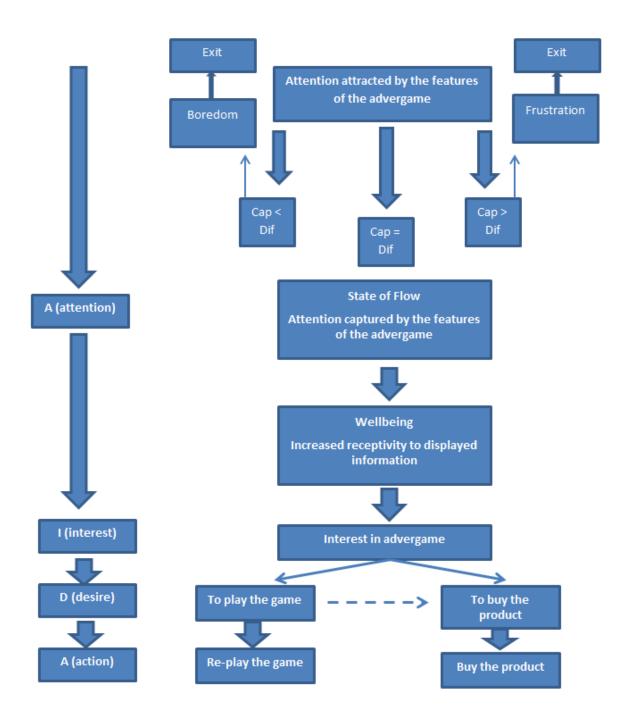


Figure 7: AIDA model applied to advergaming (Gurău 2008)

In this model, the first step is to attract the user to the game. Once attention has been grabbed, the online user will decide to play the game or not, depending on his/her level of motivation

and on the specific circumstances influencing the online activity, such as time available, level of noise, level of stress and so on.

Gurău (2008), drawing on the work of Deal (2005), argues that the stimuli received during the interaction with the advergame may then arouse the Interest of the player, both in the game itself, and indirectly, in the product or brand associated with the advergame. This may then create a desire that should result in action either in terms of replaying the game or, more importantly for the advertiser, in terms of buying the product associated with the brand. He points out that the area of most concern is during the transition between Interest and Desire, as a user may ignore the marketing message dimension of the game completely, and continue to play the game but not interact with or buy the product or perform the desired action.

Gurău (2008) conducted a study of 200 first year students between the ages of 20 and 24 and found a clear statistical relation between the capacity of the advergame to induce the state of flow and a change in the buying behaviour of players. Those who experienced a state of flow were also more inclined to pass the game and/ or brand message on as a viral message to more people. The study sample was too small to be generalizable, however.

An analysis (Moore 2006) of 431 advergames on food-related web sites found that the most common types of advergames in use were arcade, sports and adventure games, which seemed to have been chosen because they are not very complicated and the rules of play are generally simple. The study also found that the vast majority of games were animated, and about 90 per cent incorporated lively music or sound effects.

Although the primary challenge in most of the games is to a child's eye-hand coordination or reflexes, a few games also test a child's memory (e.g., matching pairs of cards as they are flipped over) or simple spatial skills (e.g., puzzles). The clear emphasis throughout the games is entertainment and brand reinforcement (Moore 2006). Although this focused on children, the issues are applicable to young adults as well.

### 2.1.6 Message Integration in Gameplay

Because in-game advertising takes different forms, ranging from static product placement to advergames where the brand takes centre stage, the brand integration can take different forms, depending on the aim of the advergame.

Moore (2006) looked at four different brand identifiers present in food brand advergames, namely the food item itself such as Capn' Crunch cereal in a bowl, a product package, a brand character and the brand logo. The study found that 97% (or 420 games) incorporate at least one type of brand identifier, and 80 per cent contain two or more. In addition to presence or absence, Moore (2006) also looked at the prominence of the brand identifiers. Of those with a product package incorporated into game play, 39% used it as the primary or focal object in the game. Fifty-eight per cent of cases where food items were incorporated into game play used them as the primary game piece, while the brand characters were prominent in 63% of the games in which they appeared (Moore 2006). Brand logos appeared in 86% of the games studied.

As mentioned in chapter 1, Chen and Ringel (quoted in Winkler and Buckner 2006: 38 -39) differentiate between three different levels of product integration in advergames, namely associative, illustrative and demonstrative.

The illustrative and demonstrative levels provide the greatest opportunities for narrative game play within advergames, although this is not apparent in many of the advergames studied.

Svahn (2005), however, points out that there are gaps in Chen and Ringel's (2001) theory.

Firstly, he says, they do not take into account if the brand immersion is done on the simulation level, the game play level, or the narrative level of the game as proposed by Lindley (2005).

Secondly, Svahn (2005) argues that the three levels identified – associative, illustrative and demonstrative – are not mutually exclusive and that a game can inhabit all three levels. Svahn (2005) believes that while Chen and Ringel's (2001) work is useful for analysing basic advergames, it does not provide perspective on the wider field of game types or a wider field of commercial or ideological services.

Svahn also finds fault in other taxonomies. Nelson's (Haugtvedt et al. 2005) seven-step taxonomy, which divides the field of advergaming by singling out some aspects of the games' visual and auditory interface design and showing what the brand-building effect on the consumer ought to be when those pieces are branded, only spans items designed into the medium carrying the game such as avatars, background banners, props and sounds (Svahn 2005). Svahn points out that the taxonomy does not consider the design of the play itself and therefore cannot provide a deeper understanding of what functions play-as-a-message-carrier can fulfil.

Svahn's (2005) own system for understanding advergames functions by addressing the relationship between the play and the rhetoric/brand-message integrated into the play. He proposes that a game is not the coding which underlies it but rather the "mental processes plus the real-world activities it engenders in the players" (Svahn 2005: 189).

When we understand dominance and the three levels, we can factor in the influence of the connotations of the mediums (that is the game play and the technologies carrying them) themselves on the communications strategy and make clear what place ludic activities have in an integrated communications strategy. (Svahn 2005: 189)

Svahn's (2005) sliding scale postulates a continuum where at one end the play and game is the dominant part and the rhetoric/brand message incidental, and on the other end, the mirror image opposite situation exists where the whole play concept down to the media choice of play-as-a media in itself is designed to serve the rhetoric/brand message.

His four game categories, as discussed in chapter 1, are Like Flies To The Honey Pot; The Invaded Reality; No Free Lunch; and the persuasive universe (Svahn 2005: 189 – 191).

As previously indicated, this research will focus primarily on games in the last two categories of Svahn's system, No Free Lunch and The Persuasive Universe and will also draw on Chen and Ringel's (2001) levels of brand integration in analysing how advergames are currently used.

### 2.1.7 Advergames as Advertising

Lee and Youn (2008) conducted a content analysis of the Web sites of the top 100 companies in the United States, ranked by advertising expenditure in ten major media, to determine how advergames were being used by advertisers. The study found that only 26 of the 100 companies examined used advergames as an advertising tool on their Web sites, but that those 26 offered

a total of 294 advergames between them (Lee and Youn 2008). The most prevalent genres of the advergames examined in the study were arcades, puzzles, and quizzes/trivia.

Entertainment and education were identified as the main purposes of the advergames analysed. The functions of the advergames varied across different levels of product involvement, with advergames for low-involvement products serving the pure entertainment function more than ones for high-involvement products. Advergames for high-involvement products served to educate consumers more than ones for low-involvement products (Lee and Youn 2008).

Lee and Youn (2008) also analysed the fit between the brand and the game as part of their study and found that most of the advergames fit well with the product being advertised in terms of lifestyle and image fit.

In addition to lifestyle and image congruity, Lee and Youn also look at functional congruity, drawing on the work of Gwinner and Eaton (1999). Functional congruity occurs when the product category being advertised in the game is a central object typically used in the content of the game, such as in the case of cars in racing games (Gwinner and Eaton 1999). The Lee and Youn (2008) study found that 59% of the advergames analysed demonstrated low levels of functional congruity with the product, 29 per cent showed high congruity and 12 per cent had moderate levels of functional congruity.

Congruity was considered an important aspect of positive attitude creation among gamers, with a study by Hernandez et al. (2004) showing that brands that were incongruent with the game play were perceived as more intrusive than congruent product placement. Wise, Bolls, Kim,

Venkataraman and Meyer (2008) also revealed a stronger positive relationship between attitude toward the advergame and attitude toward the brand when participants play games with a high thematic connection to the brand's product.

In a study of in-game advertising, which focused primarily on product placement rather than advergames per se, Bardzell, Bardzell and Pace (2008) participants indicated that advertisements which supported and extended the game world and provided more opportunities to create connections between the game and reality positively impacted the gaming experience and facilitated positive brand associations with game players. "All study participants encouraged the use of context appropriate ads as a means for increasing the realism of the game world. As one player stated, 'It wouldn't be sports without ads.' (Bardzell et al. 2008).

Like other forms of advertising, advergames can also play a role in shaping perceptions of the brand personality of a product, service, brand or issue. Azouley and Kapferer (2004) define corporate brand personality as "the set of human personality traits that are both applicable to and relevant for brands." Aaker's definition (Aaker 1997) is broader, defining the term as "the set of human characteristics associated to a brand". She defined five personality types defined by associations with specific descriptive adjectives. These are summarised in the table below and compared with Saucier's Five-Factor Model of Personality from traditional psychology (Azouley and Kapferer 2004):

Authors	Dimensions	(**)Facets or (***)items
Aaker <sup>78</sup>	Sincerity Excitement Competence Sophistication Ruggedness	(**) Down-to-earth, honest, wholesome, cheerful. Daring, spirited, imaginative, up-to-date Reliable, intelligent, successful Upper-class, charming Outdoorsy, tough
Saucier 's 40 mini- markers <sup>71</sup>	Openness ( or intellect)  Conscientiousness  Extraversion  Agreeableness  Neuroticism (or Emotional Stability)	(***)Creative, imaginative, intellectual, philosophical, deep, complex, uncreative, unintellectual.  Efficient, organized, systematic, practical, disorganized, inefficient, sloppy, careless.  Bold, extraverted, talkative, bashful, quiet, shy, withdrawn, energetic.  Kind, sympathetic, warm, cooperative, cold, unsympathetic, harsh, rude.  Unenvious, relaxed, fretful, envious, jealous, moody, touchy, temperamental.

Figure 8: Aaker's brand personality scale and The Psychology Five Factors Model (Azouley and Kapferer 2004)

Advergames could be used to communicate these personality traits to consumers and to reinforce existing perceptions of the personality of the brand.

# 2.1.8 The effectiveness of advergames

Advertising effectiveness in traditional models has focused on the relationship between attitude toward the advertisement and attitude toward the brand (MacKenzie and Lutz 1989; Muehling, Laczniak, and Stoltman 1991) and this could be used as a method to determine the effectiveness of advergames, but Wise et al. (2008) argue that these scholars have not specified production features of interactive forms of advertising that might moderate the relationship between attitude toward the ad and attitude toward the brand.

It is difficult to equate the relationship towards the game with the relationship towards the brand as little evidence exists to support this. However, gamers seem open to the use of advertising messages within games.

Linking advergames to overall brand messages has merit, as evidenced by the receptiveness study conducted by Winkler and Buckner (2006). The study found that those who play are receptive to the advertising message, or at least to the product or company that is displayed within the game, and, further, that players recall many of the details of the brand integration within the game such as the location of the logo (Winkler and Buckner 2006).

Winkler and Buckner propose that this might be because even though most advergames are engrossing and keep players immersed in the game experience, they are generally simple and straightforward. Consequently, the player can subconsciously focus better on the advertising messages communicated through the game (Winkler and Buckner 2006).

The results of the Winkler and Buckner study (2006) are significant, particularly when compared to earlier studies (Schlosser, Shavitt, and Kanfer 1999; Chaney, Lin, and Chaney 2004).

However, as mentioned in Chapter 1, cognisance should be taken of the fact that younger generations, especially the digital natives born after 1978, tend to have a photographic memory in the visual environment but not necessarily a conceptual memory and learn differently compared with past generations (Frand, 2000; Oblinger & Oblinger, 2005; Prensky, 2001a, b; Tapscott, 1999 cited in Bennett, Maton and Kervin 2008).

Prensky (2001) further describes Digital Natives as being used to receiving information really fast. "They like to parallel process and multitask. They prefer their graphics before their text rather than the opposite. They prefer random access (like hypertext). They function best when networked. They thrive on instant gratification and frequent rewards. They prefer games to

"serious" work" (Prensky 2001). It can therefore be proposed that Digital Natives are more receptive to messages communicated through games.

However, memory alone does not indicate comprehension or indeed positive perception of a message.

Also significant for South African advertisers is these researchers' (Winkler and Buckner 2006) finding that suggests that advergames might work more effectively for brands that are already known to the game player in some way, indicating that advergames may be more suitable to enhance and alter the brand impression instead of building brand awareness for a product that is new to the target audience. Thus, the current strategy of using advergames as part of a broader marketing campaign makes sense.

D'Andrade (2007) performed a more complex study of implicit and explicit memory retrieval in relation to advergaming. The findings suggest that while recognition is higher in low-object change advergames than in high-object change advergames, there was no level of difference in implicit memory retrieval for either type of advergame. Users demonstrated brand recall of both types of advergames.

Length of play and repeated game use seem to have an effect on recall of the brand advertising as evidenced in a study by Grigorovici and Constantin (2004), the results of which suggested that 30% of in-game ads are recalled in the short term and 18% in the longer term.

Coulard (2007) looked at the differences between the way men and women perceive advergames. He found that men tended to play games more than women and that women

preferred advergames which required some sort of reflection. Women tended to be more sensitive to the presence of the brand in the advergame, but men tended to enjoy the game less once they noticed the branding (Coulard 2007).

Kretchmar (2004: 49), citing Pintak (2001) and Rodgers (2002), claims that advergames offer "retention rates 10 times greater than for broadcast commercials, 16-45% of recipients play games received via promotional e-mail for an average of 25 minutes, 400% viral compounding with 90% of those who receive the pass-along e-mail responding". She adds that advergames transfer the emotion of the game to the brand that is powering it, creating an engaging, rather than passive, experience (Kretchmar 2004).

All of these studies point to the effectiveness of advergaming as a tool for branding in different ways. However, none of them attempted to discern the level of brand retention over a period of time as a result of the use of advergames.

It is clear that advergaming has the potential to reach users with brand messages in an innovative and appealing way, but it is also clear that merely creating an advergame is not enough. After all, the core purpose of any form of brand communication is to communicate a message. An advergame that merely associates a brand with a gaming experience but fails to communicate a message cannot be considered successful, for while it may create familiarity among users it may not create positive associations or even disseminate any meaningful information about the brand. It also fails to leverage the unique nature of advergaming: its ability to simulate.

Frasca (2003) points out that many advertisers are still satisfied with showing an image of the product or its brand logo within the game instead of trying to convey experiences that are associated with what is being sold. 'Advertisers ... use entertainment as a means but not as an end. What they want is to promote their brands and products and, because of this, they see in games a tool for persuasion' (Frasca 2003). He goes on to say that this puts them in an extremely privileged position for realising that the potential of games is not to tell a story but to simulate an environment for experimentation.

Advertisements in a magazine or on television may be able to describe facets of a product or service, but within the current context, images, sound and text are not enough, especially if they want their audiences to engage with the brand (Frasca 2003). A simulated environment provides an experience that traditional advertising cannot offer, in an engaging way that speaks to a digitally literate audience (Frasca 2003). He suggests that gaming literacy is an important concept in making players aware that games are not free from ideological content (Frasca 2003).

## 2.1.9 Games and Ideological Content

For media theorists, the communication of ideological content through media has long been an area of interest. Modernism's paradoxical reaction to technology – celebration and condemnation — is perhaps best epitomised in the work of the group of theorists known as The Frankfurt School (Creeber 2009). Modernism demonstrated a distinct "distrust and distaste for the sort of everyday culture to be found in pulp novels, the cinema, television, comics, newspapers, magazines and so on" (Creeber 2009).

The similarities between American mass culture and the products of mass production were critiqued by The Frankfurt School. As Creeber (2009) points out "[i]n particular, The Frankfurt School liked to perceive the media as a standardized product of industrialization, frequently connecting mass culture with aspects of Fordism," a term used to describe Henry Ford's production innovations in the motor industry. Mass production made cars cheaper and more accessible, but also limited choice and ensured that goods were identical.

The Frankfort School saw this Fordist philosophy as permeating all aspects of mass culture and resulting in a system in which every television show, film, pulp novel, newspaper and magazine were identical. "Instead of stimulating audiences, these media 'products' were designed to keep the masses deluded in their oppression by offering a form of homogenized and standardized culture" (Creeber 2009; cf Adorno 1941).

What this school of thought discounted was the possibility of an active audience. For modernists the mass audience was perceived as "generally passive and gullible" (Creeber 2009) and therefore particularly susceptible to the influence of the media. Media Effects theory, often called the Hypodermic Needle Theory, was the result.

Postmodernism, on the other hand, has seen a move away from the "cultural pessimism" of modernism and focused on the audience not as passive voyeurs but rather as participants. The characteristics of the post-industrial age can therefore be defined as:

These cultural changes can partly be understood as the inevitable by-product of a consumer society, where consumption and leisure now determine our experiences rather than work and production. This means that 'consumer culture' comes to dominate the cultural sphere; that the market determines the texture and experiences of our everyday lives. In this 'postmodern' world there

is no point of reference beyond the commodity and any sense of technology itself as separate to experience is slowly disappearing. (Creeber 2009: 15)

It is within this philosophical context that this study seeks to examine the use of advergaming to communicate messages about issues, brands, products and services. The study views users as active participants, involved in the co-creation of content in the digital sphere, while however not denying their potential behaviour changes due to advertising messages, which are, however, not the topic of this study. As a result, the concept of digital literacy is critical for this study. As explained earlier, the generation born after 1978 is categorised as Digital Natives (Prensky 2001) and are perceived as digitally literate, comfortable with both using and creating digital media. Hinchman, Sheridan-Thomas and Alvermann (2008) describe the way teenagers decode online texts, incorporating visual, linguistic and aural information into their interpretations.

However, familiarity and comfort with digital media does not imply critical literacy in these areas. Loertscher and Woolls (2002 cited in Day 2005) view adolescents as overconfident in their practice of information literacy, with a tendency to not discriminate and to settle for less. This is echoed by Watson (1998), while Todd (2003) points out that teens need to develop their critical literacies, especially regarding the Web. These studies point to the fact that while Digital Natives are familiar and comfortable with new media technologies such as the Internet and mobile devices, they are not necessarily discerning or critical in their engagement with the information presented on those media. The extent to which Digital Natives are able to discern ideological content communicated through digital media is unclear. This must be taken into

account when investigating the use of advergaming to communicate messages about issues, brands, products or services.

# 2.2 Mobile gaming

Literature on gaming and advergaming seems to point towards it as a useful tool for communicating brand messages, but it has only been used in a limited way in the South African context. This thesis proposes that in order to reach the broader South African audience and make advergaming a viable tool in advertising in South Africa, it needs to make the move to the mobile environment which enjoys a larger number of users than the traditional wired infrastructure of the PC and Internet connection.

To understand how advergaming can migrate to the mobile environment, it is important to understand the broader mobile gaming context.

For the purposes of this research mobile gaming refers to all games played on a mobile device.

These include both online mobile games that reside on a mobile portal or server and downloaded mobile games that reside on the device itself.

Nguyen (2007), a senior research analyst at Gartner, says that 'given the ubiquity of mobile phones in many markets and the ease of game-play, mobile gaming is expected to reach more of the global population than has been the case for traditional PC and console gaming.' This translates into an appealing platform for advertisers.

According to Pyramid Research (2009), global mobile gaming revenue rose to \$6.9bn in 2008, with the main driver being an increase from about 55 million users in 2005 to about 183 million in 2008. In the Entertainment Software Association (2009) study, 37 per cent of heads of

households reported that they played games on wireless devices such as a cell phone or PDA, indicating an increase of 20% on 2002 figures. Exact figures on the number of mobile gamers in South Africa are not currently available, but developments within the industry, such as the South African team winning gold in the mobile competition at the World Cyber Games in 2008, point to increased interest in mobile gaming in the sector.

Mobile use in South Africa is high. According to the International Telecommunications Union (ITU 2007), mobile users represent 90.1% of the total telephone subscribers in South Africa, reaching 87.08% of the adult population. The BuzzCity Mobile Gaming Survey 2010 provided a picture of the average South African mobile gamer. She (53 per cent were female) is between 25 and 30 years old (25 per cent), in the service industry and downloads games on average once a week (36 per cent) and plays games daily (44 per cent) or at least whenever she can (32 per cent) (BuzzCity 2010). The report also found that board/ brain/ puzzle games are the most popular among South African mobile gamers, with 22 per cent listing them as their favourite (BuzzCity 2010). Fifty-five per cent of South Africans surveyed in the TNS Mobile Life study indicated that they played games on their mobile phones (TNS Research Surveys 2011).

The Mobility 2011 study (World Wide Worx 2011) found that mobile Internet usage among South Africans above the age of 16 had increased substantially, with 39 per cent of urban South Africans and 27 per cent of rural users now browsing the Internet on their phones. The study did not include so-called "deep rural" users. The Mobility 2011 study by World Wide Worx determined that there are approximately six million mobile Internet users in South Africa, of which 4.5 million also have access to a computer (World Wide Worx2011).

In addition, while the use of cameras and music players on phones saw a significant gap between urban and rural users, with urban users indicating that they used these features more often than their rural counterparts, the gap was reversed when it came to games on the phone: 54 per cent of urban users enjoy these, compared to 65 per cent of rural users (World Wide Worx 2011). Eighty-eight per cent of those surveyed had the capability to play games on their handsets.

Rick Joubert, head of Mobile Advertising at Vodacom, says that South Africa has close to 9.5 million mobile internet users compared to the estimated 5 million desktop users (South Africa The Good News 2008). Joubert predicted that by the end of 2009 there would be more than twelve million unique users of the mobile web using a WAP or WEB-enabled handset, which is likely to be at least twice as many as the PC web (Joubert 2009).

Research into the effectiveness of mobile advertising has been promising. Dynamic Logic (2008) conducted over 30 AdIndex for Mobile research studies in the U.S. and the U.K. to measure the branding effects of mobile advertising campaigns and found that mobile advertising campaigns were effective in creating brand awareness. The studies found an average increase of 23.9 percentage points in mobile ad awareness and average increases in brand favourability and purchase intent of 5.4 and 4.7 percentage points, respectively, which supports the ability of mobile advertising to change consumers' attitudes towards a brand and to drive intent to purchase (Dynamic Logic 2008).

A study by van Wyk and van Belle (2005), in which 204 South African respondents were asked to complete questionnaires on their mobile gaming use, found that 75% played games on their

mobile phones. Significantly, though, the study also found that 88% of those who played mobile games only played games that came pre-installed on their phone. Those that played online mobile games represented only one per cent of the total, and those that played downloaded mobile games represented 11%. However, since the study was conducted in 2004/2005, it is plausible to suggest that the figures may have increased as devices have become more sophisticated and access to mobile games has become easier. The respondents were primarily youth between the ages of 16 and 25.

Van Wyk and van Belle (2005) focused on factors that could impact on the adoption of mobile gaming in South Africa. They drew on research by Pedersen and Nysveen (2002) on the theory of planned behaviour and its application in explaining teenagers' adoption of text messaging services, as well as on Pedersen and Methlie's (2004) work on the relationship between mobile data services, business models and user adoption.

The researchers (van Wyk and van Belle 2005; Pedersen and Nysveen 2002; Pedersen and Methlie 2004) identify two main factors that impact the adoption of technologies, namely subjective norm and facilitating conditions. They divide subjective norm into external influence, interpersonal influence and self-control. These sub-factors deal with the way personal beliefs and perceptions as well as peer and social pressures influence adoption.

Facilitating conditions deals with issues related to cost, awareness of a service, availability of a service, support for the service, security and service compatibility (van Wyk and van Belle 2005).

In traditional mobile games, puzzle and casual games tend to dominate the market because of their small size and ease of play, but more sophisticated games are slowly adapting to the environment. The key is to ensure a hook to get users to start playing and a solid interactive gaming experience to keep them playing. Greystripe's GameJump.com Mobile Game Consumer Insights report (2006) the top five mobile games as: Texas Hold'em (Casino); Adventure Boy in Zoozoo Land (Adventure); BlackJack (Casino); Aqualife (Action); and SuDoKu (puzzle). When designing an advergame, advertisers and game developers alike will need to investigate the appeal of successful mobile games to ensure that the advergame has appeal for its audience.

One technique is to create context-aware applications that integrate user relevant information into the game. In Dodge's Race the Pro's advergame, players must enter their zip code before playing the game. Virtual billboards for automotive dealerships located near the player's real-world location are then integrated into the game play (Balasubramanian, Karrh and Patwardhan 2006). In addition the game periodically uploads real NASCAR race times into the computer-controlled cars. The ability to insert placements in on-line game environments allows sponsors and game publishers to customize/update messages, and to assess their impact in real time (Balasubramanian, Karrh and Patwardhan 2006).

Wu, Mitchell, McCaffrey, Finney and Friday (2004) proposed a mobile multiplayer context-aware game called Real Tournament, which gathered real-time contextual information such as location and orientation from the player and injected it into the game engine to generate game events. They felt that offering a context-aware game would make interaction with the computing device more natural and increase the comfort level of the game player allowing

him/ her to concentrate on the game content (Wu et al. 2004). This type of application could be adapted for advergames.

The mobile environment is attracting increased interest from advertisers. Already rich media animated ads have started to appear on South African mobile phones, with cellular networks leading the way. Vodacom has used its iconic Mo the Meerkat mascot in its mobile promotions which feature audio, animation and text. Advergaming could take the concept one step further and leverage the concept of viral marketing.

## 2.3 Viral marketing

The Subjective Norm factor identified above is of particular relevance in terms of the potential viral marketing function of advergaming in general and mobile advergaming in particular. Viral marketing, as a concept, has evolved from a traditional marketing term, Word of Mouth (WOM), which refers to 'oral, person-to-person communication between a receiver and a communicator which the receiver perceives as a non-commercial message, regarding a brand, product or service' (Wiedemann 2007).

Ferguson (2008) says the difference between viral marketing and WOM is one of cause and effect. "Viral marketing – which might take the form of influencer marketing programs, community-building portals, viral videos and street-level guerrilla campaigns –builds awareness and buzz; it's the cause. Positive WOM, which theoretically leads to trial and acquisition, is the effect" (Ferguson 2008).

Research by Pruden and Vavra (2004) shows that above-the-line media, of which WOM is a part, provide the most effective way of creating awareness in many markets. Their research

found that customers ranked WOM the highest in terms of the techniques used not only to gather information but also to make purchasing decisions (Pruden and Vavra 2004).

Quoting Helm (2000), Porter and Golan (2006) emphasise that viral marketing can be described as 'a communication and distribution concept that relies on customers to transmit digital products via electronic mail to other potential customers in their social sphere and to animate these contacts to also transmit the products', in a similar way to a virus, but with a positive effect for the company.

Porter and Golan (2006) expand on Helm's definition in order to make the concept applicable to non-digital products as well. Drawing on the work of Welker (2002) they define viral marketing as 'strategies that allow an easier, accelerated, and cost reduced [sic] transmission of messages by creating environments for a self-replicating, exponentially increasing diffusion, spiritualization, and impact of the message'.

Many online advergames are small enough to be emailed from user to user, thus spreading the game and the brand message quickly and with greater credibility. M & M's Flip the Mix game is 2.34Mb, and can easily be shared among users with broadband connections. Similarly American Airlines' Chair-iots of Fire is 3Mb. However, this easy movement from user to user is impractical in the South African environment since broadband Internet access is not ubiquitous. According to Gurău (2008) 81% of players will email their friends to try a good game and this should extend to the mobile environment as well. Current statistics on broadband use in South Africa shows that the penetration rate is currently hovering at around seven per cent, made up mainly of around two million Vodacom subscribers, 700 000 Telkom ADSL users, and 700 000

MTN broadband users (Vermeulen 2010). This shows just how far behind South Africa lags in terms of access, especially in comparison to the statistics on broadband penetration in The Organisation for Economic Co-operation and Development (OECD) countries as of June 2010 (Vermeulen 2010), compared to leading countries. The OECD's average fixed line broadband penetration rate stands at 24.9 per cent in comparison to SA's 1.4 per cent. Even SA's wireless broadband penetration rate of just over 5.5 per cent is low in comparison to the 36.7 per cent average of the OECD countries. Despite this recent studies show an increasing use in mobile Internet access (World Wide Worx 2011).

## 2.3.1 The Hotmail Model of Viral Marketing

The principles of viral marketing assume that a message relayed by a trusted and known person such as a friend is more persuasive than those disseminated by an unknown or impersonal corporation. An advergame recommended by a friend could theoretically thus enjoy greater popularity and better brand recognition and recall.

The free email service Hotmail (www.hotmail.com) is often used as the model for successful viral marketing (Porter and Golan 2006; Fattah and Paul 2001). The model proposes the following five aspects in order for viral marketing to be successful: (1) free products or services, (2) easy transmission, (3) exploitation of common human motivations, (4) use of existing social networks, and (5) use of others' resources and infrastructure. Wilson (2000) added scalability to this same list of requirements for success in viral marketing, stating that businesses should be prepared for rapid growth if they are to implement viral methods. Another example that demonstrates the success of this model is that of GMail (http://mail.google.com).

Porter and Golan (2006) added Gladwell's (2002) concept of stickiness to the analysis of viral marketing techniques. Stickiness is about memorability. A "sticky" viral message can create change and can spur someone to action (Porter and Golan 2006) such as playing a game, passing on a game to a friend or buying a product.

Understanding why and under what circumstances a person will pass on a viral marketing message is important for advertisers wanting to leverage viral marketing as a tactic. Dobele, Lindgreen, Beverland, Vanhamme and van Wijk (2007) connected the use of emotion in viral ads to the success of those ads and analysed the effect of six emotional appeals, namely surprise, joy, sadness, anger, fear, and disgust on the effectiveness of the viral ad. According to Dobele et al.'s (2007) findings, in order to be effective, viral messages needed to contain the element of surprise, but that element alone was not enough to guarantee message success and needed to be combined with other emotions.

The study also found that the effectiveness of the viral message was moderated by gender, with disgust-based and fear-based campaigns being more likely to be forwarded by males than females (Dobele et al. 2007). In addition, the message must capture the imagination of the recipient and be clearly targeted, while achieving fit between a campaign and the featured emotions. The combination of these attributes offers an increased chance of forwarding (Dobele et al. 2007). The study focused on viral video advertisements rather than on advergames per se, however.

Evaluating the effect of viral marketing is difficult, but some companies are building measures into the campaigns themselves to assist them in determining the effectiveness of their

campaigns. Ferguson (2008) cites Swiss computer peripheral manufacturer Logitech as an example. Logitech promoted their viral campaigns for a trio of advergames hosted on its web site. Players of its Ball Balancer, Jelly Jumper and Jellybattle games are prompted to register their e-mail addresses and receive traceable discount coupons for unlocking higher game levels (Ferguson 2008). This allowed the company to measure the success of the campaign.

Ferguson (2008) warns, though, that viral marketing is not "a magic bullet" and that building true customer loyalty cannot be achieved through word of mouth alone. He advises that the viral campaign must connect at the front end of a company's customer strategy, open a doorway into customer data collection, and then connect on the back end to engage the most valuable segments of the target audience. "Viral content that does not encourage identification or dialogue is just mass marketing tarted up for the digital age" (Ferguson 2008). He advocates using viral marketing to build awareness and trial behaviour and capture customer information through identification. Companies can also use interaction with their customers through viral marketing to feed customer ideas into the product development cycle (Ferguson 2008).

In the Lee and Youn study (2008), only 35% of the advergames analysed used some form of viral marketing incentive to urge players to pass along the games to friends. Examples of referrals included "tell your friends," "challenge a friend," or "email this game to a friend" (Lee and Youn 2008).

Interestingly, the same study also found that almost 80% of the advergames analysed did not require the player to register to play the advergame and only five per cent required game

players to provide personal information such as name, age, gender, and email address. This is contrary to Ferguson's (2008) principle of identification as a part of viral marketing.

## 2.3.2 Viral marketing in the mobile environment

Viral marketing has been extended into the mobile environment, where it is referred to as mobile viral marketing (MVM). In a study by Wiedemann (2007), 70% of the 44 experts interviewed for the study indicated that MVM as a form of interpersonal communication is an important feature of a mobile marketing campaign. The research also demonstrated that recipients were more likely to participate in a mobile campaign if they received the mobile marketing message from familiar communicators (Wiedemann 2007). This proposition is confirmed in a survey by Skopos (I-Play 2006), in which 30% of the surveyed population of 2 500 indicated that a friend's recommendation would motivate them to download a mobile application.

Conversely, a Sharpe Partners viral marketing survey (Sharpe Partners 2006) found that only five per cent of those surveyed would refuse to share branded content with friends and over 40 per cent were more likely to forward branded content. It also found that 63 % of the respondents share content at least once a week and 25% share daily or almost daily, with as many as 75% of the respondents forwarding this content to up to six other recipients.

This aspect of viral marketing – the credibility associated with a friend's recommendation – is linked to the concept of Subjective Norm as proposed by van Wyk and van Belle (2005), in that social or interpersonal pressure plays a role in the adoption of new technologies such as mobile applications. This makes advergaming an attractive tool for advertisers trying to overcome the

message clutter inherent in modern life, if they are able to harness the effect of social pressure positively. Wiedemann (2007) also points out that the cost of MVM campaigns for companies is relatively low in comparison to other forms of marketing. An advergame has the potential to become a form of viral marketing, which is where the potential for mobile advergaming becomes most attractive.

## 2.3.3 Community, Viral Marketing and Advergaming

The impact of the growth of social media, defined as sites such as Facebook that allow social networks to connect and communicate, should also not be underestimated as linking advergames to social media sites could increase the viral reach of such games (Kim 2009; Slagle 2007). When one considers that Cityville, a social game available through Facebook, has 46.5 million users, the potential of social media to reach a mass audience becomes even more prominent (AppData 2012).

The increasing importance of community among online and mobile users cannot be ignored (Weber 2009) and web-savvy brands such as Mini have taken this advice on board. According to Weber (2009), Mini included an ever-changing array of features on its site such as a build-your-own car configuration page; virtual factory tour; various games and screensavers; and special owners-only e-newsletters and community pages. They also kept track of what was being said on social media sites and adapted their strategy based on this feedback (Weber 2009).

Strutton, Taylor and Thompson (2011) conducted a study of electronic Word of Mouth behaviours and attitudes among generation X and generation Y consumers. The study found that, although there are structural differences in the media used to spread e-WOM - with Gen Y

more heavily engaged with social networking media and Gen X more reliant on email – the two generations' motivations and behaviours are strikingly similar. It can thus be inferred that social networks would be the most appropriate tool to engage generation Y and younger consumers with viral marketing techniques such as advergames.

## 2.4 Barriers to advergaming in South Africa

Currently advergaming as an advertising tactic is being used to complement existing marketing campaigns in South Africa. By means of an informal email conversation with advertising agencies around South Africa at the beginning of my doctoral research process I found that most had not heard of advergaming and those that had, were implementing it on a very limited basis. Formal research to test this was conducted as part of this study and verified these initial findings as discussed in chapter 4 and 5, although the use of advergaming has expanded since my initial exploration of the topic which began in 2007.

Advergames, which are thus just one small part of the whole spectrum, ultimately aim at increasing brand awareness and reinforcing existing brand associations. Advergames therefore need to be understood within the context of their broader marketing environment and in relation to the overall brand message being communicated.

As discussed above, advergaming is currently used in South African marketing campaigns on a limited basis to reach a clearly defined niche audience of affluent users. The reason for this, it could be argued, is that advergaming is an online strategy and Internet access within South Africa is relatively low (Goldstuck 2007). This research focuses on the following barriers to the use of advergaming to reach a mass audience: access, mobility, cost and education.

#### 2.4.1 Access as Barrier

Statistics on the access to Internet facilities in South Africa point to a lack of critical mass in this space (Goldstuck 2007). Just over 10% of the population has access to Internet facilities and of those, but only 650 000 have access to broadband Internet. This limits the market for advergaming in the online environment substantially, particularly in terms of the effectiveness of online advergames, which are hosted on a server. Dial-up users would experience bandwidth problems trying to access advergames online and even if they were able to download the game to their machines, they would be limited in terms of their ability to distribute the game to friends and family, as proposed in viral marketing. As a result, only a small minority of the South African population can access advergaming at present, making it a supplementary activation for most marketers.

## 2.4.2 Mobility as Barrier

Linked to this is the concept of mobility. Mobility can refer in this study both to the mobility of the device, that is, the ability of the device to move from one place to the next quickly and easily, and to the mobility of the advergame itself. The latter is important in terms of the application of advergaming to viral marketing. An advergame that is large in size would be costly and time-consuming to send via online or mobile Internet.

In the US environment, where advergaming is more prevalent and where 71.94 % inhabitants have Internet access and 23.94% have access to broadband Internet (ITU 2007), advergames are being used as viral marketing tools. Blockdot, a developer of advergames, claims a four to

five per cent click-through to a call to action at the end of a game (Hein 2006). This is significant when compared to a banner click-through rate of 0.21% as described earlier (Marketing Sherpa 2008). This call to action is often linked to an incentive such as competition entry to increase interest.

Currently, gaming is still associated with traditional PC and console games and mobile gaming in South Africa is relatively small, although it is growing. This potential, however, needs to be harnessed in order to leverage the potential benefits of advergames.

In order for an advergame to be distributed and accessed and, more importantly, to be used as a viral marketing tool, it must be small enough to be passed on from user to user at relatively small expense. Within the traditional fixed-line PC environment this would mean the need for small games of 1Mb or less, unless a robust broadband infrastructure were in place.

Mobile phone use might be the answer. However, Scott, Batchelor, Ridley and Jorgenson (2004) point out that in Africa, mobile phone demand is driven by voice as opposed to data. "Social uses such as keeping in touch with family and friends feature strongly. Benefits include a sense of wellbeing, improved income (e.g. arranging cash transfers from family members), and reduced risk (e.g. call for assistance)" (Scott et al. 2004). The growing interest in mobile Internet access as evidenced by the 2011 Mobility Study (World Wide Worx 2011), however, seems to point to the fact that this is changing as more South Africans gain access to data-capable phones.

Interestingly a study of 66 learners at a township secondary school in South Africa found that 92% had played a game on a cell phone while 53% do so on a typical day (Kreustzer 2009).

Mobile gaming thus has the potential to overcome the access issues associated with traditional fixed-line infrastructure.

However using a mobile platform as a means to distribute and host a game could limit the possibilities of the game play in itself because of the requirements in terms of graphics, size and control interfaces.

#### 2.4.3 Cost as Barrier

As mentioned earlier, cost is one of the most significant barriers to the widespread adoption of advergaming in South Africa. Related to access is the issue of cost, which impacts on the ability of the potential target audience to access the game platform. Access to games is dependent on the user having access to the technology infrastructure to play such games, usually a computer with an Internet connection or a stand-alone computer system or console.

The cost of PCs continues to be a problem although there has been some decline in pricing over the years. However, the link between the strength of the Rand in relation to other currencies such as the dollar and euro and the price of PC technology has meant that there have also been increases in costs over time.

Initiatives have been put in place to moderate the effects of these high prices. In 2010,

Vodacom announced the launch of its Linkbook offering, a low-cost compact computer

designed specifically to provide users with simple and affordable Internet access (Joosub 2010).

Internet access in South Africa in particular, as mentioned before, is small in comparison to

more developed countries where the digital infrastructure is almost ubiquitous. As James

(2001) points out, "Even with the emergence of digital as distinct from mechanical technologies

in the telecommunications sectors, issues of cost still dominate the task of supplying telephone access to rural areas, characterised more often than not by low average incomes and low population densities (urban areas, by contrast, are generally far better served by fixed line telephony)".

In the South African context this is a very real concern as telecommunications costs remain high. According to Genesis Analytics (2005), the country-by-country price comparisons indicated that South African telecommunications were frequently among the most expensive of the selected comparison group. The study found that:

South Africa was the most expensive broadband of all fifteen countries sampled, and was in fact more than nine times as expensive as the cheapest country surveyed. On domestic leased lines, on the data available, South Africa was the most expensive of twelve countries surveyed. (Genesis Analytics 2005: 2)

It also found that South Africa's ADSL and Internet Service Provider (ISP) fees were the highest of 13 countries surveyed and five times as high as the cheapest fees.

Fixed line Internet access through a PC is hampered by telecommunications costs in South Africa, although these have begun to decrease. "Prices for Internet access have gone down by a factor of two rather than 10 as expected. Indeed prices are still high in most of Africa outside a few North Africa countries and others like Senegal. South Africa is a most puzzling case where prices are still higher than even East Africa with its new found fibre" (Twinomugisha 2010). In addition to telecommunications costs, there is the issue of the cost of computer hardware and software, which can also be a barrier to Internet use.

Cost remains a possible barrier to mobile use as a result of the cost of data transfer on mobile networks. Vodacom, for example, charges between 19 cents and R1.85 per MB depending on the data package (Pieters 2010). This is in addition to the monthly subscription fee. A survey by TNS Research Surveys (Muller 2010) found that 56 per cent of metro adults said mobile phone companies had not been charging a fair price for their services while 27 per cent were satisfied with current rates.

Linked to the issue of cost is the issue of speed. South Africa's broadband Internet while an improvement over previous Internet access still does not compare with the broadband enjoyed in much of the rest of the world. In 2009, "Telkom suffered the embarrassment of seeing its 'high-speed' ADSL line beaten by an 11-month-old homing pigeon on the delivery of four gigabytes of data over 85 kilometres" (Deutsche Presse-Agentur 2010).

While barriers such as cost are acknowledged as impacting on the ability of advergaming to reach a mass audience, these will not be explored in the empirical portion of this research.

#### 2.5 Conclusion

This chapter has explored the existing literature on games as communication and on the use of advergames in particular to communicate messages. The theoretical framework of the study as described in this chapter draws on principles of game studies, narratology, advertising and marketing and the chapter has sought to synthesise these disparate theoretical fields into a cohesive framework for the study. As demonstrated through the exploration, games have the potential to communicate messages to selected target audiences quickly, easily and effectively but certain conditions need to be in place in order for this to happen. More research needs to

be conducted on the influence of advergaming on brand perceptions and associations. The literature is primarily international, rather than local and this study sought to address that gap by investigating the realities of the use of games to communicate messages in the South African context. The next chapter will explain the methods used in this study as well as the results of the national survey of advertising agencies, while chapter 4 will discuss the results of the content analysis and semi-structured group interviews that were conducted as part of the study.

# **Chapter 3: Research Design and Methods**

## 3.1 Introduction

The following chapter outlines the research design and methods used to investigate the use of games as communication and persuasion. While the study was primarily empirical in nature, it drew heavily on existing literature from a number of fields, as discussed in the preceding chapter. In addition to presenting the research design and methodology, this chapter also includes the results from the survey of advertising agencies, from which the interview questions were derived.

## 3.1.1 Research Question

The study used a variety of methods to investigate the research question, which was:

"How are advergames used to communicate messages about issues, products and organisations in South Africa?"

The question focuses on the message communication aspect of the advergames and seeks to investigate the ways in which advergames communicate messages through the techniques employed by the game developers and advertising agencies.

# 3.1.1.1 Hypothesis, Aims and Objectives

This study used an interpretivist approach, focusing primarily on qualitative data. However, a hybrid research design was used in order to investigate the objectives of the study, namely:

To identify the ways in which advergames communicate messages about issues,
 products, services and organisations

- To investigate the effectiveness of advergaming as a tool for increasing social issue
   and brand awareness
- To identify the obstacles to the use of advergaming as a viral communication tool in
   South Africa
- To propose guidelines to manage the obstacles to the use of advergaming as a viral communication tool in South Africa
- To develop a model to operationalise the use of advergaming as a viral communication tool in South Africa

The central hypothesis of the study was the belief that advergames in which the issue, product, service or brand advertised is integrated into the game play narrative are more effective than advergames in which the link between the game and the communicated message is merely associative and are therefore the better choice in mobile viral communication.

Using Winkler's (2006: 37) three categories of advergaming to categorise a variety of South African and international advergames and combining this with narrative theory (Aristotle 1989), this research explored the effectiveness of advergaming and more specifically whether the use of narrative improved the effectiveness of advergaming or if simple association was enough.

## 3.2 Research Methods

The three methods employed to investigate the research question were a survey by questionnaire, content analysis of selected advergames and three semi-structured group interviews.

## 3.2.1 Survey of advertising agencies

Firstly, a national survey by questionnaire of advertising agencies in South Africa was used to determine how advergames are currently being used and what the industry identified as the primary obstacles to widespread use of advergaming as a communication technique in South Africa. Du Plooy (2002) says that "a survey enables us to collect large amounts of data about variables, such as people's lifestyles, attitudes, demographics and motives." Mouton (2001) says that surveys "aim to provide a broad overview of a representative sample of a large population."

The sample was drawn from the BizCommunity database (www.bizcommunity.com) of advertising agencies, which is the largest South African marketing and advertising community online, currently listing 662 advertising agencies countrywide of which 431 had working email addresses. A response rate of 22,505 per cent was achieved, with 97 survey responses having been obtained.

The survey was distributed through email with a link to the eSurveys Pro site which hosted the survey embedded in the email. The survey by questionnaire was live for a period of four months, from September to December 2010. The questionnaire was divided into two sections. Section A was used to determine the nature of the advertising agency in terms of its activity in the online and mobile advertising space. Section B focused on the advertising executive's opinion about advergaming and its use as a communication tool in South Africa. It also requested the participant to indicate URLs to any advergames their agency had created or used. One open-ended question was used to determine the respondents' opinion about what needs

to be done to make advergaming a viable option as a brand communication tool in South Africa.

Statements on a likert scale were also used.

The data was then coded according to the identified categories and an analysis of the data to extrapolate descriptive statistics was conducted.

## 3.2.2 Content Analysis of South African Advergames

In order to determine how advergaming is currently being used in South Africa, a content and thematic analysis of selected South African advergames was conducted. This data was used to develop criteria for assessing advergames in terms of their approach to the use of narrative and to identify themes used in advergames. Given the relatively small extent of advergaming in South Africa, the selection of the advergames was based on availability and accessibility.

Information obtained from the survey of advertising agencies was used to identify the specific

Information obtained from the survey of advertising agencies was used to identify the specific advergames to be analysed. Five examples of advergames produced in South Africa were provided by the advertising agencies surveyed, although many of the respondents indicated that they had worked on advergames but could not provide the URL because either the advergame was no longer available online or confidentiality agreements precluded the agency from naming the games. Two of the identified games were selected, representing 40% of the total sample. An additional two advergames were chosen from the Viralchart rankings in order to ensure that the games analysed and used in the group interviews represented the breadth of advergame types as identified by Chen and Ringel (2006) and Svahn (2005). Only games which represented brands familiar to the South African audience were included. The games selected were linked to the Flora, KitKat, Police and BMW brands.

As du Plooy (2002) explains, content analysis can use a variety of units of analysis, including but not limited to physical units; syntactic units; thematic units; and propositional units.

For the purposes of this study, the core units of analysis were physical and thematic. A physical unit of analysis includes aspects such as "the medium of communication (e.g. radio), the number of pages, size and space in print media, time duration in broadcast media, audio-visual codes used in film and television, and nonverbal codes in interpersonal communication" (du Plooy 2002: 191). A thematic unit of analysis refers to repeating patterns of propositions or ideas related to specific issues.

Krippendorff (2004:59) identified the following aspects of content analysis:

- The frequency with which a symbol, idea, reference, or topic occurs in a stream of messages is taken to indicate the importance of, attention to, or emphasis on that symbol, idea, reference, or topic in the messages.
- The numbers of favourable and unfavourable characteristics attributed to a symbol, idea, or reference are taken to indicate the attitudes held by the writers, the readers, or their common culture toward the object named or indicated.
- The kinds of qualifications adjectives or hedges used in statements about a symbol, idea, or reference are taken to indicate the intensity, strength, or uncertainty associated with the beliefs, convictions, and motivations that the symbol, idea or reference signifies.
- The frequency of co-occurrence of two concepts (excluding those that have grammatical or collocational explanations) is taken to indicate the strength of associations between those

concepts in the minds of the members of a population of authors, readers, or audiences. (Krippendorff 2004:59)

The physical units of analysis (du Plooy 2002) identified and examined in this study included the type of game (e.g. casual, first-person shooter, puzzle etc.), the placement of the logo in the game, the use of advertising slogans related to the brand, the use of links to the brand web sites, and the use of incentives to distribute the game to friends and family.

The thematic units of analysis focused on the brand messages communicated through the game play, specifically around messages about the brand and its value in the consumer's lifestyle.

These were examined in terms of the emotional/rational framework that has been studied extensively in the marketing and advertising literature (Aristotle 1989; Copeland 1924; Miller and Stafford 1999; ) which postulates that consumers buy products for either rational or emotional reasons.

The rational appeal refers to "information processing models of decision making where the consumer is believed to make logical and rational decisions; such approaches are designed to change the message receiver's beliefs about the advertised brand and rely on their persuasive power of arguments or reasons about brand attributes" (Miller and Stafford 1999). Examples of the use of rational appeals in advertising are messages showing "a product's quality, economy, value or performance" (Kotler and Armstrong 1994 in Miller and Stafford 1999).

In contrast, according to Miller and Stafford (1999), emotional appeals are "grounded in the emotional, experiential side of consumption … [and] seek to make the consumer feel good about the product, by creating a likeable or friendly brand; they rely on feelings for

effectiveness." The selected advergames were categorised as using either rational or emotional appeals in their messages.

#### 3.2.3 Semi-structured group interviews

In investigating the effectiveness of advergaming as a communication tool, a series of semi-structured group interviews were conducted. According to du Plooy (2002), partially structured interviews contain standardised questions, but the interviewer is free to deviate and follow-up or use probing questions based on the respondent's replies and is provided with the latitude to move in unanticipated directions.

In order to compare findings among different target audiences for products advertised, three groups were selected. The first group comprised educated, over 30 year-olds drawn from an availability sample of the Nelson Mandela Metropolitan University staff. An email was sent to all staff at the NMMU on 1 February 2011. The inclusion criteria for the 30+ age group was staff at the NMMU in the appropriate age group, who own a cell phone and who make use of mobile social media services such as Facebook.

There are 1540 permanent staff members at the NMMU. Thirteen responses were received.

Participants were then selected based on their representativeness of the total population.

According to the 5 August 2009 NMMU Staff statistics (Sheppard 2009), the 1530 permanent staff members at the NMMU are comprised of 44.97% males and 55.03% females. The racial constitution of the staff of the NMMU is 3.46% Indian, 15.88% coloured, 22.88% African and 57.58% White (Sheppard 2009). The majority of permanent staff members (55%) are situated on the Summerstrand South Campus and 22% on the Summerstrand North Campus (Sheppard

2009). Academics account for 36.86% of the staff population. The participants were selected in order to ensure the closest match to the larger population. The group consisted of nine people.

Then two groups of students from the Nelson Mandela Metropolitan University were selected. The first group of students comprised a convenience sample of third year BA Media, Communication and Culture and fourth year MA in Applied Media students, who were assumed to be media literate and advertising savvy. This group comprised students from the LMC302: New Media and Information Technology and the LMC408: New Media Theory and Practice classes. Five students participated in the group interview. The poor response to the first group interview, resulted in a second group from the same sample being held. This second session saw an additional nine students participating. Unfortunately due to technical problems although nine completed the pre-game questionnaire, only four were able to play the games and complete the post-game interview. Thus the total number of complete responses for the media students' group was nine. The sessions were conducted by a trained research assistant supported by a technical expert to ensure that participants felt free to express their opinions and ideas since the primary researcher is the Head of the Department for these groups of students and her presence may impact on the data collected.

The second group of students comprised students from other Faculties, who had not studied media or advertising and who could therefore be considered to be less media literate than the primary group. Media literacy, in the context of this study, refers to a person's familiarity with media messages as constructed and mediated.

The criteria for inclusion in the student study was students, aged 18 – 25, who own a cell phone and who make use of mobile social media services such as MXit. This was to ensure that the group is sufficiently comfortable with technology to be a potential market for such a communication campaign. In addition a stratified sampling procedure was used to ensure that the group was representative in terms of gender and race. According to the Self-Evaluation Report (2007), in terms of its demographic profile the NMMU student body in 2006 was classified as 60% African, 25% White and 14% Coloured and Indian. The proportions of male and female students at the NMMU remained stable at 51% female over the period 2000 to 2005 but changed noticeably to 55% female in 2006 which is more in line with the other higher education institutions in the Eastern Cape Province.

The participants in all three groups were asked to first fill in a brand awareness questionnaire, with the aim of determining the level of awareness of each product before playing the advergames. The advergames selected were the Flora Seedman Game, the KitKat Have a Break Game Site, the Police Sunglasses Be Younique Struggle for Salvation Game and the BMW Pursuit Across Europe (PACE) game. They were selected on the basis of being representative of the level criteria proposed by Winkler (2006); each representing either an associative, illustrative or demonstrative level of brand integration.

The first section of the semi-structured interview asked respondents about their demographic characteristics and gaming use, based on information extrapolated from literature (NPD Group 2009). The second section focused on the respondent's awareness of the different brands prior to playing the games. The questions were designed to test both explicit and implicit memory

retrieval. Explicit memory retrieval involves "a deliberate effort on the part of the consumer to think back to an advertisement in an attempt to recall the ad information" (Shapiro and Krishnan 2001). Implicit memory retrieval is "automatic in nature and does not rely on consumers deliberately searching their memory for a previously viewed advertisement" (Shapiro and Krishnan 2001).

They were then asked to play the advergames for a period of 25 minutes per game, the average number of minutes that recipients play games received via promotional e-mail (Kretchmar 2004).

After this the participants were asked to participate in another semi-structured interview questionnaire designed to measure their level of brand awareness after playing the advergames as well as their feelings towards the advergames and the brands themselves as a result of playing the advergames.

Through this aspect of the research design, the thesis aimed to identify the elements necessary for an effective advergame that could be used in a viral communication campaign in the mobile environment.

The data gathered from the three semi-structured interviews was then coded and analysed.

Findings were differentiated by group (media students, non-media students and staff) as well as analysed for general trends across all three groups. The nature of the advergames and the relationship with the findings from the interviews was also assessed in order to gauge which types of advergames received the most positive responses and the greatest brand recall.

The data from the survey, interviews and content analysis was then analysed to identify common themes and issues.

#### 3.2.3.1 Ethical Considerations

Ethical clearance for this study was approved by the Nelson Mandela Metropolitan University

RTI Higher Degrees sub-committee of the Faculty of Arts Research, Technology and Innovation

Committee. The ethics clearance reference number for this study is H10-ART-JMS-001.

Due diligence was paid to the conventions of ethical research during this study, particularly in terms of the rights of participants. Participants in both the survey and the semi-structured group interviews were informed of their rights, including the right to withdraw at any point during the study, prior to participation. Informed consent was obtained electronically from the advertising agencies and in writing from the semi-structured interview participants.

The LMC302: New Media and Information Technology and the LMC408: New Media Theory and Practice classes were used for the media student groups. Their participation was voluntary. The researcher was aware of the possible ethical issues involved with using this group in terms of her role as Head of the Department of Journalism, Media and Philosophy. As such a research assistant was trained to take these sessions in order to avoid students feeling pressured to participate or to respond in a particular way.

Students from other faculties and staff members in the 30+ age group were asked to volunteer to take part in this study through an email invitation sent to all staff and all students. They could refuse to take part in the study at any point during the study, including after exposure to

the advergames. A detailed interview guide was presented to participants to ensure that they understood the nature of the research and their role in it as well as their rights as participants.

They are not identified in the research report except through demographic information. The information provided refers only to their demographic profile, for statistical purposes only, and their brand knowledge and recall and is therefore not sensitive information.

The advertising agencies are not identified by name. A detailed introduction was included with the questionnaire to ensure that respondents were aware of the nature of the research and their role in it. The information represents the opinion and experience of the advertising agency as a whole rather than that of the individual.

## 3.4 Constructing a model of advergaming in South Africa

Drawing on data from all facets of the study, a theoretical model was then constructed to assist communicators in operationalising the use of advergaming in the mobile environment in South Africa. It was necessary to weigh up and balance the needs of the gamer/ consumer against those of the advertiser/ communicator in order to create the model, as these differing needs were in some instances in conflict with each other. The model was measured against Porter and Galen's criteria for viral marketing to gauge its effectiveness in overcoming the obstacles to advergaming as a viral communication tool in South Africa. Practical testing through a pilot roll-out of the model did not form part of this study.

## 3.5. Delimitations of the Study

This study focused on the recall and retention of messages communicated through selected advergames of specific groups of people drawn from the NMMU staff and student population

and is therefore not representative of the broader South African population. It will, however, be possible to draw certain conclusions from the study given that the participants' belong to clearly defined generational groups (baby boomers, generation X, digital natives).

While the thesis proposes one possible model for the use of mobile advergaming in South Africa, practical testing through a pilot roll-out of the model does not form part of this study. The next section focuses on the results of the national survey of advertising agencies, which were used to design the interview questions used in the three group interviews.

## 3.6 Results of the National Survey of Advertising Agencies

As stated earlier, 97 of the 431 advertising agencies contacted completed the survey, representing a response rate of 22.505%. The first part of the survey focused on information about the advertising agencies themselves. The majority (46.67%) had been existence for 10 years or more. Almost 74% of respondents indicated that they had a dedicated online division responsible for digital and online advertising initiatives such as Web site banner advertising and more than 88% stated that they provide online advertising services to clients such as the creation and distribution of banner adverts. Just over 76% provide mobile advertising services to clients such as the design and implementation of SMS advertising campaigns.

Most of the respondents (73.33%) had heard of advergaming prior to the survey and 57.33% had played an advergame. As expected use of advergames in marketing campaigns in South Africa was relatively low, with just under 30 per cent (28%) saying they had made use of an advergame as part of an online campaign for a client.

There was mixed opinion about the challenges to widespread adoption of advergaming as a brand communication tool in South Africa, with almost equal numbers of respondents citing access, cost, education and lack of interest as the core obstacles. See the table below for details:

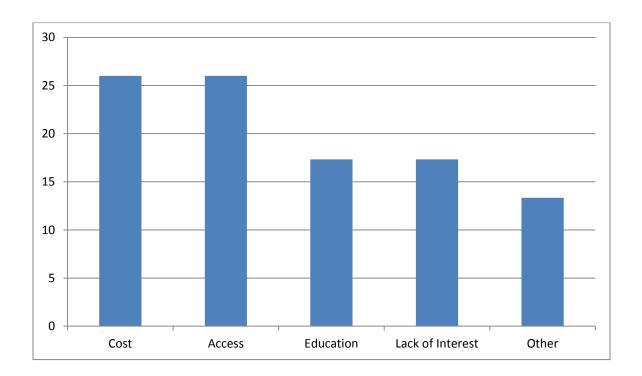


Figure 2: Challenges to widespread use of advergaming in SA (expressed in percentages)

Those that indicated "other" as their response to this question were asked to elaborate. The responses were intriguing, with a number of those surveyed indicating that the mind-set of marketers needed to change in order for advergaming to become more accepted and used more widely.

Respondent 1, for example, said "not cost, as very simple and cost effective solutions abound.

And mobile is making Access not a problem either. I think the main challenge is the mind-set of marketers - it's far easier to run a radio add (sic!) than to conceptualise a successful online

media campaign, even though online will always be cheaper." (verbatim response) Another respondent said, "Clients are very reluctant to invest in stuff that isn't tried and tested." The respondents also linked this to the need for demonstrated Return on Investment (RoI). The challenge is "defined ROI. Marketers simply don't know enough about the medium, so they lump this into the risk basket, along with most digital offerings," one respondent said. This was echoed by at least one other respondent.

Other challenges identified included the stickiness of the game – that is, its ability to keep the user playing – time for development and testing, the dearth of free content available on the Web and the mobile Web, quality of advergames, advertising depth and diversity, and the feeling that "people with the skills are not briefed far enough in advance, they should be involved in the creative strategy upfront to determine what is possible or not". The full results are listed in the table below:

Verbatim Response	
	Percentage
not cost, as very simple and cost effective solutions abound. And mobile is making Access not a problem either. I think the main challenge is the mindset of marketers - it's far easier to run a radio add (sic!) than to conceptualise a successful online media campaign, even though online will always be cheaper.	0.71%
Awareness	0.71%
Stickiness of game Often the cost only allows for simple development and not for mobile optimization.	0.71%
Time for development and testing	0.71%
none really	0.71%
there is so much free content available on the web and mobile web that the advergame would have to be extremely compelling to attract interest	0.71%
Time - business people do not have time to play advergames on a site.  However, something that can be distributed and "hosted" within an email would be ideal. This type of silly amusement game was popular a couple of	0.71%

years ago ex. the "Kill your boss" game, the "Ways to seem like you're working" game with a nifty right-click to Excel sheet built in etc.	
ROI?	0.71%
I don't know what advergaming is	0.71%
Since I've never heard of it, I'm unable to answer.	0.71%
1. Quality of Games 2. Relevance of advertising 3. Poor Engagement 4. Advertising depth and diversity	0.71%
People with the skills are not briefed far enough in advance, they should be involved in the creative strategy upfront to determine what is possible or not.	0.71%
Defined ROI. Marketers simply don't know enough about the medium, so they lump this into the risk basket, along with most digital offerings.	0.71%
Uncertainty about what will happen when clicking on the banner game (Same as Education?)	0.71%
The public is spoiled for choice with Facebook offering an endless stream of games and applications not tom mention many others	0.71%
Bandwidth constraints	0.71%
Spam walls for office environment and corporate culture of doing work rather that playing games at work, this will affect a percentage of your target market	0.71%
Clients are very reluctant to invest in stuff that isn't tried and tested.	0.71%
too time consuming	0.71%
Mistrust	0.71%

Sixty-three respondents provided suggestions as a response to the open-ended question, "What do you think needs to be done to make advergaming a viable option as a brand communication tool in South Africa?" These responses are discussed under the following themes:

## 3.6.1 Theme 1: Education

One of the most prevalent themes in this section was the need to educate the market both from an industry and a consumer point of view with 20 of the 63 respondents indicating this

should be addressed to improve the viability of advergaming in South Africa. Eight of the relevant responses are included in the table below:

3	Focus on console & mobile platforms, and increase awareness of free advergaming
	offerings. PC gaming (online access in particular) does not have sufficient uptake
	locally to be a viable option.
17	We need to educate the general populace on the fun aspects, and to play the game with
	an open mind. Also, since 80% of SA internet users access the world wide web on their
	phones, we need to be focussing on mobi games more, especially when a game is
	designed to promote a brand.
19	Train more design and communication professionals in the technology, to be able to
	design and build the games. But mostly, to educate / introduce to 'older' production
	managers and creative directors, to show them how this medium can be an effective tool.
	I think many of the decision makers in the industry / agencies a) simply do not know
	about this medium, b) do not trust it as an effective investment of time and resource, c)
	see it as more expensive and time consuming than it actually is.
32	Corporates and brands need to be educated on the value they offer. Online is still a
	"mystery" to many executives, who think it - and advergaming - is merely a "fad" that
	young people are going through!
40	Advergaming itself needs to be advertised to become a better known media channel
	option for advertising agencies to use, as Advertising Managers and Media Strategists
	need to see the benefits of this form of a brand communication tool. Successful

	advergaming (with stats attached) should be promoted with PR to create a hype about it.
44	Rich and creative advertising games will draw consumers' attention in a new and exciting
	way, but there is still a lot that needs to be done to help marketers, agencies and
	publishers understand what they can do/achieve in the digital space. They need to
	understand how it works and what it can do for their and their clients' brands. Lack of
	knowledge and understanding mean that a lot of marketers, agencies and publishers are
	ignoring digital media all together. Access to the internet, high costs and slow bandwidth
	speeds all play a huge role here as well. For rich media and tactics like advergaming to be
	adopted all of these areas will need to be addressed (which all the new cables will
	hopefully achieve sooner rather than later).
47	We simply need case studies that show how a campaign moved from business objective,
	to concept, to advergame, to results. The increase in PC web access will also help. There is
	an almost 100% cell phone penetration, but again, this goes to back to point "what will a
	brand achieve, by having 100 000s of users playing a branded advergame"? The question
	is then, so what was the ROI? As a simple branding tool, the value is easy to see, but
	organisations are plugging money into actions that they can link to sales. I've also seen
	educational games, like Visa's financial literacy football game, but the game was very
	weak and children would quickly disinterest themselves from the game.
<u>56</u>	Educating ad agencies on all the possibilities and specific ways to integrate an advergame
	into their "normal" campaigns. It seems that everyone wants to make games, but as soon
	as you ask them on what platform or which devices, they lose interest because they did
	not plan properly or they can't spend the time in research. TV, print and radio is proven,

"easy" and don't require too much resources. Clients need to know that their main audience all have mobile phones, most (if not all) spend oodles of time in social media and that they actually like to choose which brands to interact with and not being force fed by traditional media.

Education was thus an important theme among the respondents of the survey.

## 3.6.2 Theme 2: Mobile Networks

The need to explore mobile possibilities and further to improve mobile offerings through network service providers was highlighted by eight of the respondents. "If you could develop advergaming on social platforms and allow it to gain popularity via social media or on mobile phones. Traditional gaming (psp, Nintendo Wii, x box ...) is too expensive for the vast majority of south Africans and that limits the number of people who will view such integrated ads," one respondent explained.

## 3.6.3 Other Concerns

The issue of bandwidth was also highlighted as a possible area that requires attention was cost of development and the need to ensure that advergames are engaging as well as meeting the requirements of the client. As one respondent said, "Advergaming is not the total solution in and of itself. It must be within an overarching digital and brand strategy that has support throughout the year, on-going commitment from client budgets, new features, active community development and management, on-going and constant advertising, and a medium

to long term approach. Short term approaches do not produce results. Client objects also need to be clear... Is it data capture? Driving sales? Loyalty? Etc.".

Another respondent added, "It is a viable option, but it doesn't always deliver on the objectives of the task and therefore may not be included in the plan. Cost is variable - depending on the development required. But so often brands to not promote the game once it has been created. Mobile games are very popular - games should be developed with mobile in mind - the cost however increases when you make it accessible to more phone users (optimised for various phones)".

Regulation was also a concern, as one respondent indicated that stricter mechanisms need to be put in place to regulate the mobile environment. "CPA (consumer protection act) and POPI (protection of personal information) will aid this, but abuse of online and mobile marketing is the biggest enemy of campaigns that do no harm and operate as a value-add to the consumer. Subscriptions services should be completely eradicated in my opinion and better practices to disallow spam need to be adhered to."

Another respondent suggested that the industry should "publish engines and build-your-own-game solutions to let the market create their own". Such a solution already exists with SkillPod Media's Advergame Creator site (<a href="www.advergamecreator.com">www.advergamecreator.com</a>), which provides companies with a selection of existing games which they can customize with their own logo. The site allows advertisers to name the games, add logos and products to the various game screens and change the colour schemes (game specific). Advertisers are able to access reports, which detail the number of game plays by each player, clicks on banners, high scores logged and user

registrations. The solution also provides distribution code and a simple user registration feature. Users of each game can log their high scores and the top 10 scores are displayed within the game. Games include Popper, Tritris and a DriftRacing game.

## 3.6.4 Perceptions of Advergaming in South Africa

The next part of the survey listed statements with which the respondents needed to indicate their agreement or disagreement on a five-point likert scale, from strongly agree to strongly disagree.

More than 60 per cent of respondents either agreed (41%) or strongly agreed (21%) that they were positioned to offer advergaming as a potential medium for brand communication to clients. Twenty-two per cent neither agreed nor disagreed, while six per cent disagreed and a further eight per cent strongly disagreed.

Respectively 37 per cent and 49 per cent strongly agreed and agreed with the statement, "Advergaming has the potential to provide a rich, interactive experience of a brand to consumers." Six per cent indicated that they neither agreed nor disagreed, while only six per cent combined indicated that they disagreed or strongly disagreed with the statement.

Almost 75% of respondents disagreed or strongly disagreed with the statement that "Advergaming in South Africa cannot work", while only three per cent combined agreed or strongly agreed with the statement. Twenty-one per cent were neutral. Despite this close to 55% of respondents felt that advergaming can only appeal to a small percentage of South African consumers. Twenty-one per cent disagreed and eight per cent strongly disagreed while 16% were neutral.

Similarly, 30% and 46% strongly agreed and agreed respectively that advergaming will remain a complement to other advertising strategies rather than a core advertising medium in South Africa. Eight per cent disagreed and 14% neither agreed nor disagreed.

Advergaming was almost unanimously thought to be a viral marketing tool with 41% and 50% strongly agreeing or agreeing with the statement. Five per cent were neutral and only two per cent disagreed.

The survey also sought to determine the perceptions about how advergames should be structured in order to be successful. The statement, "In order for an advergame to work, there must be some kind of narrative or story to the game", saw the majority (26% and 29% respectively) strongly agree or agree with 28 % remaining neutral. Two per cent strongly disagreed that narrative was necessary for an advergame to succeed and 13% disagreed.

The majority of advertising executives surveyed disagreed (42%) or strongly disagreed (26%) that merely adding a logo to an existing game was enough to create an advergame. Seventeen per cent neither agreed nor disagreed and eight per cent and five per cent agreed or strongly agreed respectively.

The opportunity for the player to engage with the product, service or brand in a manner similar to real-life was highlighted as an important aspect of advergaming with the majority of respondents either strongly agreeing (25%) or agreeing (40%) and 22% remaining neutral.

Close to 85% of respondents recognized advergaming's ability to communicate educational messages about issues such as HIV/AIDs, examples of which have been implemented in India.

ZMQ created the Freedom HIV/AIDS initiative which comprises four mobile games targeting different mind-sets and psychologies of mobile users. "There have been effective download of 10.3 million game sessions in 15 months from its launch. As reported, more games have been downloaded in smaller cities and towns in India. The prime reason of this phenomenon is that these areas are media dark areas and have very less access to information. People here preferred to download free mobile games to know more about HIV/AIDS" (ZMQ 2008).

When the product is an intangible issue and what is being sold is health, the need to communicate with an audience in an intimate way that that is able to reach audiences despite the bombarding of traditional advertising becomes even more important. Traditionally, health communication organisations, like CANSA have used Social Marketing as the basis of their campaigns to reach the broader public with messages about public health (Scarlett Epstein 1999; Siegel 1998).

Social marketing is concerned with the

application of marketing technologies developed in the commercial sector to the solution of social problems where the bottom line is behaviour change [and involves] the analysis, planning, execution and evaluation of programs designed to influence the voluntary behaviour of target audiences to improve their personal welfare and that of society. (Andreasan 2005)

These programmes usually involve traditional public relations, marketing and advertising techniques such as television advertising or media relations or a combination.

Weinrich (2006) explains,

[social marketing] has evolved from a one-dimensional reliance on public service announcements to a more sophisticated approach which draws from successful techniques used by commercial marketers ... Rather than dictating the way that

information is to be conveyed from the top-down, public health professionals are learning to listen to the needs and desires of the target audience themselves, and building the program from there. This focus on the 'consumer' involves in-depth research and constant re-evaluation of every aspect of the program. In fact, research and evaluation together form the very cornerstone of the social marketing process. (Weinrich 2006)

Advergaming is an area that has not yet been explored in depth in terms of health communication in South Africa, but there seems to be consensus among the advertisers surveyed that it could provide valuable opportunities for health communicators.

The assessment of the extent of the use of advergames by advertising agencies shows that only 20% (10% and 10% respectively) of respondents are currently using advergaming as part of their advertising campaigns to clients, while 53% indicated that they were not. Thirty-five per cent of those surveyed indicated that they were currently investigating using advergaming as part of their advertising campaigns and 29% were neutral. An almost equal number (34%) of respondents disagreed that they were investigating using advergaming in their campaigns.

There were mixed opinions about whether or not advergaming will become an important part of advertising in South Africa, with 13% and 20% strongly agreeing and agreeing respectively, 49% remaining neutral and 14% and 2% disagreeing or strongly disagreeing.

However, the respondents showed far more consensus in terms of the statement, "the mobile platform can provide a means to reach a wider audience with advergaming". Ninety-two per cent of respondents either strongly agreed or agreed and eight per cent were neutral.

The survey also yielded data on existing South African advergames (see addenda), which was used as part of the selection criteria for the content analysis of advergames in the next chapter.

## 3.7 Conclusion

This chapter has focused on an explanation of the research design and methods used in this study as well as an analysis of the survey results from the survey of advertising agencies in South Africa. The results point to an interest in advergaming as a tool for communicating messages among advertising agencies but have also highlighted the challenges faced by those wanting to implement such a strategy. It is also clear that there has been use of advergames by South African agencies and advertisers, but always within the context of a larger advertising and marketing campaign and more as a value-add than a message communication tool.

The following chapter focuses on the result of the content analysis and semi-structured group interviews, aiming to integrate the understanding gleaned from the literature review with the empirical data from the survey, semi-structured group interviews and content analysis.

# **Chapter 4: Results**

Building on the initial results of the survey explored in Chapter 3, the results chapter brings together the findings from each of the methods used in the study and aims to provide an overview of advergaming in South Africa as well as to provide possible recommendations for the expansion of advergaming as an advertising medium in South Africa. These however will be expanded upon in the next chapter, which will focus on Conclusions and Recommendations.

## 4.1 Content Analysis of Selected Advergames

Four advergames were identified through the survey process, however not all of them proved suitable for the analysis. Initially all four of the advergames selected were South African advergames, however it became clear after analysis that all of them fell quite clearly into the associative level as proposed by Chen and Ringel (2006) and therefore only one could be selected for use in the study. Two of the games were also too short, lasting less than a minute in game time and without multiple levels. These were therefore discarded. Another two were discarded because they were advergames linked to sports teams rather than to specific products and therefore did not have sufficient similarity with the other product-related games. These were also discarded. As the aims of this study included identifying the most effective level of brand or message integration, it became necessary to expand the criteria for the selected advergames and to use Viralchart (<a href="https://www.viralchart.com">www.viralchart.com</a>) to select an additional two games for inclusion in the study. The games chosen were the Flora Seedman Game, the KitKat Have a Break Game Site, the Police Sunglasses Be Younique Struggle for Salvation Game and the BMW Pursuit Across Europe (PACE) game.

## 4.2.1 Flora Seedman Love Your Heart Game

The Flora Love Your Heart (www.florahearts.co.za) campaign is an integrated marketing campaign aimed at associating the Flora product line with heart health and general well-being. The campaign is communicated through television advertisements, print advertisements, branded events such as the Flora-sponsored Comrades Marathon and a web site, which includes an advergame.

Flora's Seedman Love Your Heart game is a branded version of classic arcade game Pacman (Namco 1980) in which a round yellow face with a large mouth eats small Pac dots around a maze-like course while being pursued by four multi-coloured ghosts, called Blinky, Pinky, Inky and Clyde. (see Figure 3)

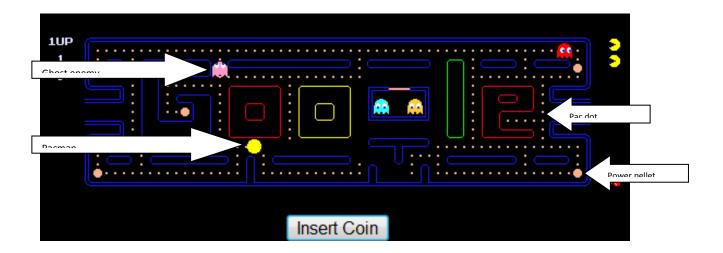


Figure 9: The original Pacman (Namco 1980)

Flora's adaptation of the game sees the Pacman character replaced by the head of Flora's Seedman mascot who must eat all the seeds in the maze while avoiding being caught by the enemies, which are unhealthy food choices such as burgers or steaks.



Figure 10: Screenshot of the instruction screen for the Flora Seedman game



Figure 11: Screenshot of level 1 game screen

The Seedman game features multiple levels. Level one (see Figure 5) uses the Seedman mascot to collect seeds, which, the player is told, are rich in Omega 3 and 6. The Seedman must avoid the unhealthy foods. The maze looks like a hedged maze set in a country setting. In Level two (see figure 6) the seeds become good fat molecules and the unhealthy food becomes bad fats. The maze is designed to look like the inside of the body showing the arteries where the good and bad fats interact.

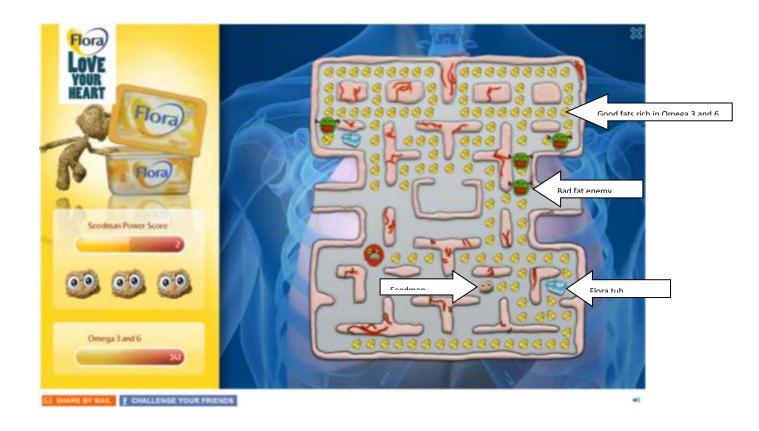


Figure 12: Screenshot of level 2 game play

In terms of the physical units of the game (du Plooy 2002), the Flora Seedman game can be classified as an arcade game.

The game is embedded in the "Love Your Heart" Web site. The brand mascot, Seedman takes on the pacman role and seeds replace the traditional pacman dots, placing the brand at the centre of the gameplay. The Flora product – different tubs of Flora margarine representing the different products – fulfils the role of the power pellets in the original Pacman game. The logo and slogan are visible on the left hand side of the screen and the Seedman mascot is seen interacting with the product itself outside the game.

In terms of incentives, the game appeals to the sense of competition in that the player can share the game with peers through Facebook or share the game through email as well as submitting their score for the leader board. In addition the game's connection with the well-loved Pacman games of the 1970s and 1980s resonates with a target audience in its 30s and 40s who would remember playing those games in their teen years. This target audience are the key decision-makers in a majority of households in terms of grocery purchases and so the nostalgic evocation of the game could be seen to be directly targeting this desired group.

The thematic elements of the game demonstrate both rational and emotional appeals. The rational is seen clearly in the focus on healthy eating and healthy choices, while the Pacmanstyle game itself uses emotional appeal (nostalgia) to promote the core message of the game: Flora is a healthy choice.

The game itself while using the product as part of the gameplay, still falls into the lowest level of brand integration, the associative level, according to Chen and Ringel (2006) in that the product is not used in a way that mimics its real-life use. "In this case, the product or brand is linked to a certain lifestyle or a particular activity featured in the game. Most commonly this is realized by displaying the logo or product of a company in the background" (Chen and Ringel 2006).

Interestingly while the Seedman game can be described as occupying the lowest level of brand integration as proposed by Chen and Ringel (2006), it can be described as meeting the criteria for the highest level of Svahn's (2005) gaming categories, namely The Persuasive Universe in

that every aspect of the game is designed to communicate the underlying rhetoric of the brand, that is "making healthy choices includes choosing Flora which is rich in Omega 3 and 6".

#### 4.2.2 KitKat Have a Break Game Site

The KitKat site is entirely designed around the games it features. The premise of the site is that it can be used as a stress reliever during a break. The user is able to stipulate how long their break is and the game then counts down to the end of the break (see Figure 7). The concept ties in with Kit Kat's traditional brand positioning as captured in its slogan, "Have a break, have a KitKat."



Figure 13: Screenshot of home screen of KitKat Web site (www.kitkat.co.za)

The user can play a variety of casual/ puzzle games with a tropical break theme.



Figure 14: The KitKat game choice screen (www.kitkat.co.za); Each item on the tropical island links to a different game.

Once the user has indicated the length of his/ her break, he/she is taken to a screen featuring a tropical island (Figure 8). Each item – such as the raft in the ocean, the turtle near the volcano and the canoe – links to a different tropical break Kit Kit-themed game. The games include Island Sudoku, Lava Leap (an arcade game in the vein of the popular Mario Brothers series (Nintendo 1983) in which the player has to manoeuvre a turtle out of a volcano by jumping on to KitKat fingers and rocks while avoiding lava), memory raft (a musical memory game using a raft constructed of KitKat fingers to play a melody) and the Find the KitKat game, which is an adaptation of the traditional cup and ball trick.

The KitKat branding is prominent throughout the site and the games themselves. On the game choice screen the KitKat logo is clearly seen in the top left-hand corner (Figure 8). A plane tows a banner featuring the KitKat logo and slogan as well as other pertinent messages reflected the brand positioning of the product. The product is also integrated into the game play in different ways. In Lava Leap (figure 9), KitKat fingers are used as moving platforms onto which the turtle must jump. In Find the Kit Kat, a KitKat bar is hidden under one of three coconuts which are then shuffled. The user must guess where the KitKat is. In River Wild, the user must move a canoe through the river, avoiding the KitKat logs and catching the lifesavers and in Memory Raft, the user must remember and replicate a tune played on a raft made from KitKat fingers.

In all of the games the KitKat logo is prominently visible in the bottom left-hand corner together

with an image of the product being broken, thus playing on the concept of "a break".

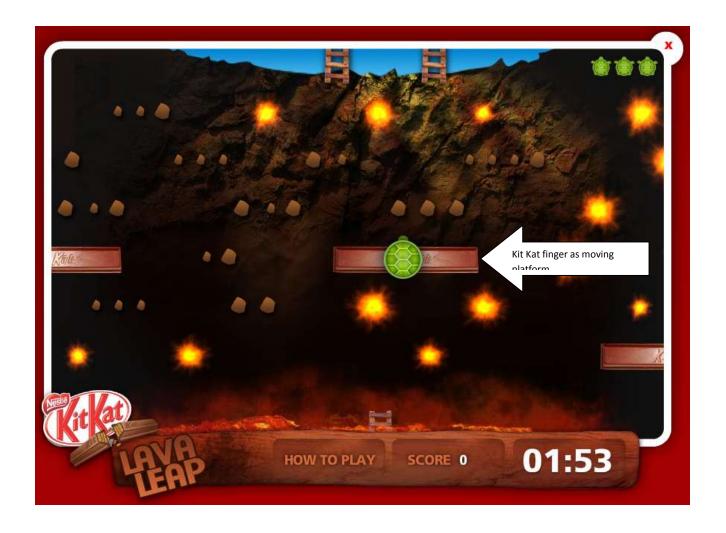


Figure 15: Screenshot of Lava Leap game on the KitKat site (www.kitkat.co.za)

The site is primarily focused on the games, but the product information is emphasized through the additional pages of information accessible through the red navigation bar at the top of the screen. Through this bar the user can access product information, download tropical music, tropical break themed screensavers and wallpapers with the KitKat logo prominently displayed and watch the KitKat television advertisements.

The site also allows users to comment on how they spend their break, focusing on KitKat (figure 10).

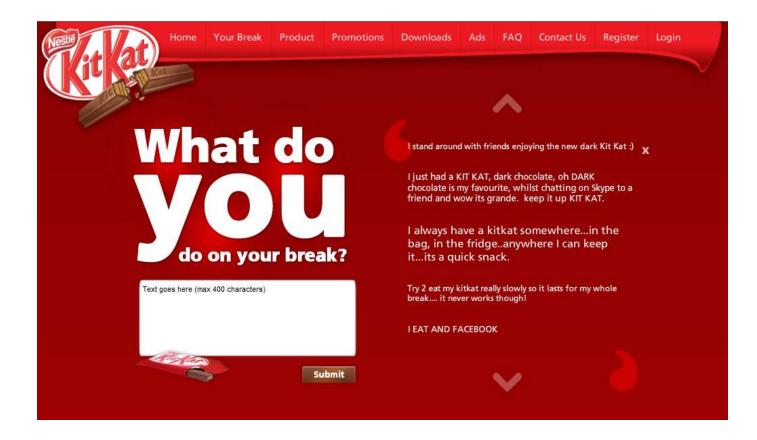


Figure 16: Screenshot of Your Break page (www.kitkat.co.za)

The site also uses incentives such as the ability to download music and wallpapers to drive traffic to the site. The ability to customize the game experience through the time limit option and to choose a game that appeals to the user provides the user with the illusion of control. It encourages the user to share the site with a friend through email. Unlike the Flora Seedman game, the games on the site do not allow the user to submit his/ her scores to a leader board and thus to compete with peers and friends. This may be due to the focus of the game which is on the individual user and providing him/ her with a relaxing and enjoyable break experience, thus associating KitKat with escape, fun and relaxation rather than with competitiveness. The word "break" is used extensively throughout the games and the site in general in order to emphasise this focus. This also echoes the KitKat slogan.

The appeal (Miller and Stafford 1999) therefore can be defined as emotional as it uses the desire for a break and the theme of stress relief, fun and escape as the primary foci for the game environment.

Interestingly, although the focus is on stress relief and escape, the countdown timer and time limit (figure 10) could produce feelings of anxiety in the user. This could be interpreted as communicating to the user that KitKat is a fast, convenient snack option that can be used as stress relief.



Figure 17: The break's timed element (www.kitkat.co.za)

While there are elements of the illustrative level of message integration throughout the site, the games themselves can be considered primarily associative (Chen and Ringel 2006) since the

games themselves are mostly existing games rebranded as KitKat games, the product itself is not used as it would be in real life and there are no real messages about the product embedded in the game other than the overall themes of escape, fun and relaxation as embodied within the concept of "a break". As Svahn (2005) noted the three levels are not mutually exclusive.

In terms of Svahn's typology, the KitKat games would, like the Flora Seedman game, be classified as fulfilling the criteria of The Persuasive Universe category.

## 4.2.3 Police Sunglasses Be Younique Struggle for Salvation Game

The Police Sunglasses advergame was created to complement the brand's 'Be Younique' campaign, which includes "a rewards scheme, with 12 truly 'younique' holiday experiences, 10,000 GQ subscriptions and an online members only club, with discounts throughout the year" (Police 2010). The concept behind the Be Younique campaign is to position Police as a street smart, gritty and stylish brand. The Be Younique web site (www.policebeyounique.co.uk) slogan is "The space where you are the exclusive protagonist", an idea that is central to the advergame.

The Police Sunglasses Be Younique Struggle for Salvation game has the most elements of narrative progression of all the games analysed. It takes a film noir approach using comic book style graphics to put the user in the position of hero and master detective. The plot focuses on the user's quest to help the protagonist, John, defeat the mysterious enemy, Mr M and his army of mutants and unfolds much as a film noir detective story would with clues being revealed over time and femme fatales both helping and impeding the hero's progress. The story

is set in Los Angeles, the ideal metropolis to "convey the plucky and street style of the brand" (Police 2010). The hero provides a textual voice-over that explains some of the context (figure 12). The user is warned that "the destiny of the whole world is now in your hands" (Police 2010).

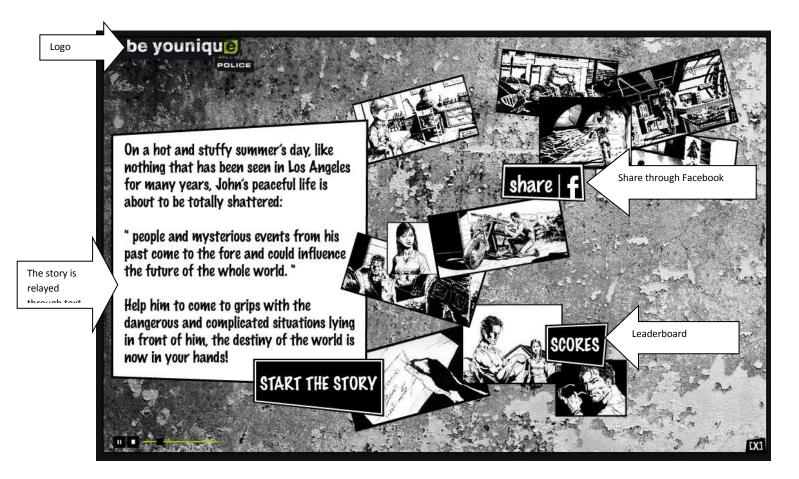


Figure 18: Screenshot of the home screen of the Police Sunglasses Be Younique Struggle for Salvation advergame (www.policebeyounique.co.uk)

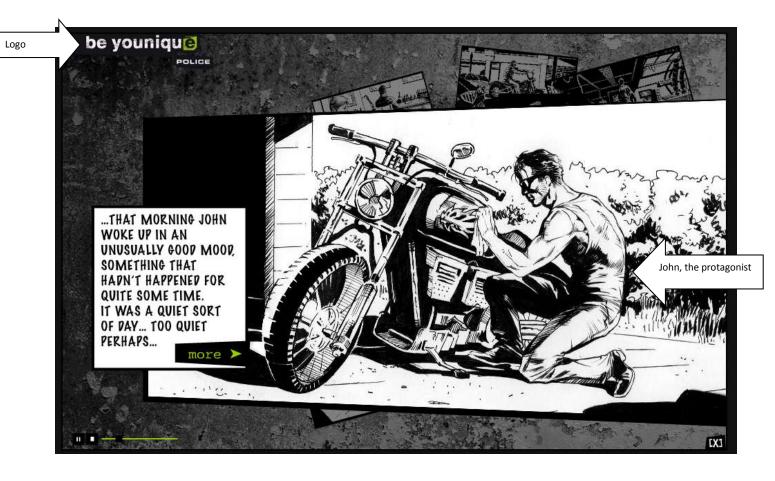


Figure 19: The user is introduced to the hero of the game, John and the spy/ mystery narrative begins to unfold

The games which are embedded within the narrative are used to move the plot forward, but are not the central focus of the advergame which is primarily story-based. This is evident from the fact that it is possible to follow the story without playing any of the embedded games or to fail at all of the games and still reach the end of the story.

The product and links to the product catalogue are interwoven into the story line at strategic points in the narrative (figure 14). Clicking on the catalogue link opens a pop-up window of the Police web site. In addition there is more subtle product placement within the games themselves with a Police watch being used as the timer device in all of the games. The game

serves to highlight the range of products that Police offers and not just the sunglasses range for which it is most well-known.



Figure 20: Product placement within the game with links to the Police catalogue (www.policebeyounique.co.uk)

The games themselves are primarily puzzle games such as word puzzles, photo puzzles and mazes, although the final game is a first-person shooter in which the user must shoot the many members of the mutant army before they introduce the virus into the city's water supply.

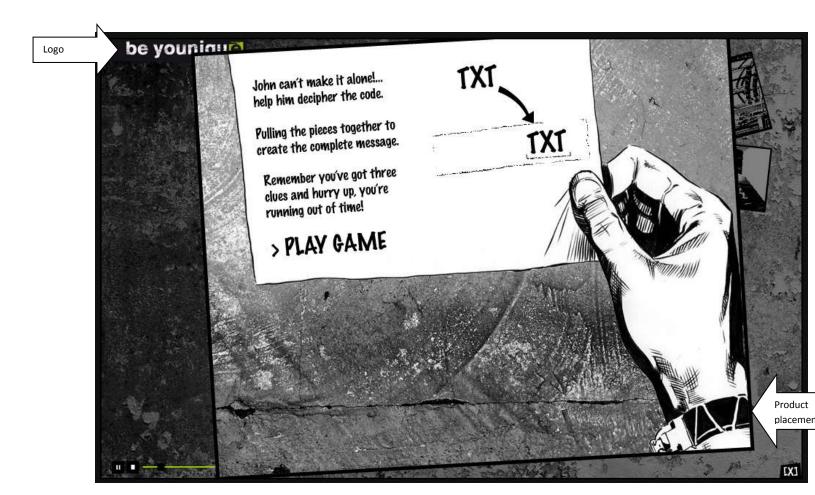


Figure 21: Puzzle game embedded in the noir narrative

The choice of black and white emphasises the gritty urban setting and is in keeping with the brand's desired street-smart positioning. The protagonist, John, demonstrates the traits of the bad boy anti-hero, a loner who is cool and streetwise but who has a caring heart beneath his rough exterior. The choice of plot is interesting in that is far removed from reality and takes on a superhero characteristic especially in the latter parts of the game narrative when the mutants are introduced. This could be a reflection of the current interest in the superhero narrative as inspiration for film and television, as seen in films such as *The Green Lantern* and television series such as *Heroes*.

Despite the narrative elements, however, it is difficult to care about the characters or even the overall plot involving the fate of the world as the story unfolds too quickly and the game play is simplistic and at times frustrating. The dialogue is stilted, "My moment of glory is fast approaching!" (Police 2010).

There is little character development of John himself except for some brief exposition around his relationship with the father figure institutionalised scientist and his own father who turns out to be the villain Mr M. His interaction with other characters is perfunctory and shallow and is merely in service of moving the plot towards its inevitable heroic conclusion.

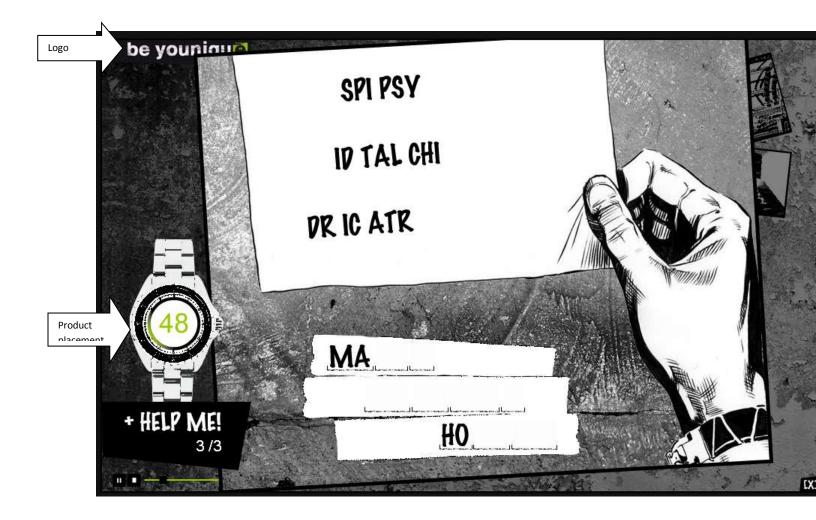


Figure 22: Puzzle word scramble game providing the first clue (www.beyounique.co.uk)

Produ place

The Struggle for Salvation game can be classified as an adventure game and shares certain characteristics of the sub-genre of visual novel in that it is "an adventure game featuring mostly static graphics, usually with anime-style art" (Frink 2009).

The Police products are integrated both into the gameplay and into the narrative as highlighted earlier. The Be Younique campaign logo is visible on every page of the game.

Emotional appeal is used within the game by appealing to the user's desire to be the hero, to "be younique". It also appeals to the curiosity of the game player who wants to solve the mystery and save the world. In addition it makes use of the wounded family as part of the storyline which may resonate with game players on an emotional level.

The game meets the criteria for Chen and Ringel's (2006) illustrative level of brand integration in that the product itself plays a significant role in the game play and the narrative reflects the desired brand personality of gritty, streetwise and stylish.

For Svahn (2005) the Police game would be classified as a No Free Lunch game since "The single brand is wholly [situated] inside the game-environment and more or less integrated so that the rhetorical message has moved well inside the game space. However, the brand and product advertised while obviously graphically visible remains outside the actual game play" (Svahn 2005).

Logo



Figure 23: Screenshot of the final showdown with Mr M (www.beyounique.co.uk)

## 4.2.4 BMW Pursuit Across Europe (PACE) game

The BMW Pursuit Across Europe (PACE) game (www.bmw-pace.com) plays on the idea of the appeal of the open road combined with speed and solitude. Using a sepia landscape that simulates the route from Lisbon to Paris, the game puts the player literally in the driver's seat of a BMW.

Equipped with the latest BMW models and technologies, players drive through cities and countryside that are seen in a completely new light. "Film sequences in the style of Edward Hopper and Film Noir push the mysterious story further and lead seamlessly into driving sequences" (4theJury 2007).

The music adds to the ambiance, creating an almost quest-like mood for the game and heightening the sense of exhilaration and excitement experienced in the driving simulation. The storyline is thin, but adequate for the focus of the game which is on the race itself rather than any drama around it. A narrator introduces each segment of the race with a poetic description such as "[o]n a road in Alentejos in the south of Portugal, Fields stretch as far as the eye can see. Dust clouds blow across the road" (BMW 2010).



Figure 24: The initial BMW game screen (www.bmw-pace.com)

A cut scene is then shown, featuring the BMW speeding along the road. The camera angles and movement capture the feeling of motion and propel the user into the game at which point the perspective changes and the user takes control of the vehicle and begins the race.

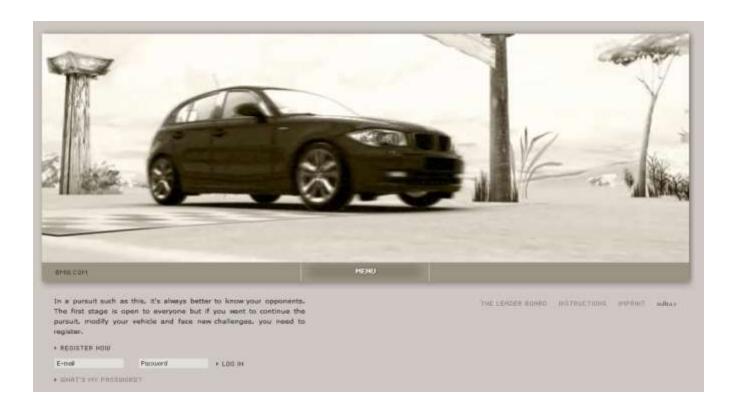


Figure 25: The video transitions into the game play so that it feels like the player is taking over control of the car

The first level of the game is available to everyone, but if the user wishes to continue or to have access to different BMW cars he or she would have to register and provide an email address.

Once registered, the user can move on to the next levels. As the player moves through the different levels, she wins new BMW vehicles which she can choose to race. In addition, when a player goes to The Garage, he can customise his car in terms of suspension, wheelbase and steering responsiveness.



Figure 26: Screenshot of the BMW game screen (www.bmw-pace.com)

While the overall brand personality of BMW as a whole features aspects of both the Sophistication and Excitement personality types as identified by Aaker (1997), the game focuses on the Excitement personality as expressed through the adjectives "daring" and "spirited".

The BMW PACE game is a sports game in the racing sub-genre. Apart from a small link to the BMW.com web site in the bottom left-hand corner of the screen, the only brand or product integration is in the form of the car that is being driven. This, however, should provide greater connection with the brand as the player is able to experience the product in a virtual simulation. The game can thus be classified as being demonstrative as per the Chen and Ringel (2006) levels of brand integration.

Svahn's typology would place it in The Persuasive Universe category as "At this level, everything – from the choice to produce a game to at all to choosing the game medium to the type of the game used – is chosen to communicate the intended rhetorical message" (Svahn 2005).

## 4.3 Semi-Structured Group Interview: Media Students

Fifteen (15) Media students participated in the semi-structured interviews. Unfortunately due to technical difficulties with accessing the games through the computer laboratories on campus, while all 15 completed the pre-gaming questionnaire, only nine (9) were able to play the games and participate in the post-gaming interviews. In addition, one of the games, the Police game, had to be substituted with the KitKat game for some of the participants as the Police game would not load.

The data from all 15 pre-gaming questionnaires will be discussed. The first section focused on the students' demographic information as well as their gaming behaviour. Eleven of the 15 participants were in the 18 - 25 age group, with three in the 26 - 29 age group and on in the 30 to 35 age group. Eleven of the respondents were female and four were male.

All 15 indicated that they played either PC or console games. PC games were played by all of the respondents, while only 10 of the participants indicated that they played console games.

Nine of the respondents said that they played games online. The time spent on these different gaming types per week is described in the chart on the following page:

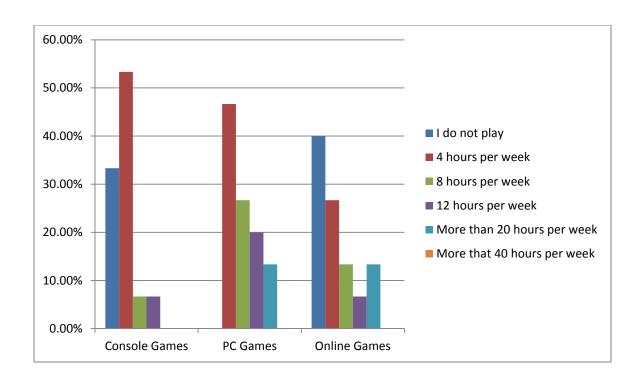


Figure 27: Time spent playing games per week

Four of the participants indicated that they had played an advergame before, while six were unsure if they had or had not played one before. The advergames listed as having been played before were for Cadbury, Coca-Cola, Mattel, Nesquik, Crayola, Smarties and for "new movie releases which I have forgotten".

The next section was designed to test brand awareness of the brands linked to each advergame prior to playing the games. First the participants were asked to list the three brands that immediately came to mind in each product category, namely margarine, chocolate bars and luxury cars.

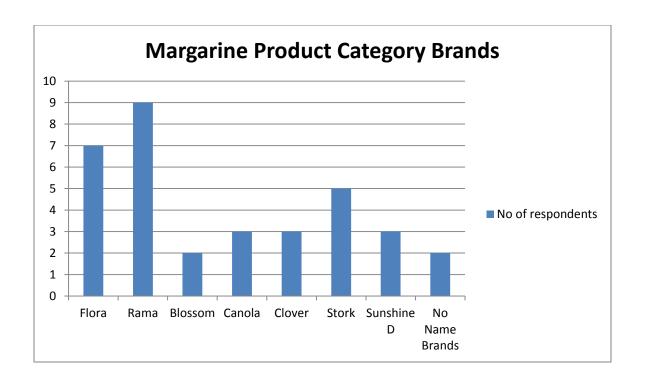


Figure 28: Brand awareness in the margarine product category

As evidenced from the graph above, Flora was one of the top brands in terms of association with the margarine product category, although Rama was clearly top of mind.

The most common association of Flora margarine was health and healthy, followed by associations specifically linked to heart health such as Flora's endorsement by the Heart Foundation. Sunflowers and sunflower seeds were also frequent associations among this group of respondents. Only one respondent mentioned the Seedman mascot. Negative associations included expensive, "not nice" and "not for cooking", but these were listed by only a small number of respondents. Four of the 16 respondents said that they buy Flora margarine and five that they sometimes buy it. Nine participants indicated that they had not been exposed to brand messages from Flora. Those that had been exposed indicated that the messages had

been in the form of TV advertisements, print advertisements, banner ads, competitions, posters, in-store promotions and brochures.



Figure 29: Brand Awareness in the luxury car product category

Mercedes-Benz was the most common association in the luxury car product category, but BMW was the second most common association as represented in the graph above. The most common association, with 10 mentions, was expensive, followed by speed with eight mentions. One respondent described BMW as "ideal car for drag racing. [It has a] kind of sport feel to it." Class and sophistication was also prominent in the minds of participants with one respondent describing it as "people's dream car". Safety scored four mentions. Other associations included "not very female friendly", "good to be pimped out with audio and visual equipment", "comfort", "luxury", "powerful" and "comfortable".

None of the respondents own or had ever owned a BMW. Eleven of the participants had been exposed to BMW brand messages in the past week. Television advertisements were the most common form of advertising to which they had been exposed, followed by print advertisements in magazines and newspapers. Online ads, reviews, billboards and radio advertisements were also mentioned.

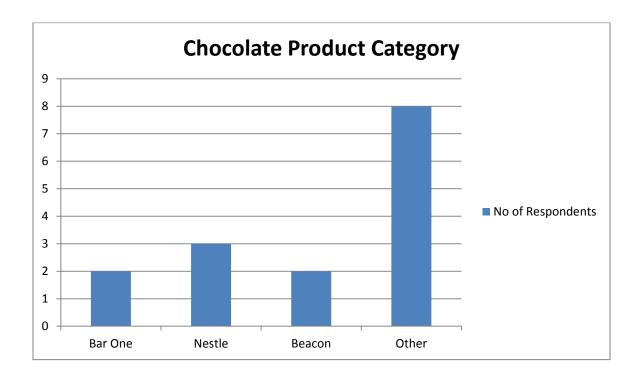


Figure 30: Brand awareness in the chocolate product category

Due to technical difficulties only six of the 16 respondents were able to play the Kit Kat game. Their responses are discussed next. The brand associations in the chocolate product category were so varied that comparison became difficult. Kit Kat did not feature in terms of top of mind awareness. Associations with Kit Kat strongly favoured the chocolate's slogan with the word "break" being used in all of the responses. The colour red was also foremost in the minds of respondents. Sharing was a strong association as was crispness and crunchiness. Negative

associations included "kiddies chocolate" and "not very satisfying". Three of the six respondents indicated that they bought Kit Kat or sometimes bought Kit Kat, one did not answer the question and two indicated that they did not buy Kit Kat.

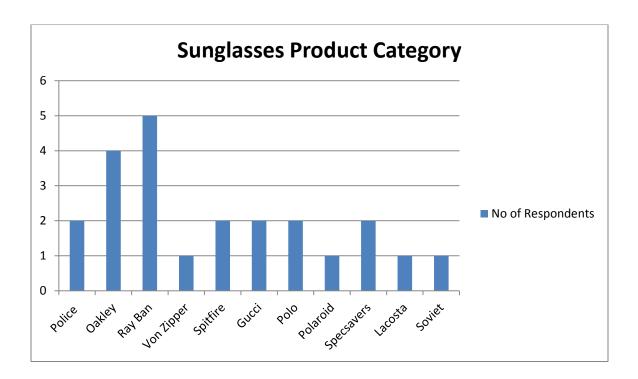


Figure 31: Brand awareness in the sunglasses product category

As with the Kit Kat game, only nine of the participants were able to play the Police sunglasses game due to technical difficulties. The most popular sunglasses brands in terms of top of mind awareness were Ray Ban and Oakley, followed by Police, Spitfire, Gucci, Polo and Specsavers all with the same number of mentions. The primary association was of variations of "stylish", "fashionable", "cool", "street cred" and "sexy". This was followed by "quality" and "durability", with one respondent described them as "a brand that will never fail you". Associations with celebrity were also common with Sting and Bruce Willis being mentioned by name.

Only one of respondents indicated that they own a pair of Police sunglasses. Three of the participants indicated that they had been exposed to brand messages from Police Sunglasses, with print being the most common format.

After ascertaining the product awareness of respondents, the participants were then asked to play the games and thereafter were interviewed about their experiences.

#### 4.3.1 Post-Game Interviews: Flora Seedman Game

Nine respondents were able to play the Flora Seedman game. The respondents found the game easy to navigate and play. One respondent in particular related to the Seedman character, Flora's mascot, in the game: "[t]he Seedman is so endearing, he's such a cute character. I love that it's based on what is probably the most well-known game in the world (Pac Man). I like how they changed the theme of the game to relate to Flora (i.e. the Seedman's head, seeds instead of little yellow dots, flora tubs instead of big yellow dots, unhealthy food instead of the ghost monsters. I love the slight level of tension that goes along with playing Pac Man, and the level of tension is still there when trying to avoid the beasties that kill your Seedman."

The respondent added that she learned "[t]hat I love that little mascot more than I thought I would. In all seriousness, I didn't learn anything that I didn't already know about the margarine.

The reason for this is that I am frequently exposed to the TV and print advertisements, so I already knew about the presence of seed oils and good fats in the margarine, and the health benefits."

This seemed to point to the potential for strong positive association with the brand, using the game used to cement existing perceptions and crystallise the association with the Flora mascot.

The respondent also seemed to indicate that the message of the game – Flora is healthy and pat of a balanced diet; choose good fats instead of bad fats – was clearly communicated through the gameplay and reinforced the information provided in other media, which seems to emphasise the use of advergames as a complement to other brand strategies rather than a stand-alone activation.

On the negative side, some of the respondents felt that the game was too old-fashioned to be appealing. "The concept is outdated, unoriginal; this could be overlooked for the first few minutes, but I got extremely bored after 2 or 3," one respondent stated.

Respondent 2 suggested an improvement in game play: "I think that the monsters should have perhaps changed colour if at any stage the Seedman was able to 'eat' them."

The integration of the brand into the game appeared to be seamless. As one respondent explains, "[t]he game was not completely overrun with advertising messages. The majority of the advertising messages were found before you started playing the game, and the focus was on healthy eating and which foods contained good fats and which contained bad fats. I enjoy the Flora advertising because it makes an appeal to the consumers' logic in order to sell their product. So Flora advertising never has to "shout" at consumers, and thus presents itself as a "sophisticated" product directed at a higher income groups."

The respondents stated that the Flora Seedman advergame felt more like a game than an advertisement. "Because the game was not bombarded with advertising messages, it didn't feel like an advertisement. Also, the fact that the game is based on one of the most well-known games in the world, definitely takes it out of the realm of advertisements. The brand mascot is

also so cute, and has developed a personality through print advertisements and television advertisements. The game makes you feel that you are interacting with the product and the lovable mascot, and thus avoids feeling like an advertisement," one respondent said.

### 4.3.2 Post-Game Interviews: Police Sunglasses

Technical difficulties made it impossible for some of the participants to play the Police

Sunglasses game, however two participants were able to play the Police game. Their responses

are discussed in this section.

The narrative element of the game attracted attention from the participants. Respondent one said that "[t]he concept of the game was very original. I really liked the graphics, and the fact that it felt like a comic book. The animation between the 'frames' of the 'comic book' was great as well."

On the negative side, respondent one did feel that the product information was distracting to the game play: "[t]here were a lot of popup messages in the game that told you to look at the range of Police sunglasses, jewellery and watches on the Net. It was rather distracting, but I can understand why the popup messages were there." Respondent two expressed concern about the "[l]oading times and incompatibility with some web browsers."

The integration of the products into the game seemed to be to the detriment of the game play itself, as respondent one stated, "[t]here was a character wearing a watch, and a message popped up for the player to browse the range of Police watches, so one assumes that this character was wearing a Police watch. The main character was wearing a pair of sunglasses and a necklace, and once again, messages popped up for the player to browse the range of Police

products on the Net. In this way, the products were integrated into the advergame." He goes on to say that "I found the marketing messages a little bit distracting. I was following the story, getting involved in the game, and these pop-up messages served to remind me that I was actually experiencing advertising messages. It jolted me out of the game experience, which was not a pleasant feeling."

Respondent two felt that the Police Sunglasses Struggle for Salvation advergame felt more like a game, while Respondent One said that it felt like both an advertisement and a game: "[i]t felt like a game, and suddenly a popup message made it feel like an advert. Once the advertising popup disappeared, it felt like a game again, and as soon as another popup appeared, it felt like an advert once again. It jumped the line between the two."

Only Respondent one felt that they had learned something from the game: "I learnt their slogan, which is 'Be Younique'. I didn't know what their slogan was before the game."

Both respondents indicated that they would play the game again and one said she would recommend the game to friends and the other that she was unsure whether or not she would.

The associations after the game remained pretty much the same, which seems to indicate that the game did not communicate a specific message about Police as a brand. These included Sting; Bruce Willis; Dark lenses and black frames; New York; sunglasses; looking cool; eating up bad guys; sirens; numerous TV shows; expensive; rugged; adventure; and stylish

Given the fact that only two participants from this group played the game, however, further research would need to be conducted to test this reasoning.

## 4.3.3 Post-Game Interviews: BMW PACE game

The realism of the BMW Pace game was popular among participants. Respondent one stated, "[t]he whole being in control thing, playing the game felt like driving for real," while respondent 3 enjoyed, "[t]he video, quality designs and 'PS3' feel of the game itself." Respondent 4 indicated that she enjoyed the "videos and the story". This was the first time the issue of narrative within game play was touched on by the respondents.

Other comments included, "[I enjoyed] every aspect of the game", "[t]he graphics were absolutely beautiful, especially for a browser game. It was an original concept. Very nice replayability. It doesn't get boring for a long time" and "I liked the scenery, I liked that the game set the scene for the player. I liked that the scenery and setting gave me a sense of freedom while playing."

Negative comments centred on the technical aspects of the game with all of the respondents complaining about the long loading times and the erratic game play. Objections to the need for registration were also mentioned. Examples of these comments are provided in the table below:

Respondent	Comment
Respondent 3	The graphics are monotonous and dull. After each race I got kicked out and had to reregister, which was three times. The story was boring.
Respondent 5	Long loading times. The sepia look takes away from the experience overall. It's a bit complicated for anyone who's not an avid gamer. Difficult to know what to do most of the time instructions not clearly laid out.

Respondent 6	The game froze and I couldn't get to play more
	of it. The game built up expectations and I
	wanted to see if it met them. Sadly I didn't get
	to see much of the game at all, so I was
	disappointed. There's nothing quite like the
	disappointment an avid gamer feels with
	games that build up expectations and then
	don't meet them. I don't think this is any fault
	of the game or the developers though. I'm
	sure the game is fun, I just was not able to
	navigate the vehicle I was supposed to be

driving.

Table 1: Respondent comments for the BMW PACE game

Six of the respondents said that the BMW advergame felt more like a game than an advertisement, two said it felt like both an advertisement and a game and one said it felt like "[a] bad attempt of advertising through the game".

The product integration was identified by all respondents, since the car that the participants used in the race was clearly a BMW. As respondent 3 said, "[y]ou drove a BMW, so the product was part of the game play. And a few BMW cars were visible at the beginning of the game."

Four of the respondents felt that they did not learn anything about BMW from the advergame.

The remaining five indicated that they learned the following:

Respondent	Comment
Respondent 1	I learnt that it is very fast and it is easy to drive
Respondent 3	It's fast, dependable, good-looking and contemporary and it allows you the control you need to drive safely and soundly - even after being able to drive off after bumping into a pole [sic]
Respondent 5	that BMW is very efficient
Respondent 6	That they have aesthetically pleasing cars, some relatively sporty ones too.
Respondent 9	They are fast

Table 2: what respondents learned about BMW from playing the BMW advergame

Respondent 2 on the other hand did not enjoy the BMW game: "[t]he stories at the beginning of each race was dull, I didn't listen to any of it. May fair [sic] better as a game for a console or PC." Another negative comment was, "[i]f they can't get their advergames right how are they supposed to get their cars right," which highlights how every customer touch point can impact on the perception of the brand and of the product.

After playing the game, the most common association with BMW among the participants was that of speed. Adventure, fun and elegance were also cited numerous times. Other associations included, "[f]lashy and aerodynamic", "[r]oad trip across Europe", "[e]xpensive", "[l]uxury car", "[p]erformance", "[q]uality", "excellent on a bumpy road" and "German engineering". The majority of the associations were positive or neutral. For example, Respondent Five indicated that he thought that BMW's "handling is good", it has "grip" and it is "powerful".

Four of the respondents said they would play the game again, three were unsure and two said they would not play the game again. In terms of the potential for viral marketing the

respondents were divided: five said they would recommend the game to friends, one said he was unsure and three said they would not recommend the game to friends.

## 4.3.4 Post-game Interviews: KitKat Game

Due to technical difficulties in the computer laboratories at the time of the semi-structured group interview experiment, only six of the respondents were able to play the Kit Kat game. All of the respondents enjoyed the game, with only one indicating that they enjoyed it "somewhat". The integration of the brand into the game was clear to the respondents:

Respondent	Comment
Respondent 1	The product was used as an objective which needs to be found, a musical instrument, climbing bars etc. There was no way to NOT see where Kit Kat was.
Respondent 2	The logo and KitKat piece was found in each and every game. In find the KitKat a bar was used. In the boat race the bars were used as logs, etc. Very well integrated.

Table 3: Comments on brand integration in the Kit Kat game

The most enjoyable component of the Kit Kat game was the variety of game experiences available:

Respondent	Comment
Respondent 1	The different options to choose what game you could play - limitless navigation.
Respondent 2	There were many different games to play, it was well designed into the layout of the website. Could time yourself as to how long you are going to play, during your break.

Respondent 3	All aspects of the game has different packages and its very entertaining
Respondent 4	The variety of different games to play and the fact that you can set your own time to play the game.
Respondent 5	The fact that they provided different games and you could choose for how long you wanted to play the games

Table 4: Positive comments about the Kit Kat advergame

There were only a few negative comments about the games. One respondent stated that he did not enjoy "having to start over after time runs out", while another indicated that "some of the games were a bit tricky". Other comments included, "[t]he movement of the objects are a bit slow which makes it difficult to play the game", and "the fact for some of the games there are no scores".

All of the respondents felt that the Kit Kat advergame was more like a game than an advertisement and that because the brand integration was so seamless, the marketing messages did not distract them from their enjoyment of the game experience. As respondent 3 stated, "it blended in well and made me want to eat some Kit Kats". Respondent 5 added, "[t]hey were not distracting, they were nice and even children could be able to enjoy those games."

Overall the Kit Kat game site was well-received by the participants. As one respondent stated, "[t]he Kit Kat game ... was a fun distraction, and I think it certainly fits the site since you are only meant to play for 2 or 3 minutes. The graphics are good considering and I like the style. The gameplay is nice and responsive, no unnecessary waiting." Four out of the five respondents said

they would play the game again and four out of the five said they would recommend it to friends.

Despite the well-integrated product placement and the enjoyableness of the game, all of the respondents felt that they did not learn much about Kit Kat other than that "it was good to have a break with Kit Kat" and "it is for fun people". So while the Kit Kat game seemed to deliver in terms of game play and had adopted the least intrusive method for product placement, the brand message was unclear to players of the advergame. The intention of the Kit Kat games may have been simply to connect the Kit Kat product with the concept of a break so that when a player takes a break in future he or she immediately thinks of eating a Kit Kat. This is in keeping with Kit Kat's tag line, "Have a break, have a Kit Kat".

But the respondents' associations with Kit Kat after the game were overwhelmingly positive, as evidenced by the table below:

Respondent	Associations
Respondent 1	1. Fun
	2. Adventure
	3. Red
	4. Relaxing
	5. Summer
Respondent 2	1: Have a break have a KitKat
	2: Fun
	3: suitable for children and children's
	games
	4: simple yet fun and relaxing
	5: humble and positive concept
Respondent 3	1. Fun
	2. Vibrant
	3. Chilled back kind of person's chocolate
	4. Ideal for breaks, no matter how long or short
	5. Something for everybody

Respondent 4	1. for fun people
	2. relaxing
	3. for break time
	4. enjoyable
	5. tasty
Respondent 5	1. have a break with friends
	2. have a break with family
	3. be a hero
	4. be smart
	5. play games

Table 5: Postgame association with Kit Kat

Fun and relaxation were the most common associations, along with the break concept as discussed earlier.

## 4.3.5 General perceptions on advertising in games

The students' perceptions of advergaming as a whole were mostly positive. As one respondent noted, "I loved how the Flora game and the Police game were creative and well-executed, and the graphics were fun and related well to their respective products. The Flora and Police games were fun to play."

Another respondent added that, "[t]he concepts were pretty interesting. It's nice that these companies have incorporated amusement into their images. Most internet gamers who find these games will naturally have an inclination to purchase the product they advertise simply because it's nice to know they're thinking about us." Others were attracted by the relative simplicity of the games and the potential for relaxation.

However, two of the respondents found the gaming experience frustrating. "How frustrating the BMW game is. It takes a long time to load, the intro is far too slow, and the game keeps freezing. I couldn't navigate using the usual arrow keys or the W, A, S and D keys, nor the

mouse. Crashing into a lamp post in the first two seconds and not being able to go further is a serious irritation to avid gamers like myself," one respondent said.

Another pointed out that she has "a huge issue with browser games: unless they're extremely simple, they lose a lot of functionality, people get lost, they're prone to crashes, etc. It's very difficult to get them up and running smoothly. And of course there's the fact that you will NEVER get the same performance out of a browser game that you would out of a predownloaded or retail game." Loading times were also sometimes problematic, which is an important factor to take into consideration in a country such as South Africa where bandwidth is at a premium.

The group felt uncomfortable about having to register in order to participate in the BMW and KitKat games, which may pose a problem for advertisers who will want to leverage the games as a means to harvest information about potential and existing customers.

Brand association, engagement and the integration of narrative were less important to participants than anticipated, instead ease of game play was a significant contributor to the enjoyment of participants in each of the games played. However, while this points to what makes a good game, it does not indicate the factors that make a good advergame.

Respondents listed a number of characteristics of what they felt would make a convincing and persuasive advergame.

Respondent	Comment
Respondent 1	The games should be personalised according to the target market of the intended
	advergame. There are a lot of games, so the

	game should be something refreshing/ comical and involve the product (the game should be related to the product in some way or other).
Respondent 2	Attractive Graphics Simplicity Subtlety Incorporating the product in a way that you associate to real life: causing you to actually want it for that purpose. Addictive gameplay and concepts Customization: let the user have as much control as possible Satisfaction: the user should feel rewarded for completing the game.
Respondent 3	A good balance of imagination (with regards to the game concept), fun, challenging content (e.g. trying not to get eaten by the monsters in the Flora game), and of course product integration, while not having the advertising messages totally overwhelm the player. I think the BMW game would have been better if it involved building your own BMW or customising your favourite BMW model. A car advertisement whose advergame is about car racing is a little bit unimaginative.

Table 6: Characteristics of a convincing and persuasive advergame

The respondents felt that advergaming was a great possibility for advertisers provided that the gameplay was not negatively affected. Respondent one stated, "[m]any game advertisers use their games to advertise other products of theirs and it has not been used much in the past, but there is definitely a gap for some initiative to advertise with/in games."

This was supported by respondent 2 who said, "I think that what we have played here forms only the tip of the iceberg. There's a lot of potential for much larger and more complex games, which could be mutually beneficial to both parties. There are many game designers struggling to raise money to publish their work, and there are many companies wanting to expand their

target market. So what if there was a sort of sponsorship program? The companies provide the game designers with money if their game is successful, and in return, the game designers incorporate that product into their games. The game won't be based on any specific product, but may cause users to want what's in it."

Not all respondents were positive about the introduction of brands into games, however. Respondent 3 said, "[a]dvertising within games (product placement, not advergames) is a bit of a cheap shot I think. Like having the Sims eat a certain food brand, or having certain brands in their house, like Ikea, is deliberately saying to players: 'you will have this brand in your life, you will have this product in your life, and you don't really have a choice'. That's a bit of subliminal messaging, which I don't necessarily agree with. I feel the same way about advertising within soapies (e.g. the Clover milk, Clover cheese and other Clover products in 7de Laan) and series." Despite this, he felt that advergames are a very good idea. It's a clever, modern way of getting consumers to interact with the product and the brand. "It's also a good way of building a positive brand experience for consumers (provided that the game is enjoyable). Modern society is increasingly into gaming (as is obvious from the large range of gaming consoles available and the enormous number of games available for both consoles and PCs), and advergames are a way of reaching a new, technologically-advanced audience in a way that society can relate to." He went on to caution that "[i]t's very difficult to advertise all products with games. Just because it is a trend currently to use games to promote products, this is not to say that all products even should be promoted with games. For some products it's actually not a good idea to use games to promote them. This, of course, depends on the product and the intended

target market of that product. It also depends on the branding and image of the company. If advergames do not fit the company image and overall brand message, then it will most likely have a negative effect to use games to advertise their products."

Overall though the attitude of this group of participants towards advergaming seemed to be positive to neutral, though attention must be given to the very specific demands of this group of potential users as discussed above. The next section looks at the responses from NMMU students from other Faculties.

4.4 Semi-Structured Group Interview: Students from other Faculties

Only four of the five students from other faculties at NMMU were able to complete the game experience. Of the total number of participants, there were three females and two males. Four of the five were in the 17 to 21 years age group and one was in the 22 to 26 years age group. All five indicated that they play PC or console games.

Two indicated that they played console games four hours per week on average, two that they played for at least eight hours per week and one for more than 20 hours per week. In terms of the playing of PC games, three of the respondents indicated that they played for at least four hours per week, one for 12 hours per week and one for more than 20 hours per week. Only two of the respondents indicated that they played online games and both said they played about four hours per week.

None of the respondents had played an advergame before, though three indicated that they were not sure if they had or not.

As with the previous groups, the respondents were asked questions regarding the brands represented in the advergames. Brand awareness of Flora was relatively low in terms of implicit memory retrieval, with only one respondent listing it as one of the three brands he associated with the product category. Rama was the most cited brand with all five respondents listing it in their three brands list. Other brands mentioned were Stork, Sunshine D and Delite as well as butter.

The respondents were then asked to list five associations about Flora. Associations of health and health benefits were most prevalent, with one respondent identifying the "walking seed", Seedman mascot and another indicating that Flora helps to prevent cholesterol. Other words associated with Flora included creamy, tasty, delicious, cooking oil, cooking spray and green and yellow colours.

Two of the respondents stated that they sometimes buy Flora margarine. Three respondents indicated that they had seen advertisements for Flora in the past week, with television adverts being the most common.

The next section dealt with Police sunglasses as a brand. Only two respondents listed Police as one of the three brands they think of when asked about sunglasses as a product category.

Dolce and Gabana and Rayban were also mentioned by two respondents each. Other brands included von Zipper, Adidas, Gucci, Basetsana Khumalo and Connie Ferguson.

Police sunglasses as a brand were most closely associated with wealth and celebrity and were viewed by respondents as expensive. Some of the comments were: "[t]hey are worn detectives and celebrities", "[t]hey are worn by rich people unless you get a fake", "sporty men and

women" and "they are cool and mysterious". Mirror shades and tinted shades were also mentioned. Elements of mystery and secrecy were also alluded to.

Negative associations included "pointless adverts in magazines and on TV" and "cops trying to look cool".

The respondents were then asked about the three brands that immediately came to mind when they thought of luxury cars. BMW was the most commonly cited brand in implicit memory retrieval with three of the five respondents citing it as one of the three brands of luxury cars they listed. Lamborghini, Ferrari and Rolls Royce were mentioned by two respondents each.

Other brands listed included Aston Martin, Lotus, Mercedes-Benz, Audi and Mini Cooper.

BMW was most closely associated with ideas about wealth, success and luxury. Money and power were key words that were used by respondents in describing their associations with the brand. Other positive associations included speed, racing, comfort, innovation and Need for Speed Games. Negative associations included "its rival, Mercedes".

As with the previous group of interviewees, the participants were then asked to play the games.

#### 4.4.1 Post-Game Interviews: Flora Seedman Game

All the respondents agreed that they enjoyed the Flora Seedman game to a certain extent (somewhat). Despite this none of the respondents would play the game again and all of the respondents indicated that they were either unsure whether they would recommend the game to a friend or sure that they would not recommend it.

The Pacman-style game was perceived as enjoyable but not overly exciting as evidenced by these comments:

Respondent	Comment
Respondent 1	I enjoyed running away from food that I actually like. The Seed man dying after eating a burger
Respondent 2	I enjoyed the way the game is so similar to Pacman. It was nice to play but not really an adventure.

Table 7: Post-game comments about the Flora Seedman game

### Negative comments included:

Respondent	Comment
Respondent 1	The whole run for the tub thing and being chased by meat and burgers and it was very boring.
Respondent 2	At times the controls were not responsive. It needs more elements to make it just a bit more fun/puzzles. It could possibly become more educational.

Table 8: Negative comments regarding the Flora advergame

In terms of the integration of the brand into the game, respondents identified the Flora logo and the use of the mascot as the game avatar. These respondents did not seem to identify with the underlying messages about healthy eating and the value of Flora in a balanced diet. Only

one respondent stated that he had learned something from the game: "[t]here are good fats and bad fats. Omega 3 & 6 are healthy and Flora contains them."

The respondents did not find the Flora marketing messages in the game distracting, although their reasons for this were different. One respondent stated, "[I did] not really; I did not understand that part you can't even see the name of the product." On the other hand, another respondent stated, "[a]nything that may look like a useless message or looks like an obvious (in your face) advert, I immediately don't take notice. This is due to the fact that I have had to deal with annoying pop-ups in the past." The respondents were split on whether the Seedman advergame felt more like a game or an advertisement with half saying game and half advert.

Despite these predominantly negative responses to the advergame, the respondents seem to have positively changed their associations of Flora after playing the game.

Associations listed post-game include: Omega 3 & 6; good fats; Seedman; pleasure; energy boosting; brightens your day; healthy; and sporty people can use it

This is interesting in that, from their responses to earlier questions, the respondents do not seem to be aware that they have learned something about Flora through the game and that they have in fact changed their associations of the brand. This could point to the fact that messages communicated through gameplay, even when the game is perceived as boring or lacking in excitement, are internalized subconsciously by the players. Further research on this aspect needs to be conducted.

## 4.4.2 Post-Game Interviews: Police Sunglasses

Both participants highlighted the narrative element of the Police game as a positive aspect of the game play experience:

Respondent	Comment
Respondent 1	It was the whole process of you actually taking part in the game and helping out John throughout the whole thing.
Respondent 2	It had a story and it had a detective feel to it nearly like the PC games.
	One of the games (police sunglasses) had a good story and had a few different mini-games

Table 9: Positive gameplay aspects of the Police sunglasses advergame

Again technical issues such as wait times were the main concern: "the waiting for the next part and having to be patient for each adventure instead of going straight to it."

The integration of the product/ brand into the game was noticed to varying degrees by each participant, with Respondent one stating, "the product was shown each time you had to click to get new information and when John would put them on some advertising the product was on point," while Respondent two said, "[n]ever saw the logo but I saw sunglasses."

The respondents were divided in terms of whether the advergame felt more like an advertisement or a game. The messages seemed not to be clear to the participants.

Respondent said he learned that, "it [Police sunglasses] is cool and can be used to hide your face and to shade you from the burning sun," and Respondent two stated that she had learned that "Police sunglasses exist."

Both indicated that they would play the game again and both would recommend it to friends.

The associations with the Police brand remained essentially the same after the game had been played: Sunglasses; Fun; adventure; danger; disguise; and sexy.

Overall the attitude towards the Police game seemed positive although its ability to communicate brand or product messages seems questionable.

### 4.4.3 Post-Game Interviews: BMW PACE game

One of the three respondents was not able to play the BMW game due to technical difficulties and so answered every question with "the game would not load". The remaining two respondents' responses are discussed in this section.

Two of the three respondents indicated that they enjoyed the BMW PACE game. The association with speed, excitement and adventure seemed to be cemented through the game play: "the chase and the whole process of buying the car and being able to crash it and go to extreme speed with no consequences".

The messages also seemed to be clear. As respondent one said, "[The brand was integrated in] all the new cars on the market [that] were being advertised and the new technological advances made by BMW and the way in which BMW is a car for every occasion and that you can ride on any kind of street."

The respondents indicated that they learned about BMW through the games, but that much of what they learned was not new to them: "that it [BMW] has so much to offer besides cars and that it has definitely revolutionised car technology. But the rest of the other stuff wasn't new things."

One of the respondents indicated that he would play the game again and that he would recommend it to his friends.

Associations after the gaming experience emphasised the speed and adventure aspect of the BMW driving experience: thrill and fun; speed; technology; wild side; and adventure.

Overall, the attitude of this group of participants towards the BMW advergame was neutral to positive, although the technical issues did impact on the gaming experience. The next section presents the general perceptions of this group about advertising in games.

### 4.4.4 General perceptions on advertising in games

Technical issues were identified as a major frustration in terms of the enjoyment of this group of participants, especially in terms of long loading times and some games not operating at all. The fact that some of the games, most noticeably the BMW PACE game, required users to register also made the group uncomfortable, pointing to this group's concern with privacy issues, a concern that has been highlighted in the earlier media student group interviews.

One of the respondents did not like the concept of something that was designed to be an escape from the real world being used to push a capitalist profit motive. "There is not much I can say it sells the product, but my main problem is the fact that it could end taking away from the fun just enjoying the game and just being satisfied with the game. The whole point of playing a game is to leave the materialistic world into a different zone but if the games we play push this consumerist ideology then we don't have an escape only a cage we think is our salvation," he said.

In terms of the characteristics of a successful game, only two of the participants provided feedback on this question. Respondent one said, "[t]he way it challenges the mind and yet makes you remember key points within the game it is fun and lets you learn how to let loose." Respondent two added that "[i]t should be fun and have messages about a brand but in a way that is not distracting to the player."

Respondent one went on to state that in terms of his feelings towards advertising in games, "they are great fun and very positive and also informative and they give a person an outlet on their unresolved emotions." Respondent two, on the other hand, stated that, "[n]ormally I dislike them is they are normally annoying and in your face [sic]."

Overall the feelings of this group towards advergames were mixed; they seemed to concede that there was the potential for successful advergaming use, but were not overly enthusiastic about the concept.

The next section presents the results from the semi-structured group interview with the NMMU members of staff.

# 4.5 Semi-Structured Group Interview: Staff Members

Nine members of staff participated in the semi-structured group interviews which took place on 1 February 2011. The majority (5) of participants was in the 30 - 39 age group, two were in the 50 - 59 age group and the remaining two were in the 40 - 49 and 60+ categories respectively. There was an almost even split of genders with four being male and five female.

The participants were asked questions to determine their game playing profile. Six of the nine respondents indicated that they played either PC or console games. The three who did not play

PC or console games indicated that they were either unaware of the games, preferred not to spend their time on gaming or "I am too stupid to do so and I don't have the patience. The only game I really played was Monopoly on my cell phone especially when I had to wait for the doctor etc."

Three of the game players indicated that they played console games for four hours per week on average, three indicated that they played PC games for four hours per week on average, one that he/she played on average 12 hours per week and one that he/ she played for more than 20 hours per week. Thus, according to the NPD Group (2009) categories, the majority of respondents fall into the Secondary Gamers category and only one falls into the Avid PC Gamer and one in the Console Gamer category.

Just over half (5) of the participants indicated that they played games online and of those five, four played four hours per week on average. The remaining one indicated that he/ she played for 12 hours per week. Again the majority fall into the Secondary Gamer category with one forming part of the Avid Gamer category.

Seven of the participants stated that they had never played an advergame before and two were unsure whether they had or not.

The group was then asked a series of question to determine their level of brand awareness of each of the products advertised in the three advergames: Flora Margarine, BMW and Police Sunglasses. First an implicit memory retrieval technique was used. The respondents were asked to list the three brands they thought of when they were asked about margarine as a product category.

The most cited brand was Rama with seven mentions followed by Flora with six mentions, Stork with four mentions and two mentions for Sunshine D. Choice, DLite, Blossom and butter were also indicated as associations with the product category.

Explicit memory retrieval techniques were then used by asking the respondents questions about Flora specifically. They were asked to list the five most common associations they had of Flora margarine. The most common association was healthy as well as the brand's link with the Heart Foundation of South Africa. The sunflower and the colour yellow were also closely associated with the product. Only one participant indicated that he associated the brand with the seed man. Some of the negative associations included expensive, artificial, pale and not as good as butter.

Two of the respondents indicated that they bought Flora margarine, six that they did not and one that he sometimes bought it. The majority (6) had not been exposed to brand messages from Flora such as television, radio or print advertisements, billboards or banner advertisements online in the past week.

The same techniques were then used to explore the brand awareness of participants with regard to Police Sunglasses. Eight of the nine participants mentioned Ray Ban as a brand of sunglasses, while four of the nine respondents chose Police as one of their three brands. Oakley also scored four mentions, with Dolce and Gabana and Polaroid claiming two each. Von Zipper, Edgar's, Woolworths, Smith and Polo were also indicated.

The primary associations for Police Sunglasses were cool, trendy, sexy and fashionable. A number of respondents also indicated that it was an expensive brand. Youth was also linked to

Police Sunglasses. Other associations included UV protection, dark lenses, leather jackets, military, polarized lenses, movies and celebrities. One respondent was not familiar with Police as a brand at all.

None of the participants owned Police Sunglasses, nor had any been exposed to brand messages from Police Sunglasses such as television, radio or print advertisements, billboards or banner advertisements online in the past week.

The final advergame was for BMW and was called the BMW Pace game. When asked which three brands they thought of what they thought of the luxury car product category, all of the respondents included BMW in their list. Other brands mentioned were Mercedes, Audi, Volvo, Rolls Royce, Bugatti, Bentley, Lamborghini and Nissan.

The associations of the BMW brand centred primarily around wealth, prosperity and cost (six mentions) as well as technological advancement, sleek design, reliability and speed, which was mentioned by four of the nine respondents. Other mentions included "for YUPPIES", "more popular than Mercs", "the mouse on the steering wheel ad" and "German precision". Negative associations included "stupid people driving them" and "bad drivers".

Four of the nine participants had purchased a BMW at some point and five had been exposed to brand messages from BMW such as television, radio or print advertisements, billboards or banner advertisements online in the past week. All five had seen a television ad for BMW, two had heard a radio ad and one each had seen a newspaper ad and a magazine ad respectively.

The staff members were then asked to play each of the games for a minimum time period of 15 minutes. Once they had finished they moved on to the post-gaming interview.

## 4.5.1 Post-game interview - Flora Seedman Game

All of the participants found the Flora Seedman game enjoyable to a certain extent. The Pacman-style appealed to the respondents, drawing on their feelings of nostalgia as proposed in the content analysis section earlier in this chapter. This ties in with a general trend in the gaming industry in terms of what Swalwell (2007) calls techno-nostalgia. She explains that this is evident in the fact that "high-profile re-releases are appearing for current generation consoles – such as a 25th-anniversary re-release of 'Pac-Man' for the Xbox 360 (Poplak, 2006) – while Namco is again making arcade machines with 'Pac-Man', 'Ms Pac-Man' and 'Galaga' in a 'cabinet that screams 'retroville' Pac-Man with a little 'edge' added for the current millennia! [sic]' (Greater Southern, n.d.)." (Swalwell 2007).

As one respondent stated, "[I really enjoyed] the Pacman relationship. I really enjoyed Pacman in my younger days". Another concurred saying, "I liked the PacMan Style. It really took me back to my childhood days when PacMan was the game to play. I also liked the way they stress the good seeds compared to the bad food and unhealthy hearts." One of the participants was also able to connect the game with the related television ads: "[it] reminded me of the ad." The anxiety created when the enemies neared Seedman was also found to be enjoyable.

Respondent	Comment
Respondent 1	The apprehension when the horrible men come to eat you
Respondent 2	The excitement of almost getting caught but

	being able to get away	
--	------------------------	--

Table 10: Perceptions of the Flora Seedman game

Ease of play and simplicity were also mentioned as positive aspects of the game as was the ability to progress to other levels. One participant stated that the most enjoyable aspects were "the satisfying way it crunched seeds and avoided the bad fats. The ease of playing it even though I'm not good at it."

Despite these positive aspects, the participants all felt that the game was perhaps too simple and as a result could be quite boring. They did not feel that they would want to play it for a long period of time even those that indicated they had enjoyed the original Pacman games in the 1980s. Two suggestions to improve gameplay from two of the respondents were that there were "too few lives per game" and that "[i]t would be nice if you could "power-up" and destroy the baddies", something that is possible in the traditional Pacman games.

Attitudes towards the game were equally mixed with three respondents indicating that they would play the game again, three that they would not and three that they were unsure.

Interestingly, six of the nine respondents said that they would recommend the game to a friend.

The simplicity of the game was both an advantage and a drawback for the participants, which seems to point to the need to balance ease of use with challenging game play dimensions, something which was also highlighted in the survey of advertisers.

**4.5.2 Post-game interview – Police Sunglasses Struggle for Salvation Game** Only two of the nine participants found the Police advergame enjoyable, four enjoyed it somewhat and two did not enjoy it at all. One respondent did not answer the question.

Four of the respondents stated that they enjoyed the puzzle games embedded in the Police Struggle for Salvation game. Two cited the graphic quality which made the experience "almost like I was reading a comic book". One of the respondents said he did not enjoy anything about the game and that "this was my least favourite game".

The weakness of the narrative within the game was highlighted by several respondents, "the story was lame ... no connection between product and game" and "[t]he story as a cartoon is quite creative, but becomes a bit tedious after a while". Lack of clarity in terms of instructions as well as difficulty with the controls were also highlighted as negative aspects of the game. One respondent said that she did not like the "dark and gloomy graphics". Another disliked the "lengthy speech segments with the Police ads popping up". Two of the participants indicated that they did not enjoy the reading aspect of the game through which the narrative was told. The respondents felt that the product placement and brand integration were poor. "The signs kept popping up to view the whole range but I was never tempted to actually click on them. More could have been made of this aspect of the game," respondent 1 said. Respondent 7 agreed, saying, "[e]very now and again the guy had sunglasses in his hand. I can make the

On the other hand, the other respondents noticed more about the product placement and branding:

conclusion that it was Police sun glasses."

Respondent	Comment
Respondent 2	yes very much so , It fitted in well with Police sunglass image
Respondent 3	The product and logo were visible. Whenever the product could be related to - sunglasses, watch, jewellery - a popup would appear to allow the user to navigate to the website.
Respondent 4	there were continual popups with the website link pointing at one of the characters accessories
Respondent 5	Conveyed the idea of sexy people, adventure, danger
Respondent 6	Whenever a character appeared I had the option to check out the sunglasses, accessories, and so forth.

Table 11: Product placement and branding in the Police sunglasses advergame

However, Respondents 6 and 7 found the branding and product placement distracting.

Respondent 6 said, "I must admit I found it a bit [of] overkill. Every time a character arrived, a little message to say check out our jewels, accessories, and sunglasses appeared." Respondent 7 added, "[y]es. You are busy reading and then something else pops up. Then you have to start over again." The other respondents indicated that they just ignored the brand messages.

Despite this four of the respondents felt that Police's Struggle for Salvation felt more like an advertisement than a game. Only two of the participants described it as predominantly like a game. One respondent felt that it was more like a book or story.

This points to the need for the developers to ensure balance in the integration of branding messages in the game so that the messages are salient and central but not regarded as distracted or annoying by the users.

The brand personality of Police is evident in the responses to the question: "What did you learn about Police from the advergame?"

Respondent	Comment
Respondent 2	Dangerous and adventurous guys wear Police sunglasses
Respondent 4	Young, thin and adventurous people wear police brand
Respondent 5	It is for cool and sexy people who are into danger and adventure
Respondent 6	It is about being young, hip and cool.
Respondent 8	It's cool it's protective

Table 12: Respondents' perceptions of learning about Police as a brand through the advergame

This is in keeping with the brand personality of excitement as defined by Aaker (1997) and reflects aspects of the desired identity of gritty, street-smart and cool as purported by Police as a brand (Police 2010).

This was also clear from the participants' associations of the Police brand after playing the game. As in the pre-game interviews the participants were asked to list the five most common associations they had of the Police brand after having played the game. The adjectives "youth" and "cool" were the most commonly used, followed by "sexy", "adventurous", "dangerous" and "mysterious".

Overall the perceptions of the Police game among this target group were not positive. Only one of the participants indicated that he would play the game again and four that they were unsure.

Similarly only two of the respondents said they would recommend the game to friends and three that they were unsure if they would recommend it or not.

## 4.5.3 Post-game interview - BMW PACE Game

Falstein (2004), who relates game play with genetic memory of survival skill training, says that "our key interest in survival comes from evolution, shaped by millennia of life on the African veldt [and] filtered through the lens of survival in our modern society, [that] helps us comprehend the appeal of all sorts of game types and gameplay mechanisms". He links this to the appeal of racing games, arguing that the basic physical appeal of learning to move as quickly as possible, the social appeal of competing with our peers and gaining status and recognition, and the mental appeal of perceiving constantly changing patterns in the midst of a race and acting on them instantly and correctly all connect back to our prehistory (Falstein 2004). Indeed the majority of the respondents cited speed as the most significant positive aspect of the BMW game.

Six of the eight respondents indicated that the game taught them that "BMW are fast cars".

Reliability and ease in driving were also mentioned as associations as a result of playing the game. These were reflected in the pre-game interview, however, so the game could be viewed as reinforcing existing perceptions of the brand rather than creating new ones.

Positive perceptions of the game seemed largely dependent on personal preference. Those who indicated that they enjoyed racing games in general expressed much more positive feelings towards the BMW game than those who indicated that they do not enjoy racing games.

Respondent	Comment

Respondent 3	The game had very good graphics and was well developed. The story was interesting and caught your attention. Except for corners the game was easy and did not frustrate you.
Respondent 4	Nice voice, nice scenery
Respondent 6	It was more interactive. I felt like I was really in control of the movements of the car
Respondent 7	I enjoy racing games. The graphic and setting of the game was pretty good. The game was well designed, good reaction from the controls. You can multi player [sic].

Table 13: Positive responses to the BMW advergame

In contrast, the other respondents indicated that they were less positive about the game:

Respondent	Comment
Respondent 1	I do not like racing games, and found everything unenjoyable.
Respondent 2	Took too long to load; Didn't know what I was supposed to do; Very bad at controlling the movement of the vehicle
Respondent 4	I am too stupid to control the car so I crashed into everything.
Respondent 5	Leaving the track and being unsure where I was going to
Respondent 8	I found it difficult to understand what I was supposed to do.

Table 14: Negative responses to the BMW advergame

Ease of use and simplicity in control were therefore two major themes in terms of the perceptions of this group of participants.

The BMW game's brand integration was subtle as evidenced by the comments from some of the respondents that "I was not aware of BMW at all in this game except for the logo right in the beginning", "I assume I was driving a BMW (and badly at that)" and "very poorly, I only noticed that it was related to BMW later in the game". Again those with a positive attitude towards racing games displayed a more positive attitude towards the BMW brand integration and were able to make the association between the game and the product. Respondent 3, for example, stated, "[t]he product, BMW vehicle was part of the game. The ease of driving that made the game enjoyable could be associated with the BMW vehicle so driving in the game was made as simple as possible for a reason." Respondent 6 echoed this sentiment, saying, "I do not recall seeing the logo however you the game is designed to give the player the illusion that you are driving a BMW so in that sense the product is part of the game and you are driving it..."

The subtlety of the brand integration meant that all of the respondents related to the game in terms of its gaming characteristics rather than its advertising characteristics.

Respondent	Comment
Respondent 1	It felt more like a racing game. I did not really concentrate on the ads and so forth.
Respondent 3	A game. Although the car was present, you were not explicitly bombarded with information about the vehicle. Instead, through the story the characteristics of the vehicle were mentioned.
Respondent 4	More like a narrative or a short story
Respondent 6	I did not feel like I was bombarded with adverts yet I knew that I was in the seat of a BMW and could enjoy the game rather than thinking that I was viewing an advert
Respondent 7	The logo or advertising was not in your face throughout the game. [It was] fun to race the other cars.
Respondent 8	A game because it was just as frustrating as a game

Table 15: Game characteristics of the BMW advergame

Half of the respondents indicated that they would not play the BMW game again, three that they would and one that they were unsure. In terms of the potential for use as a viral marketing tool, four of the eight indicated that they would recommend the game to friends and one that she was unsure.

Overall, the BMW game seemed to produce extremes of liking and disliking depending on the individual preference of the user in terms of game type.

## 4.5.4 General perceptions of the gaming experience

The participants were also asked questions about their general perceptions of gaming and of advergaming in particular. The majority of respondents recognized the potential of the gaming

medium to communicate messages about issues, products, services and brands. They found both positive and negative aspects in the experience.

Respondent	Positive	Negative
Respondent 3	The challenge	Time restrictions
Respondent 4	Trying something new	Did not like the driving as I don't control movement so well
Respondent 5	The flora game was simple. The BMW game gave the feel of a professional game, and would encourage gaming users to continue playing. The Police game tried to develop an interesting storyline and offered different games so that the player would not become bored.	The Flora game graphics and game play did not encourage extended game playing. The Police game some of the games had a high difficulty level thus would not appeal to normal web surfers.
Respondent 6	Only the BMW game as I prefer racing games. You had a wider choice of what to do.	The Flora game was boring. The original pac-man was better. The police game took too long to begin. The ads that popped up was irritating
Respondent 7	I only enjoyed the BMW gameit was the most interactive, I really felt I was in control and it was fun as I would imagine actually driving a BMW would be	The flora did not provide the challenge that the BMW game did, for flora if the point is to get people to buy your product to make a better choice the game could be a little more sophisticated rather than just munching through the beans that lead to a tub of margarineI did not learn anything which for food products that would be what I am looking forfor the police game I did not

		enjoy the story
Respondent 8	The Police game is more "literary" with the texts etc. but nonetheless I was far too slow to score properly. I just realise I am not one for games. Not good enough coordination.	I am stupid with controlling of cursors etc. especially during the BMW game.
Respondent 9	I liked Pacman although it was frustrating. I enjoyed being able to continue even though I failed in the Police game.	I didn't like it when controls did not respond. the instructions for the BMW game

**Table 16: Perceptions of advergaming** 

Frustration both with the control of the games and with the users themselves was a common theme in this part of the interview, pointing to the need to ensure ease of use and provide a simple control interface that can be easily mastered. As stated previously this must be balanced with a game that provides sufficient challenge, excitement and variety to engage the user for long periods of time.

The narrative element of the BMW and Police games received mixed reviews, with some respondents responding positively to the story component and others finding it too simplistic and not engaging enough. It can be deduced therefore that the inclusion of narrative elements within a game in this case is insufficient and that narrative will only be considered successful if it is well conceptualised, relatable and meaningful within the user's reality.

Respondents were then asked about their feelings towards advergaming and advertising within games. The majority seemed to view advergaming as a potential means to reach a younger

audience. On the whole the participants were positive towards the idea of using games to communicate messages about issues, brands, products and services.

Respondent	Comment
Respondent 1	It is a creative way of advertising, especially if you are trying to gain the younger market (much like the police game).
Respondent 2	Good - unobtrusive way of communicating a brand message
Respondent 3	[Advertising] Can be incorporated well in games - BMW game for instance is a good example where a driving game is used.
Respondent 4	I think it is another way to reach an audience and generation that is using this technology, however, companies need to be aware though of the audienceI do not think women tend to play games as much compared to men, so it will depend on the product
Respondent 7	ideal for a younger niche market could be educational as well considers the interests of the players and the suckers you want to hook to buy your product
Respondent 8	It's a good idea and influences people subliminally.

**Table 17: Positive perceptions of advergaming** 

Respondent 1 added that "[g]ames could be a very useful and effective marketing tool in promoting products. It depends on the type of market you are trying to capture and the BMW game and Police game are geared toward a younger and "cool" crowd." Respondent 2 felt that as long as "they are enjoyable then [they are] not a problem".

Respondent 4 cautioned that "[t]he design of the game must be good, if not, you will lose the viewer very quickly," a concern that was echoed by other respondents. Respondent 5 commented that "[It is a] good idea but for it to work the access to the game must be widely publicized".

Expressed as a graph, the enjoyment experienced for each game can be expressed as follows:

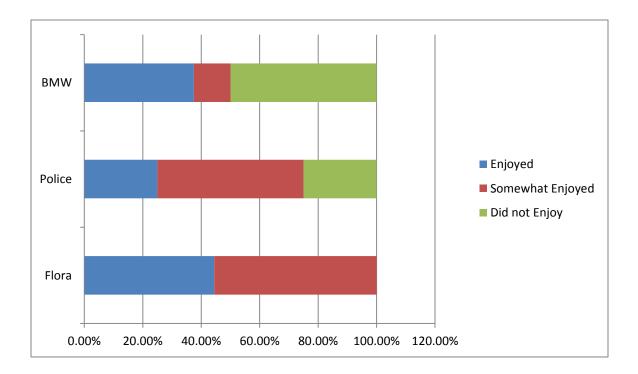


Figure 32: Graph of game enjoyment of each game

The Flora Seedman therefore elicited the most positive reaction in terms of enjoyment for this group of participants, while most participants were relatively neutral about the Police game.

The BMW game saw the greatest disparity with almost an equal split between those who enjoyed or somewhat enjoyed the game and those who did not.

## 4.6 Conclusion

This chapter focused on the results of the content analysis of the four identified games and the semi-structured group interviews conducted among three groups of NMMU staff and students. It explored the nature of advergames as a message communication tool with specific reference to their use in advertising. The results point to the potential for advergaming to be used as a viral marketing tool, but also highlight the pitfalls that advertising agencies, advertisers and game developers need to consider when developing an advergaming. Chapter five draws together these findings into a proposed model for advergaming in South Africa and presents the recommendations and conclusions from this study, synthesising the information gleaned from all aspects of the study as well as the literature review and providing a comprehensive picture of the state of advergaming in South Africa as well as a proposed way forward for the use of this tool in the South African context.

# **Chapter 5 - Conclusions and recommendations**

This thesis set out to analyse the use of advergaming in South Africa and the potential for the mobile platform to allow advergaming to reach a larger audience in South Africa and become a viral marketing tool. It also sought to propose a model for operationalising mobile advergaming within the South African context. A review of existing literature in the fields of in-game advertising, mobile gaming and viral marketing points to the potential of advergaming on mobile devices, despite current barriers to online advergaming.

#### 5.2 Recommendations

The following conclusions and recommendations can therefore be extrapolated from the literature, the findings from the survey, semi-structured group interviews and content analysis presented in the previous chapters.

It is evident from the study that education about the possibilities of advergaming as a form of message communication needs to take place both at industry and at consumer level to broaden the appeal of the advergame within the South African context and to create platforms for innovation within this domain. The general lack of awareness about advergaming among respondents is indicative of the need for this type of education, a need echoed by the advertising agencies surveyed.

Although there is evidence of the use of advergaming in the South African advertising industry, the research found that advergaming in its traditional wired form cannot reach a mass audience in South Africa at this time, due to the lack of access to the Internet among the majority of the population and other barriers such as cost of access and cost of ownership. The thesis has explored two of those barriers, namely access and mobility, and concludes that the mobile environment has the potential to overcome those barriers and enable advergaming to reach a larger mass audience. Despite this there is

evidence that both advertising agencies and potential consumers are interested in the possibilities of advergaming as a means to reach the South African audience in a unique and engaging manner.

Already there is some evidence to show that mobile gaming and mobile advergaming is starting to be explored in South Africa, as described in previous chapters. Given that mobile advergaming is still in its infancy in South Africa, the significance of this study lies in its proposal of a model to operationalise mobile advergaming in the South African context.

The central hypothesis of the study was the belief that advergames in which the issue, product, service or brand advertised is integrated into the game play narrative are more effective than advergames in which the link between the game and the communicated message is merely associative and are therefore the better choice in mobile viral communication. Contrary to the initial hypothesis of this study, the use of narrative was not seen as being central to the success of an advergame. Instead the study's results seem to point to game play, both in terms of ease of use and challenge, as being the most influential aspect in terms of the player's enjoyment of the game. The need to balance these two aspects – ease of use and challenge of skill – is vital to the success of any game, not only advergames. From the results of the study, narrative is secondary to these aspects in terms of game enjoyment although a game that combines ease of use and challenge of skill with an engaging narrative may be more successful than one that does not. The respondents of the semi-structured group interviews were intrigued by the narrative aspects of the Police game, but found the game play in different levels both too simplistic and too challenging. The result was that the game itself was not enjoyable to the majority of participants, indicating that narrative alone is not enough to create a compelling game. In terms of Chen and Ringel's levels of brand integration, the first two levels, associative and illustrative, seemed to be most effective among the semi-structured group interview respondents. This is significant given that Chen and Ringel defined the demonstrative level as the most sophisticated level of brand integration.

However, the study only tested four games. A more comprehensive study looking at a larger number of advergames across all of the proposed levels is needed to determine the validity of this initial finding.

In addition to the need to take cognisance of ease of use and challenge of skill in advergames, respondents indicated that advergame developers and their clients need to look at the technical aspects of their games to ensure a smooth game playing experience and to lessen the frustration of game players. There is also evidence to support the need for advergame developers and their clients to identify potential technical difficulties that players may experience and to design games around these technical restrictions, such as bandwidth, connection speed and device compatibility. Access to the Internet, whether fixed line or mobile, does not necessarily translate into the ability to access and play games as the device and connection used have an impact on this. Users also have different levels of sophistication in terms of the use of their devices. Developers need to look to device-independent games standards as a means to expand the reach of mobile games within the current context and to cater to all levels of user sophistication.

Once the game play is defined, it is important to investigate the dissemination and promotion of an advergame in order to ensure its success. Viral marketing is an accepted tactic in online brand communication and has a demonstrated effectiveness as evidenced by the literature explored in previous chapters. There is some evidence from the semi-structured group interviews that South African audiences are willing to pass on advergame links or recommend advergames to their social networks; however since this study only looked at staff and students at NMMU a larger study would need to be conducted to determine whether this is true of the larger population.

Advergaming as a tactic can be adapted to become a viral marketing tool and, because of the increased level of engagement of a game as opposed to a commercial message such as a television advertisement, the potential for even greater brand recall and positive brand association is high. The semi-structured

group interview interviews seem to indicate that advergames can be used to improve brand associations and perceptions in the short term. The responses post-game play indicate an increased awareness of embedded messages regarding the brands and/ or products concerned. The extent of this brand recall is, however, limited by the level of message integration in the advergame played. The study pointed to the need to balance message integration with game play experience. Overt advertising messages were not positively received by respondents (such as in the Police game), while messages that were too subtle failed to create recall and awareness, a case in point being the BMW game which although it delivered enjoyable and engaging game play failed to adequately convey a message about BMW as a brand. Advergames that successfully combine engaging game play with non-intrusive messages seem to be the most successful at increasing message recall and creating positive associations with the brand. Brand, product or message integration needs to be seamless so that messages do not distract from the game play. The KitKat game seemed to best exemplify this seamless integration with all participants finding it the least distracting. However, it is imperative that there is a message communicated through the advergame or it will not fulfil its purpose. In this regard, the Flora Seedman advergame seemed to be most effective although there were indications that the game play needed to be made more exciting. However, more research needs to be done to determine to what extent brand recall of advergames translates into positive brand association and sales conversions in the longer term. A longer term study would need to be conducted in order to determine this.

Advergames seem set to remain a complement to other branding and communication tools, rather than a central strategy in themselves. Therefore, advertisers and game developers need to focus on the ways in which advergames can be used as part of the broader communication strategy and interlink the various components of the strategy to drive traffic across all platforms, including advergames.

While the commercial potential of advergames is important, it is equally vital to consider applications beyond advertising and marketing. From the survey of advertising agencies it was clear that the majority believed that mobile gaming could provide the ideal platform for extending the reach of games for communication, whether advergames or so-called serious games. The survey also demonstrated that there was widespread support for the idea that games can be used as educational and issue dissemination media for HIV/AIDS, environmental consciousness and so on. This is especially significant in the South African context where social, health and environmental issues continue to impact on the well-being of society. Drawing on international examples such as that of India, the South African government and non-profit organisations could explore the possibility of creating games to communicate messages through mobile phones as part of their broader educational and awareness campaigns.

It is clear from the data collected and the literature cited that games offer more than just an entertainment experience and that they can be used in a variety of ways to communicate messages to niche and mass audiences. In South Africa, advergaming is slowly growing as a complement to existing brand strategies and could potentially be used to reach citizens with messages regarding health, social ills, education and environmental conservation among others. The mobile platform seems ideal for overcoming the obstacles to the use of advergames to reach a mass audience.

## 5.1 A model for mobile advergaming in South Africa

Drawing on the literature, the content analysis of advergames, the survey data and the semistructured group interview input and on observation of the way mobile phones are used, the following model of advergaming is proposed (Figure 33):

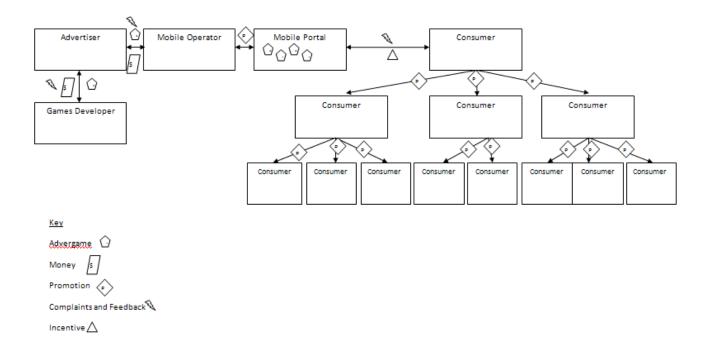


Figure 33: A model for operationalising gaming as a viral communication tool in South Africa

The model represents graphically the relationship between all parties in the gaming viral communication system.

The advertiser or message initiator will need to engage a games developer to create a branded game to distribute. The advertiser/ message initiator and games developer will need to ensure that they have enough data on the consumer as well as balanced integration of the message to create a sufficiently engaging game, firstly to encourage regular, prolonged gameplay and secondly to encourage dissemination of the game to friends and family as per the viral marketing model. Drawing on the research about the consumer, the advertiser/ message initiator and games developer will need to determine whether an associative, illustrative or demonstrative approach to brand integration is needed (Chen and Ringel 2006). The results of the semi-structured group interviews point to greater support for the demonstrative and

illustrative levels but without the need for a fully realised narrative around that integration.

This implies a process of negotiation and continued input from the advertiser and/ or advertising agency and the games developer as represented in Figure 32.

Before the model is implemented, a testing phase needs to be completed in which the efficacy of the advergame is assessed through a pilot distribution of the game. This stage is crucial to determining factors that may impede the success of the advergame in communicating its message as well as in its ability to be used as a viral marketing tool. This could take the form of a beta testing process much akin to that used by software developers where a group of test users are asked to engage with the game and to provide feedback on their experience. This is also an opportunity to gauge the balance between usability and challenge to ensure that the game is neither too challenging nor too easy.

Next the advertiser/ message initiator or advertising agency would need to approach a mobile operator, who manages a mobile portal through which the game could be seeded. Seeding refers to the placing of a viral message in the public domain for dissemination by consumers (Chaffey 2008). The advertiser/ message initiator would provide the completed advertisement to the mobile operator and pay the mobile operator a fee per download for access of the advergame. In this way, the cost for the consumer becomes negligible and the barrier of cost for the consumer is avoided. The relatively small cost of the advergame, as it is played by any consumer, is thus carried by the advertiser.

Once the game is placed on the mobile portal, the mobile operator will need to promote it in some way to the consumer. This could be as simple as listing it at the top of the mobile games

list on the portal or as direct as sending a promotional SMS or MMS to consumers encouraging them to download or access the game.

The mobile operator and/or the advertiser will also need to provide an incentive to the consumer to disseminate the game or a message about the game, as per the model of viral marketing (Porter and Golan 2006; Fattah and Paul 2001). The incentive could take the form of a competition entry for each referral that downloads or accesses the game as in the case of the BMW Pace game or even reduced rates on SMS's or call charges for a specific length of time. Once the consumers access or download and play the game, an option at the end of the game should offer them the chance to 'challenge your friends'. The link will automatically generate an SMS message for the consumers, who can then forward it to their friends.

When the friend receives the SMS, it will include an embedded link to the mobile portal where the game can be downloaded. The friend will need to enter the mobile number of the person who sent him/her the referral before he/she will be allowed to download or access the game. This will allow the mobile operator to track the number of referrals as well as downloads and accesses, and to manage the incentives for the campaign. The result would be that each consumer would become a brand ambassador for the advertiser, disseminating brand messages and encouraging engagement with the game. The term brand ambassador is used in marketing to describe a satisfied customer who communicates their positive experience to other potential consumers of her own volition and functions as a promoter of a brand and its products (Fisher-Buttinger and Vallaster 2008).

The mobile environment thus offers almost all of the features needed for viral marketing as proposed by Porter and Golan (2006). Firstly, Porter and Golan (2006) recommend that viral marketing needs to offer free products or services; the advergames would be available for free to consumers under the proposed model. Secondly, they require easy transmission of the marketing message. By using SMS, the advergame is easily transmitted to the consumers. Thirdly, exploitation of common human motivations is reflected in the incentive for referral as well as in the gameplay itself and the ability to challenge peers. The use of existing social networks will form part of the viral marketing process itself, in that consumers will send the advergame to their network of friends and contacts. Another possibility would be to use the existing social networking medium, Facebook, to disseminate the game (Kim 2009; Slagle 2007). Lastly, the model demonstrates the use of others' resources and infrastructure in the use of the existing mobile network or the existing mobile portal or social network. The cost implications would then lie with the advertiser/ message initiator rather than with the consumer.

The study also pointed to three key factors that need to be balanced in the production of an advergame: ease of use/ usability, challenge and skill requirements and message integration. In addition, the advergame must be supported by marketing and promotion to ensure that traffic is driven to the game. These factors are represented visually in the diagram below:

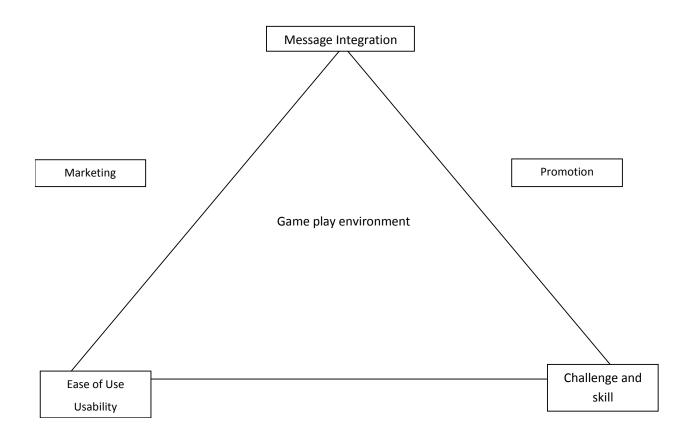


Figure 34: The factors required to create a successful advergame

Ease of use and usability within the study referred to two key aspects. Firstly ease of use refers to the ease with which a player is able to learn the rules of the game and interact with the game interface. This is especially important for new or beginner gamers. The second aspect encompasses the technical environment (including compatibility issues) and issues of similarity to the conventional game play environment, that is to what extent the advergame displays similar characteristics to games that users would have played in the past. These similarities may not be in terms of the game type or narrative, but may be as simple as the use of conventional controls such as the arrow keys to move and the space bar to jump. In the mobile environment

this would need to be tailored to the specific device as a mobile device with a QWERTY key board is different to a device with a numeric keypad. This links back to the first aspect of usability in that instructions for play – including details of control – should be clearly spelled out to the users.

The second factor identified in the study is that of challenge and skill. This refers to the extent to which an advergame poses a challenge to a player. It also deals with the excitement and difficulty of levels of the game. Avid gamers expect an increasingly higher degree of difficulty as they move through the different levels. A game that is too easy to master, quickly becomes boring. Replayability is also impacted by this factor.

The third factor refers to the message integration. The study pointed to the need for balance within this area as well. On the one hand, it is important that the message about the issue, product, brand or service is clear to the player, otherwise the advergame has failed in its primary purpose. On the other hand, however, the message integration must be seen to be seamless and not distracting to the game play experience so that enjoyment of the game is not compromised. This is a delicate balance to strike, but one that appears to be vital to the success of an advergame.

These three factors together influence the viability of the game play itself and therefore of the narrative. In essence it seems that these factors supersede narrative in importance in terms of the advergame environment.

All three of these factors should be assessed during the testing phase.

External to the game play environment but still vital to the success of the advergame is marketing and promotion, which should be designed to drive traffic to the site. The advergame model employs an adapted version of the Hotmail model of viral marketing (Porter and Golan 2006).

In addition, this marketing and promotion usually provides the incentive for game play and is involved in the tracking of users with a view to measuring the success of an advergame.

Incentivising advergaming in the mobile environment is an important solution to overcoming the cost implication of mobile advergaming for consumers. In addition, advertisers and mobile operators can work together to create an environment in which advergaming has a negligible cost for the consumer. Mobile operators need to form partnerships with both games developers and advertisers to create such an environment.

It is therefore recommended that advertisers/ message initiators, game developers and mobile operators work together to operationalise the use of advergaming in the mobile environment in South Africa in order to leverage the benefits of reaching this mass audience.

### **5.1.1** Limitations of the model

While the model seeks to offer a potential way of operationalising mobile advergaming as a viral marketing tool in the South African context, its limitations are acknowledged. These limitations are as follows:

 The model relies on the willingness of a mobile operator to manage the viral marketing incentive process.

- The model increases the cost for the advertiser beyond that of the development of the
  advergame by making the advertiser carry the cost of access for the consumer. Further research
  would need to be conducted to demonstrate whether this investment is worth the initial cost.
- Initial research mentioned in the literature points to the interest of users in mobile gaming, yet a larger study, focusing on how and why South African users access and play games on their mobile phones is needed to substantiate this research and to better inform the promotion of advergaming as a viral marketing tool. Such a study would also need to focus on the appeal of games and the characteristics of gameplay that start and keep users playing.
- The model does not propose a particular type of advergame or a particular approach to brand integration as the ideal format for a viral marketing campaign using advergaming.
- In addition, the model itself needs to be tested in practical terms to determine its fit with the
   South African audience and the audience's willingness to spread the message.

Despite these shortcomings, the model provides a useful starting point to explore the possibilities of mobile advergaming as a viral marketing tool in South Africa.

By leveraging the unique elements of advergaming – gameplay, simulation and engagement – and the unique elements of the mobile environment – increased access and mobility with a potentially negligible cost to consumers – advertisers/ message initiators should be able to create a successful viral marketing campaign that results in greater brand/ message recognition, awareness and positive association than traditional advertising forms evokes. The study provides an exploration of some examples of advergaming in South Africa and presents the possibility of reaching a mass audience in a way not yet achieved in South Africa, while translating some of the interactivity of the Internet onto the mobile device.

The potential of gaming as a means to communicate messages extends beyond the merely commercial to possibilities for engaging with social, environmental, health and economic issues of society and therefore to become a tool for positive change rather than simply a money-making activity.

## References

[unknown] (2006). 'Free Mobile Game Downloads Gaining Traction in North America and Europe as Reported in Greystripe's GameJump.com Mobile Game Consumer Insights'. URL: (Consulted on 15 September 2007):

https://www.greystripe.com/pressrelease.php?release=pr13gjreport

[unknown] (2007). 'AdMob Reports 1 billion Ads in 6 months'. URL: (Consulted on 15 September 2007):

http://www.mobilemarketingmagazine.co.uk/2007/01/admob\_reports\_1.html

Aaker J.L. (1997). "Dimensions of Brand Personality". In *Journal of Marketing Research*, vol. 24 (1), 347-356.

Aarseth, E. (2004). "Genre Trouble: Narrativism and the Art of Simulation". In *First Person:* New Media as Story, Performance and Game. The MIT Press: Cambridge, Massachusetts, USA. Pp. 45 – 55.

AGASA. (2009). About Us. URL (accessed on 2 September 2009): <a href="http://league.agasa.co.za/info/about.htm">http://league.agasa.co.za/info/about.htm</a>.

Ang, C. (2006). "Rules, gameplay, and narratives in video games", *SIMULATION & GAMING*, 37(3), 306-325.

AppData. 2011. "Top applications 10 March 2012". URL (accessed on 10 March 2012): <a href="http://www.appdata.com/">http://www.appdata.com/</a>.

Aristotle. (1989). Poetics. (S. H. Butcher, Trans.) Hill and Wang, Publishers: New York 1989.

Axe. (2007). Axe Vice Game. URL (accessed 1 September 2009): http://www.axevice.com/.

Balasubramanian, S, Karrh, J and Patwardhan, H. (2006). "Audience response to product placements: an integrative framework and future research agenda", *Journal of Advertising*, 35(3), 115.

Bardzell, J, Bardzell, S and Pace, T. (2008). "Player Engagement and In-Game Advertising", One To One Interactive. White paper.

Bennett, S, Maton, K and Kervin, L. (2008). "The 'digital natives' debate: A critical review of the evidence", In *British Journal of Educational Technology*, 39 (5), 775–786.

Bernstein, E. M., and Putnam, F. W. (1986). "Development, reliability, and validity of a dissociation scale". In *Journal of Nervous and Mental Disease*, 174, 727–735.

Blockdot. (2002). M&Ms Flip the Mix game. Downloaded from URL (accessed 31 August 2009) http://www.kewlbox.com.

Blumler, JG. and Katz, E. Katz, . (1974) <u>The uses of mass communications: Current perspectives on gratifications research</u>. Beverly Hills, CA: Sage.

BMW. (2009). BMW Pursuit Across Europe Game. URL (accessed 29 September 2009): <a href="http://www.bmw-pace.com/pace/">http://www.bmw-pace.com/pace/</a>.

Bogost, I. (2008). "The Rhetoric of Video Games". In *The Ecology of Games: Connecting Youth, Games, and Learning*. Edited by Katie Salen. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning. Cambridge, MA: The MIT Press. 117–140.

Brightman, J. (2009). "Video Game Players Are Gamers for Life, says EMA". URL (accessed on 2 September 2009): <a href="http://www.industrygamers.com/news/video-game-players-are-gamers-for-life-says-ema/">http://www.industrygamers.com/news/video-game-players-are-gamers-for-life-says-ema/</a>.

Brockmyer, J, Fox, C, Curtiss, K, McBroom, E, Burkhart, K and Pidruzny, J. (2009). "The development of the Game Engagement Questionnaire: A measure of engagement in video game-playing", *Journal of Experimental Social Psychology*, 45, 624–634.

Bryce, J and Rutter, J. (2002) 'Spectacle of the Deathmatch: Character and Narrative in First Person Shooters' in G. King and T. Krzywinska (Eds), <u>ScreenPlay:</u>

Cinema/videogames/interfaces, Wallflower Press, 66-80.

Caillois, R. (1962). Man, play and games. London: Thames and Hudson.

Calleja, G. (2007). "Digital Game Involvement: A Conceptual Model", *Games and Culture* 2(3), 236 – 260.

Capcom. (1987). Street Fighter the Game.

Chaffey, D. (2008) 'Define 'Seeding ': Definition: What Is?'. URL: (consulted on 21 January 2009): <a href="http://www.davechaffey.com/E-marketing-Glossary/Seeding.htm">http://www.davechaffey.com/E-marketing-Glossary/Seeding.htm</a>

Chaney, IM, Lin, K, and Chaney, J. (2004), 'The Effect of Billboards within the Gaming Environment', *Journal of Interactive Advertising*, 5(1). URL: (consulted on 28 February 2009): <a href="http://www.jiad.org/vol5/no1/chaney/">http://www.jiad.org/vol5/no1/chaney/</a>

Chang, B, Lee, S and Kim, B. (2006). "Exploring factors affecting the adoption and continuance of online games among college students in South Korea: Integrating uses and gratification and diffusion of innovation approaches", In *New Media Society*, 8(2), 295 – 319.

Chen, J. and Ringel, M. (2001), 'Can Advergaming be the Future of Interactive Advertising?'. URL: (consulted on 21 September 2008):

http://www.locz.com.br/loczgames/advergames.pdf

Constantin, C. and Grigorovici, DM. (2004), 'Experiencing Interactive Advertising Beyond Rich Media: Impacts of Ad Type and Presence on Brand Effectiveness in 3D Gaming Immersive Virtual Environments,' In *Journal of Interactive Advertising*, 4 (3).

Coulard, S. (2007). Les hommes et les femmes ont-ils une perception différente des advergames? Master's Thesis.

Cruz, D and Fill, C. (2008) 'Evaluating Viral Marketing: isolating the key criteria', In *Marketing Intelligence & Planning*. 26(7). Emerald Group Publishing Limited.

Csikszentmihalyi, M. (1991). Flow: The Psychology of Optimal Experience. London: Harper Perennial.

D'Andrade, N. (2007) 'The effects of varying levels of object change on explicit and implicit memory for brand messages within advergames', Masters dissertation. URL: (consulted 21 January 2009): <a href="http://edt.missouri.edu/Winter2007/Thesis/DAndradeN-051707-T6889/research.pdf">http://edt.missouri.edu/Winter2007/Thesis/DAndradeN-051707-T6889/research.pdf</a>

Dahl, S, Eagle, L and Baez, C. (2009). "Analysing Advergames: Active Diversions or Actually Deception", In *Young Consumers: Insight and Ideas for Responsible Marketers*, 10(1), 46 – 59.

Deal, D. (2005) 'The Ability of Branded Online Games to Build Brand Equity: An Exploratory Study'. Paper presented at DiGRA 2005 Conference: Changing Views – Worlds in Play.

Deutsche Presse-Agentur. (2010). "New undersea cable lands in South Africa - internet costs to fall". URL (accessed 1 July 2011): <a href="http://www.earthtimes.org/articles/news/308926,new-undersea-cable-lands-in-south-africa--internet-costs.html">http://www.earthtimes.org/articles/news/308926,new-undersea-cable-lands-in-south-africa--internet-costs.html</a>.

Digital District. (2005) 'White Paper on Mobile Adgames'. URL: (Consulted on 21 September 2007): <a href="http://www.digitaldistrict.de/">http://www.digitaldistrict.de/</a>

Dinehart, S. (2009). 'Dramatic Play'. In Gamasutra. URL: (consulted on 28 August 2009) <a href="http://www.gamasutra.com/view/feature/4061/dramatic\_play.php">http://www.gamasutra.com/view/feature/4061/dramatic\_play.php</a>.

Dobele, A, Lindgreen, A, Beverland, M, Vanhamme, J and van Wijk, R. (2007). "Why pass on viral messages? Because they connect emotionally", In *Business Horizons*, 50(1), 291–304.

Dobson, M and Ha, D. (2008). "Exploring interactive stories in an HIV/AIDS learning game: HEALTHSIMNET", In *Simulation & Gaming*, 39(1), 39-63.

Du Plooy, GM. (2002). *Communication Research: Techniques, Methods and Applications*. Juta & Co: Lansdowne.

Dynamic Logic. (2008). "FIRST LOOK AT MOBILE PERFORMANCE: Early Research Shows Mobile Advertising Campaigns Increase Brand Metrics". URL (accessed 1 September 2009): http://www.dynamiclogic.com/eu/research/btc/beyond the click aug2008 int.html.

Entertainment Software Association. (2009). "2009 Essential Facts About the Computer and Video Game Industry". URL (accessed on 2 September 2009): <a href="http://www.theesa.com/facts/pdfs/ESA\_EF\_2009.pdf">http://www.theesa.com/facts/pdfs/ESA\_EF\_2009.pdf</a>.

Eskelinen, M. (2001) 'The Gaming Situation'. In *Game Studies*, 1(1) URL: (consulted 20 March 2009): <a href="http://gamestudies.org/0101/eskelinen/">http://gamestudies.org/0101/eskelinen/</a>

Falstein, N. (2004). "Natural Funativity". In Gamasutra.com. URL (Accessed on 5 March 2011): http://www.gamasutra.com/features/20041110/falstein\_01.shtml (Accessed on 5 March 2011)

Fattah, H and Paul, P. (2002) 'Gaming gets serious'. In American Demographics 24(5): 38-44.

Ferguson, R. (2008). "Word of mouth and viral marketing: taking the temperature of the hottest trends in marketing". In *Journal of Consumer Marketing*, 25(3), 179 – 182.

Flora. (2009). Flora's Seedman Love Your Heart Game. URL (accessed 29 September 2009): <a href="http://seedman.florastrongheart.co.za/#/level-one">http://seedman.florastrongheart.co.za/#/level-one</a>.

Frasca, G. (2003). 'Simulation versus Narrative: Introduction to Ludology', M. Wolf and B. Perron (eds) <u>Video/Game/Theory</u>. London: Routledge.

Frasca, G. (2004). "Video Games of the Oppressed: Critical Thinking, Education, Tolerance, and Other Trivial Issues". In *First Person: New Media as Story, Performance and Game.*\_The MIT Press: Cambridge, Massachusetts, USA. Pp. 85 – 93.

Gaviscon. (2009). Heartburn Hero. URL (accessed 1 September 2009): <a href="http://www.gaviscon.com/hero.aspx">http://www.gaviscon.com/hero.aspx</a>.

Gladwell, M. (2002). The Tipping Point. New York: Time Warner.

Goldstuck, A. (2006) 'Online Media in South Africa 2006: Executive Summary'. URL: (consulted on 15 September 2007):

http://www.theworx.biz/download/Exec%20Summary%20-%20Online%20Media%20in%20SA%202006.pdf

Goldstuck, A. (2007) 'Internet Access in SA 2007' URL: (Consulted 13 September 2007): http://www.theworx.biz/access07.htm

Greystripe. (2006) 'Free Mobile Game Downloads Gaining Traction in North America and Europe as Reported In Greystripe's GameJump.com Mobile Game Consumer Insights' URL: (Consulted 21 January 2009):

https://www.greystripe.com/pressrelease.php?release=pr13gjreport

Griffiths, M. (1999). 'Violent video games and aggression: A review of the literature'. In Aggression and Violent Behavior, 4(2), 203-212.

Gurău, C. (2008). "The Influence of Advergames on Players' Behaviour: An Experimental Study". In *Electronic Markets*, 18(2): 106-116.

Gwinner, KP and Eaton, J. (1999). "Building Brand Image Through Event Sponsorship: The Role of Image Transfer". In *Journal of Advertising*, 28(Winter), 47-57.

Hassan, R and Thomas, J. (2006). *The New Media Theory Reader*. Open University Press: Berkshire, England.

Haugtvedt et al, C., Machleit, K. and Yalch, R.. (eds). (2005). Chapter 7. Online Consumer Psychology Understanding and Influencing Consumer Behavior in the Virtual World.. Erlbaum NJ U.S.A.

Hein, K. (9 November 2006) 'Advergaming Attracts Large A-list Players'. In *Brandweek*. URL: (Consulted on 21 September 2008):

http://rps.hva.nl:2679/ehost/results?vid=5&hid=122&sid=f69a3008-b872-40ad-8417-7e753fa59bd0%40sessionmgr104

Hernandez, MD., Chapa, S., Minor, M., Maldonado, C. and Barranzuela, F. (2004). "Hispanic Attitudes toward Advergames: A Proposed Model of Their Antecedents". In *Journal of* 

*Interactive Advertising*, 5(Fall). URL (accessed 2 September 2009): http://www.jiad.org/vol5/nol/hemandez/index.htm.

Huizinga, J. (1955). *Homo Ludens: A Study of the Play Element in Culture*. Beacon Press: Boston.

I-Play (2005) 'I-play Outlines Collective Industry Action Required for Mobile Gaming Market to Reach True Potential'. Press release, 2005-06-13

ITU. (2007) 'World information Society Report 2007'. URL: (consulted on 21 September 2008): <a href="http://www.itu.int/osg/spu/publications/worldinformationsociety/2007/">http://www.itu.int/osg/spu/publications/worldinformationsociety/2007/</a>

Joosub, S. (2010). "Vodacom announces low cost web-focused computer: A South African first". URL: (accessed 5 March 2011) <a href="http://www.saine.co.za/?p=2129">http://www.saine.co.za/?p=2129</a>.

Joubert, R. (2009). "The RSA mobile media landscape in 2009 – a forecast", RickJoubert.com. URL (accessed 1 September 2009): http://www.rickjoubert.com/?p=28.

Joyner, L and Terkeurst, T. (2005). "Accounting for User Needs and Motivations in Game Design". In *Interactive Convergence: Critical Issues in Multimedia*. Eds: Scott P Schaffer & Melissa Lee Price. Inter-Disciplinary Press: Oxford, United Kingdom.

Kim, E. (2009). 'Social networking is next big thing for gaming'. In *San Francisco Chronicle*. URL (Accessed on 26 August 2009): <a href="http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/08/03/BUMN1926DU.DTL#ixzz0PMvrFh9m">http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/08/03/BUMN1926DU.DTL#ixzz0PMvrFh9m</a> (Accessed on 26 August 2009).

KitKat. (2009). KitKat Have a Break Game. URL (accessed 28 September 2009): http://www.kitkat.co.za.

Kretchmar, S. (2004). "Advertainment: The Evolution of Product Placement as a Mass Media Marketing Strategy". In *Journal of Promotion Management*, 10(1/2), 37-54.

Kreustzer, T. (2009). "Assessing Cell Phone Usage in a South African Township School". In *International Journal of Education and Development using ICT*, Vol. 5(5), pg. .

Kreutzer, T. (2009). "Generation Mobile: Online and Digital Media Usage on Mobile Phones among Low-Income Urban Youth in South Africa". URL (accessed 1 July 2011): http://tinokreutzer.org/mobile/.

Krippendorff, K. (2004). *Content Analysis: An Introduction to its Methodology*. California: Sage Publications, Inc.

Lavender, T. (2006). 'Games Just Wanna Have Fun...Or Do They? Measuring The Effectiveness of Persuasive Games'. In *Proceedings of CGSA 2006 Symposium*.

Lee, M and Youn, S. (2008). "Leading National Advertisers' Uses of Advergames". In *Journal of Current Issues and Research in Advertising*, 30(2),

Lindley, C. (2002). "The gameplay gestalt, narrative, and interactive storytelling". Paper presented at Computer Games and Digital Cultures Conference, Tampere, Finland.

Lindley, C. (2003). "Game Taxonomies: A High Level Framework for Game Analysis and Design". In *Gamasutra*, URL (accessed on 3 September 2009): <a href="http://www.gamasutra.com/features/20031003/lindley">http://www.gamasutra.com/features/20031003/lindley</a> pfv.htm.

Lindley, C. (2005). "The Semiotics of Time Structure in Ludic Space As a Foundation for Analysis and Design". In *Game Studies*, 5(1), URL (accessed on 3 September 2009): http://gamestudies.org/0501/lindley/.

Lister, M, Dovey, J, Giddings, S, Grant, I and Kelly, K. (2009). *New Media: A Critical Introduction (Second Edition)*. Routledge: London and New York.

Løvlie, A. (2007). "The Rhetoric of Persuasive Games: Freedom and Discipline in America's Army." URL: (Accessed 29 August 2009) http://www.duo.uio.no/sok/work.html?WORKID=54268&fid=26043.

MarketingSherpa. (2008) 'Banner Ad Size and Click Rate: Bigger a Bit Better, But It's Clicks that Count'. URL: (Consulted 22 October 2008): <a href="https://www.marketingsherpa.com/barrier.html?ident=30829">https://www.marketingsherpa.com/barrier.html?ident=30829</a>

Marolf, G. (2006) 'Advergaming'. Master's Thesis at the University of Zurich.

McQuail, D. (1983), Mass Communication Theory: An Introduction, London: Sage.

Mentos. (2009). Kiss Fight. URL (accessed 31 August 2009): <a href="http://www.mentoskissfight.com">http://www.mentoskissfight.com</a>.

Mole, D. (2008). 'South African wins gold at World Cyber Games'. URL: (consulted 28 February 2009): <a href="http://www.gadget.co.za/pebble.asp?relid=644">http://www.gadget.co.za/pebble.asp?relid=644</a>

Moore, S. (2006). It's Child's Play: Advergaming and the Online Marketing of Food to Children. The Kaiser Family Foundation. URL (accessed 31 August 2009): http://www.kff.org/entmedia/7536.cfm

Mouton, J. (2001). How to succeed in your Master's & Doctoral Studies: A south African Guide and Resource Book. Van Schaik: Pretoria.

Muller, R. (2010). "Cellphone costs are excessive, says SA". URL (accessed on 1 July 2011): <a href="http://mybroadband.co.za/news/cellular/11467-cellphone-costs-are-excessive-says-sa.html">http://mybroadband.co.za/news/cellular/11467-cellphone-costs-are-excessive-says-sa.html</a>.

Myers, D. (1990a). "Computer Game Genres". In Play and Culture. 3 (1), 286 – 301.

Myers, D. (1990b). "A Q-Study of Game Player Aesthetics". In *Simulation & Gaming*, 21(4), 375 – 396.

Myers, D. (1999). "Simulation, Gaming, and the Simulative". In *Simulation & Gaming*, 30(4), 482 – 489.

Namco. (1980). Pacman video game.

Namco. (1994). Tekken the Game.

Namco. (1996). Soul Blade the Game.

Nelson, MR, Keum, H and Yaros, RA. (2004). "Advertainment or Advercreep? Game Players' Attitudes towards Advertising and Product Placement in Computer Games". In *Journal of Interactive Advertising*, 4(3), 1-30.

Nguyen, TH. (2007) 'More Growth Ahead for Mobile Gaming', *Gartner* Research URL: (Consulted 22 October 2008):

http://www.gartner.com/DisplayDocument?ref=g\_search&id=504622&subref=simplesearch

Norman, DA. (2001a). "The future of education: Lessons learned from video games and museum exhibits" URL: (Accessed 29 August 2009)

http://www.jnd.org/dn.mss/NorthwesternCommencement.html.

Norman, DA. (2001b). "Learning from the success of computer games". URL: (Accessed 29 August 2009) <a href="http://www.jnd.org/dn.mss/ComputerGames.html">http://www.jnd.org/dn.mss/ComputerGames.html</a>.

Oblinger, D and Oblinger, J. (2005). "Is It Age or IT: First Steps Toward Understanding the Net Generation". In *Educating the Net Generation*. URL: (consulted 28 February 2009): http://www.educause.edu/educatingthenetgen.

Pedersen, PE and Methlie, LB. (2004) 'Exploring the relationship between mobile data services business models and end-user adoption', paper presented at the Fourth IFIP Conference on e-Commerce, e-Business, and e-Government. URL: (consulted on 28 February 2009): http://ikt.hia.no/perep/i3e paper2.pdf

Pedersen, PE and Nysveen, H. (2002) 'Using the theory of planned behaviour to explain teenagers' adoption of text messaging services'. Working Paper, Agder University College. URL: (consulted on 28 February 2009): <a href="http://ikt.hia.no/perep/ISR\_submission.pdf">http://ikt.hia.no/perep/ISR\_submission.pdf</a>

Piaget, J. (1951). Play, dreams and imitation in childhood. London: Routledge & Kegan Paul.

Pieters, M. (2010). "New Vodacom data prices". URL (accessed 1 July 2011): http://www.bandwidthblog.com/2010/04/23/new-vodacom-data-prices/.

Police. (2010). BeYounique Struggle for Salvation Game. URL (accessed on 3 September 2009): <a href="http://beyounique.police.it/">http://beyounique.police.it/</a>.

Pop Cap Games. (2000). Bejeweled the Game. URL (accessed on 3 September 2009): <a href="http://www.popcap.com/games/free/bejeweled">http://www.popcap.com/games/free/bejeweled</a>.

Porter, L and Golan, G. (2006) 'From Subservient Chickens to Brawny Men: A Comparison of Viral Advertising to Television Advertising'. In *Journal of Interactive Advertising*, 6(2).

Prensky, M. (2001). "Digital Natives, Digital Immigrants", In *On the Horizon*. 9(5).MCB University Press,

Proffitt, JM, Tchoi, DY and McAllister, M. (2007). "Plugging Back Into The Matrix: The Intertextual Flow of Corporate Media". In *Journal of Communication Inquiry*, 31(3), 239-254.

Pruden, DR and Vavra, TG. (2004) 'Controlling the grapevine: how to measure and manage word-of-mouth'. In *Marketing Management*, 13(4): 24-30.

Raney, A, Smith, J and Baker, K. (2006). "Adolescents and the Appeal of Video Games". In Playing Video Games: Motives, Responses and Consequences. Vorderer, P and Bryant, J (Eds). Lawrence Erlbaum and Associates: New Jersey. 165 – 180.

Rouse, R. (2000). *Game Design Theory and Practice: 2nd edition*. Wordware Publishing: Plano, TX, USA.

Ryan, M. (2001). *Narrative as Virtual Reality*. John Hopkins University Press: Baltimore and London.

Santos, E, Gonzalo, R and Gisbert, F. (2007) 'Advergame: An Overview'. In *International Journal 'Information Technologies and Knowledge'*, Vol. 1 1(2007).

Sawyer, B and Smith, P. (2008). Taxonomy of Persuasive Games. Unpublished Presentation.

Scarlett Epstein, T. (1999). A Manual for Culturally-Adapted Social Marketing. Sage: USA.

Schlosser, AE, Shavitt, S and Kanfer, A. (1999) 'Survey of Internet users' Attitudes toward Internet Advertising'. In *Journal of Interactive Marketing*, 13(3): 1-21.

Shapiro, S and Krishnan, H. (2001). "Memory-Based Measures for Assessing Advertising Effects: A Comparison of Explicit and Implicit Memory Effects". In *Journal of Advertising*, Vol. 30, No. (3 (Autumn, 2001), ): pp. 1-13.

Sharpe Partners. (2006). SHARPE PARTNERS' STUDY: NEARLY 90% OF INTERNET USERS SHARE CONTENT VIA EMAIL. URL (accessed 1 September 2009): <a href="http://www.sharpe-partners.com/2006/02/sharpe-partners-study-nearly-90-of-internet-users-share-content-via-email/">http://www.sharpe-partners-study-nearly-90-of-internet-users-share-content-via-email/</a>.

Slagle, M. (2007). 'Online games meet social networking tools'. In *USAToday*. URL (Accessed on 26 August 2009): <a href="http://www.usatoday.com/tech/gaming/2007-11-22-">http://www.usatoday.com/tech/gaming/2007-11-22-</a> socialgames N.htm (Accessed on 26 August 2009).

South Africa The Good News. (27 November 2008). "Mobile internet users exceed PC users". In *South Africa The Good News*. URL (Accessed 1 September 2009): <a href="http://www.sagoodnews.co.za/science\_technology/mobile\_internet\_users\_exceed\_pc\_users.html">http://www.sagoodnews.co.za/science\_technology/mobile\_internet\_users\_exceed\_pc\_users.html</a>.

Squire, K. 2006. "From Content to Context: Videogames as Designed Experience". In *Educational Researcher*, 35(8), 19-29.

Stafford, M and Faber, R. 2004. Advertising, promotion, and new media. M.E. Sharpe: USA.

Stam, R, Burgoyne, R, and Flitterman-Lewis, S. (1992). *New Vocabularies in Film Semiotics: Structuralism, Post-Structuralism and Beyond.* London and New York: Routledge.

Stapleton, A J & Taylor, P C (2002), 'Physics and Playstation Too: Learning Physics with Computer Games'. Australian Institute of Physics 15th Biennial Congress, Darling Harbour, NSW, July 8-11

Stapleton, A. (2004). 'Serious Games: Serious Opportunities.' Paper presented at the Australian Game Developers' Conference, Academic Summit, Melbourne, VIC

Strutton, D, Taylor, D and Thompson, K. (2011). "Investigating generational differences in e-WOM behaviours". In *International Journal of Advertising*, 30(4), 559 – 586.

Svahn, M. (2005). "Future-proofing advergaming: a systematisation for the media buyer". Proceedings of the Second Australasian Conference on Interactive Entertainment, 23 - 25 November 2005, Sydney, Australia.

Swalwell, M. (2007). "The Remembering and the Forgetting of Early Digital Games: From Novelty to Detritus and Back Again". In *Journal of Visual Culture*, 6(2): 255.

The NPD Group. (2009). "VIDEO GAMING ATTRACTS LARGER FEMALE AUDIENCE IN 2009". URL (accessed on 2 September 2009):

http://www.npd.com/press/releases/press 090629b.html.

Thompson, C. (2006). "Saving the World, One Video Game at a Time". In *New York Times*. URL: (accessed 29 August 2009)

http://www.nytimes.com/2006/07/23/arts/23thom.html? r=1&oref=slog.

TNS Research Surveys. (2011). "Urban South Africa's mobile patterns show significant shifts a few highlights". URL (accessed 1 July 2011): <a href="http://www.tnsresearchsurveys.co.za/news-centre/pdf/2011/MobileLifeSA-18April2011.pdf">http://www.tnsresearchsurveys.co.za/news-centre/pdf/2011/MobileLifeSA-18April2011.pdf</a>.

Tomlinson, D. (2007). "Contextual Ideologies of Video Games within the realm of Social Interactivity". URL (accessed 1 July 2011):

http://duketomlinson.files.wordpress.com/2009/04/contextual-ideologies-of-video-games-within-the-realm-of-social-interactivity.pdf.

Twinomugisha, A. (2010). "Why Are African Internet Access Prices Still High?" URL (accessed 1 July 2011): <a href="http://www.africabusinesssource.com/experts/why-are-african-internet-access-prices-still-high/">http://www.africabusinesssource.com/experts/why-are-african-internet-access-prices-still-high/</a>.

Underwood, M. 2003. "Introductory models & basic concepts: Shannon-Weaver". URL: (consulted on 15 September 2007):

http://www.cultsock.ndirect.co.uk/MUHome/cshtml/index.html

Van Wyk, S and van Belle, J. (2005). 'Adoption Factors for Mobile Gaming in South Africa', in Khalid S. Soliman (Ed.) *Managing Information in the Digital Economy: Issues & Solutions*, Proceedings of the 5th International Business Information Management Association (IBIMA) Conference, pp. 13 - 21, 13-15 December 2005, Cairo, Egypt.

Verklin, D and Kanner, B. (2007) 'Games People Play'. In *Media Magazine* URL: (consulted on 21 September 2008):

http://www.mediapost.com/publications/?fa=Articles.showArticle&art\_aid=63264

Vermeulen, J. (2010). "Broadband penetration: It's not looking good for South Africa". URL (accessed 25 September 2011): <a href="http://mybroadband.co.za/news/broadband/17085-broadband-penetration-it-s-not-looking-good-for-south-africa.html">http://mybroadband.co.za/news/broadband/17085-broadband-penetration-it-s-not-looking-good-for-south-africa.html</a>.

Vorderer, P., Hartmann, T. (2003) Explaining the enjoyment of playing video games: the role of competition. Proceedings of the second international conference on Entertainment computing, Pittsburgh, Pennsylvania, 2003.

Welker, C. (2002). "The paradigm of viral communication". In *Journal Information Services* and *Use archive*, 22(1).

Wiedemann, D. (2007). 'Exploring the Concept of Mobile Viral Marketing through Case Study Research'. Paper presented at Konferenz Mobilität und Mobile Informationssysteme (MMS 2007), March 2007. Aachen, Germany. URL: (Consulted on 22 October 2008): <a href="http://www.brainguide.in/exploring-the-concept-of-mobile-viral-marketing-through-case-study-research">http://www.brainguide.in/exploring-the-concept-of-mobile-viral-marketing-through-case-study-research</a>

Wiedemann, D.G. and Marini, S. (2006) 'Entwicklungen im Bereich Mobile Advertising aus der Sicht von Experten – Ergebnisse der Expertenbefragung MM1. In K. Pousttchi (Ed) Studienpapiere der Arbeitsgruppe Mobile Commerce, Augsburg: 1-49.

Winkler, T and Buckner, K. (2006). 'Receptiveness of Gamers to Embedded Brand Messages in Advergames: Attitudes towards Product Placement'. In *Journal of Interactive Advertising*, 7(1). URL: (consulted on 15 September 2007): <a href="http://jiad.org/article85">http://jiad.org/article85</a>

Wirth, W, Hartmann, T, Bocking, S, Vorderer, P, Klimmt, C, and Schramm, H, et al. (2007). "A process model of the formation of spatial presence experiences". In *Media Psychology*, 9, 493–525.

Wise, K, Bolls, P, Kim, H, Venkataraman, A and Meyer, R. (2008). "Enjoyment of Advergames and Brand Attitudes: The Impact of Thematic Relevance". In *Journal of Interactive Advertising*, 9(1).

Wolf, M. 2006. "Game Studies and Beyond". In Games and Culture. (1), 116

Wu, M, Mitchell, K, McCaffrey, D, Finney, J and Friday, A. 2004. "Real Tournament – mobile context-aware gaming for the next generation". In *The Electronic Library*, 22(1), 55 – 64.