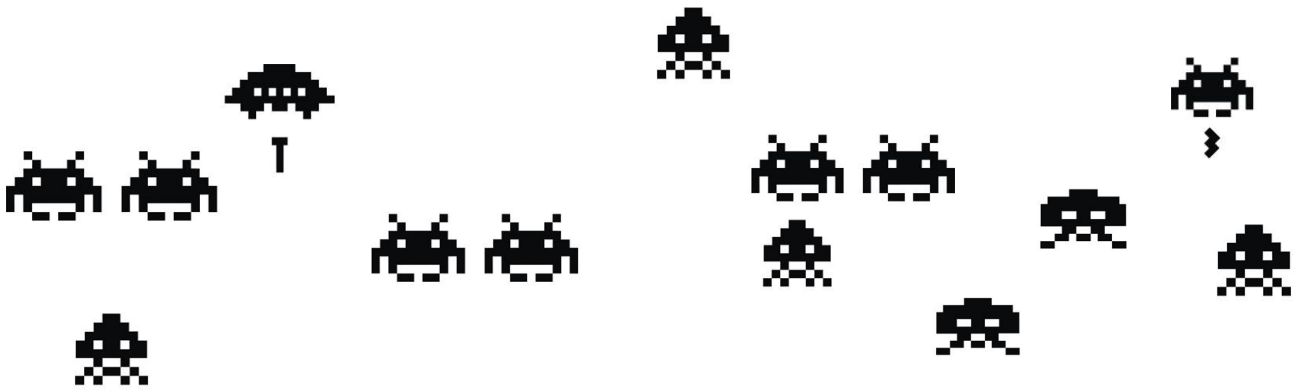
Generation game
-and how to reach them

A study of
advergames affect on brand attitude
and of gaming habits in a Danish context



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Executive summary
This thesis has a two-folded, yet coherent, aim. First of all it seeks to prove the relevancy of advergames in a Danish context by uncovering the contemporary media habits of the segment males age 18-30, and secondly it seeks to build a framework that outlines how to drive positive brand attitude formation from advergames.

Marketing campaigns are increasingly implementing advergames to engage consumers with a brand through interactive, entertaining media content. Many reasons for the emerging usage of advergames can be identified, however the most significant includes ad clutter, negative attitudes towards traditional advertising, and particularly a markedly rise in the usage of computer games. Within the segment of males age 18-30 playing computer games now accounts for the majority of time spent on media platforms, which is a tendency that has been long acknowledged globally and thoroughly investigated by market data companies. However, in a Danish context advergames are a nearly non-existing phenomenon, and likewise is the acknowledgement of the contemporary media habits in regards to computer game consumption within the segment of Danish males age 18-30. Through a quantitative survey it is verified that the segment spends much time on game-based platforms, which proves the existence of a large potential target group for Danish advergame campaigns. Advergames represent a rather new marketing tool and research on the subject is still its infancy. Marketers engaging in executing advergame campaigns are therefore left with a somehow vague basis for validating whether developed advergames drives marketing objectives or wastes budget. However, this does not restrain companies from increasingly engaging in advergame campaigns, in fact advergame spending nearly reached $1.83 billion in the US in 2010. Insights from game design theory and marketing-based theory on advergaming were combined, and incited 20 hypotheses proposing a positive relationship between motivational compliant game features and game and brand attitude. Hypotheses were tested using regression analysis, and results revealed that a focus on driving immersion and achievement in advergames is most feasible in driving game and brand attitude. Therefore advergames should focus on implementing immersion and achievement compliant features, such as individualization, prestige, stories and collecting. Findings further indicated a relationship between game attitude and brand attitude hence favorable attitudes towards the game were transferred to the sponsoring brand.

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1. Introduction

This master thesis will focus on the marketing discipline *advergaming*. In brief the term advergaming is used to describe the different possibilities to advertise brands or products with or within computer- and console games (Marolf, 2007).

The game for delivering a brand's message to a desired target audience has changed. Advertisers previously played tag with consumers, trying to chase them down and reach them by saturating traditional media channels with traditional spot advertising. Yet ad clutter, negative attitudes toward traditional advertising, and a media landscape filled with a mind-boggling number of media options for advertisers have shifted the way the game is played. As a result, advertisers have begun engaging consumers in a game of hide-and-seek by imbedding brand messages in entertainment-oriented media content. This growing advertising strategy, known as branded entertainment, involves integrating elements of brand communication into content that consumers seek out for entertainment purposes (Hitch & Worple, 2010). According to a report by PQ Media Research, spending on branded entertainment efforts will surpass $330 billion in 2011 (PQMedia, 2011a).

One form of branded entertainment is the advergame, a computer game designed around a brand. Advergame executions range from simply repurposing an existing, well-known game (e.g., shooting baskets) to feature the brand in the gaming environment to creating more elaborate, custom-built games that involve detailed virtual experiences with the brand's product (Wallace & Robbins, 2006). Advergaming constitutes part of the smallest but fastest growing segment of branded entertainment marketing efforts. The tremendous growth in the number of brands that include advergames as part of their advertising strategy has been attributed to a desire to engage youth and young adults who are increasingly choosing online, interactive media over traditional media (Business Wire, 2008; PQMedia, 2011a).

Thus this thesis will focus on the spendthrift young male, age 18-30, which is a target group that has been getting more and more difficult to reach through the traditional media mix (PQMedia, 2011a). Global-based McKinsey research from 2011 highlights a dramatic increase in the intensity of which this segment uses digital devices and platforms. The research outlines seven different

user segments based on digital media consumption and within all these segments we find a very high consumption of gaming. 57,4% of the respondents highlights gaming as their media choice once a week or more while we find as many as 84% of the respondents engaging with gaming once a week or more within the top three segments measured on gaming consumption. Furthermore, we find a markedly rise in consumption of online gaming from 2008-2010 within four of the user segments, which is in fact the segments that expresses the lowest consumption of gaming (Chappuis et al., 2011; McKinsey, 2011a).

Males age 18-30 are continuously moving away from traditional media channels and on to digital platforms. In fact, a McKinsey media and entertainment news survey from 2010 shows that media interest towards general platforms within our target group is pointing directly at the web. From 2006 till 2009 the rise in interest of web news has risen from 44 to 72 percentages, while all other platforms except the dailies show decrease or still-stand. All in all, websites are the second-most-used news platform for all age groups except those over age 55 (Nattermann, 2010; McKinsey, 2011b).

We believe that the above are tendencies that can be derived in a Danish context as well. Nonetheless, all accessible Danish market data we have come across neglect to investigate the consumption of online gaming (FDIM, 2011; Dansk Statistik, 2011; TNS Gallup, 2011). Online gaming, in which category we find advergaming, is still representing an unnoticed niche area within media behavior when the point of departure is Denmark. Danish advertisers and media buyers seem to ignore online gaming, and the marketing channel it constitutes. When no attention is given to the subject it remains an unfeasible area of interest for market data companies, thereby leaving the general market, here among companies, with no available data on the subject of online game consumption within our target segment (Markedsføring, 2011).

According to several scholars, an advergame represents a unique form of branded entertainment because, in contrast to placements purchased in other forms of gaming, the game incorporated as part of an advergaming execution is produced specifically for the sponsoring brand, in essence making the game itself the brand message (Chen & Ringel, 2001; Deal, 2005).

The opportunity to create entertaining content in an advertisement for the brand establishes advergaming as a form of branded entertainment that in essence provides a hybrid form of brand

messaging. Advergames merge the level of advertiser control found in traditional advertising with the entertainment communication context associated with product placement. Because of their unique attributes, advergames hold tremendous potential for delivering a brand's message in an engaging manner at a fraction of the cost of television advertising (Bertrim, 2005). Campaign planners also appear to recognize this value; the technology research firm Yankee Group (2006) predicted that advergames would generate nearly $260 million in revenues by 2011. Current data shows that advergames generated a total industry turnover in 2011 of $1.83 billion (DFC Intelligence, 2012).

Thus, advergaming provides a growing and unique form of branded entertainment worthy of the attention of advertising scholars. The significant potential of advergaming as a new form of interactive advertising suggests proprietary research exists that evaluates the effectiveness of advergames, yet as Winkler and Buckner (2006) note, little academic research provides the potential to offer theoretically grounded insights into the impact of specific features of advergames on desired communication effects (Winkler & Buckner, 2006). A growing number of scholars are turning their attention toward advergames, but most studies involve content analyses (Moore, 2006), examine the effects of advergames on children (Mallinckrodt & Mizerski, 2007), or consider social policy ramifications (Villafranco & Zeltzer, 2006). Furthermore, most research into in-game advertising focuses on traditional product placements in online and console games rather than advergames (Winkler & Buckner, 2006).

More research that examines how specific features of advergames affect desired advertising outcomes can reveal theoretically grounded relationships between advergame features and communication effects, as well as provide practical insights for agencies and their clients. At the time given Youn, S. and Lee (2003), Hernandez (2011; 2004) and Sukoco and Wu (2011) are the only researchers that have conducted preliminary studies within this field of advergaming. As noted by McCarty (2004), in-depth knowledge of the effects of product placement in traditional media did not exist until scholars began systematically examining specific attributes of different product placement executions; thus, research on advergames should follow a similar direction (McCarty, 2004).

The increased use of advergames is one out of many new, innovative advertising means to

circumvent the growing lack of confidence in traditional mass-communication, but in the hectic hunt for the consumers companies tend to rush into using these innovations without a clear understanding of the media's effect on the target audience (Langer, 2003). We propose that the target segment of this thesis has never been more present at game-based platforms than now, making advergames a very relevant subject to investigate. It is the thesis' aim to examine this proposition along with revealing the theoretically grounded relationships between advergame features and positive brand attitude formation on the basis of four chosen advergames.

2. Problem statement

Based on the introduction the following problem statement has been formulated:

What are the current media habbits of Danish males age 18-30 and what is the relationship between advergame features and the segment's perception of positive brand attitude analyzed through four advergames; and what general guidelines of creating successful advergames can be derived from our conducted research?

3. Area of research

The following section presents an introduction to the thesis' area of research. We explore the underlying motivations and wonderings behind the formulation of the thesis' problem statement and outline our chosen research demarcations.

3.1. Elaboration on problem statement

Despite the global anticipation on consumers' massive usage of online games (McKinsey, 2011; Radoff, 2011; Chappuis et al., 2011) we have come across no empirical founded data on online game usage in a Danish context within or target segment. Online gaming, including advergaming, is representing a niche channel within the marketing discipline, and taking point of departure in Denmark, we see that the focus on online gaming behavior is very minor adjacent to non-existing. Hence, we suppose that this specific media behavior do not qualify as a feasible area of research for Danish market data companies to work within.

We, conversely, want to investigate the relevancy of advergames in a Danish context, and in order

to do so we aim at mapping the current media habits of our chosen target segment with a specific focus on online gaming. Hereby leading us to following research question:

R1: *What is the current media behavior of Danish males within the age group 18-30 with a specific focus on the usage of online games in comparison with more traditional media types?*

Many types of organizations are starting to use advergames as a part of their marketing strategy. Their aim is to improve branding, to boost product awareness, and collect detailed data about existing and potential customers, clients, and supporters (Afshar et al., 2004; Buckner et al., 2002; Van der Graaf & Nieborg, 2003). Despite the growth in adoption of advergames, relatively little empirical developer/marketer-independent research has been undertaken which focuses specifically on how to build advergames that actually drives brand attitude (Marolf, 2011; Winkler & Buckner, 2006).

After having gone through a major part of the somehow limited research on advergaming we assess that marketers have no actual independent knowledge base available on how to structure an advergame. Those, who nevertheless continue with developing an advergame, are most likely to contact a digital agency to undertake the actual conceptualizing and programming (Radoff, 2011; Reeves & Read, 2009). Due to the lack of well-documented knowledge on the subject marketers are left with a markedly vague basis for validating whether the developing party are creating a valuable brand driver or just wasting budget. What is missing is a toolbox that enables marketers to plan, structure and evaluate advergames. It is the purpose of this thesis to accommodate this need by creating a framework that outlines how to do this in practice.

An applicable approach in building this framework is looking at the grounded relationships between advergame features and desired communication effects. Communication effects are a major part of the common marketing literature but in order to investigate advergame features this thesis' takes point of departure in game design theory. Theory on game design is becoming an increased area of interest for both scholars and organizations (Radoff, 2011). Often verbalized as *Gamification*, which typically involves applying game design thinking and mechanics to non-game applications to make them more fun and engaging. Gamification has been called one of the most important trends in technology by several industry experts and can potentially be applied to any

industry and almost anything to create fun and engaging experiences, converting users into players (Koster, 2005; Reeves & Read, 2009). The common denominator for game design theory, here among gamification, is working actively with player motivations to stimulate positive user engagement (Koster, 2005; Zichermann, 2010). In practice, players are sought motivated through the use of various motivational compliant game features where each feature aims at engaging the player in the gameplay (Radoff, 2011; Yee, 2007).
We see an ideal match in combining player motivations and motivational compliant game features as outlined within game design theory with marketing-based theory on attitude towards the ad and attitude towards the brand. We find this combination of theory an interesting and useful theoretical basis for building our advergame framework. Extending the understanding of the antecedents to consumer's attitude towards advergames could prove valuable for designers and marketers to better strategize their advergame designs. Four advergames from respectively the California Milk Processor Board, Google, Saluke and PepsiCo have been chosen to create an empirical foundation for our framework. Each of which will be thoroughly introduced in section 7.2. Hereby leading us to the following research question:

R2: *How can we on the basis of four chosen advergames build a framework of guidelines that enables marketers to plan, structure and evaluate advergames that drives positive brand attitude combining the theoretical fields of game design and marketing?*

R1 and R2 encapsulate two dimensions of our problem formulation. First by proving the relevancy of the thesis by demonstrating the wide usage of online games in a Danish context within our target group Danish males 18-30. Secondly exploring the correlation between player motivational compliant advergame features and positive brand attitude as a basis for providing general guidelines in creating successful advergames.

3.2. Demarcation

In order to address the problem statement within the allowed scope of the thesis and at the same time in a thorough and profound way, a number of delimitations as well as choices made are now presented.

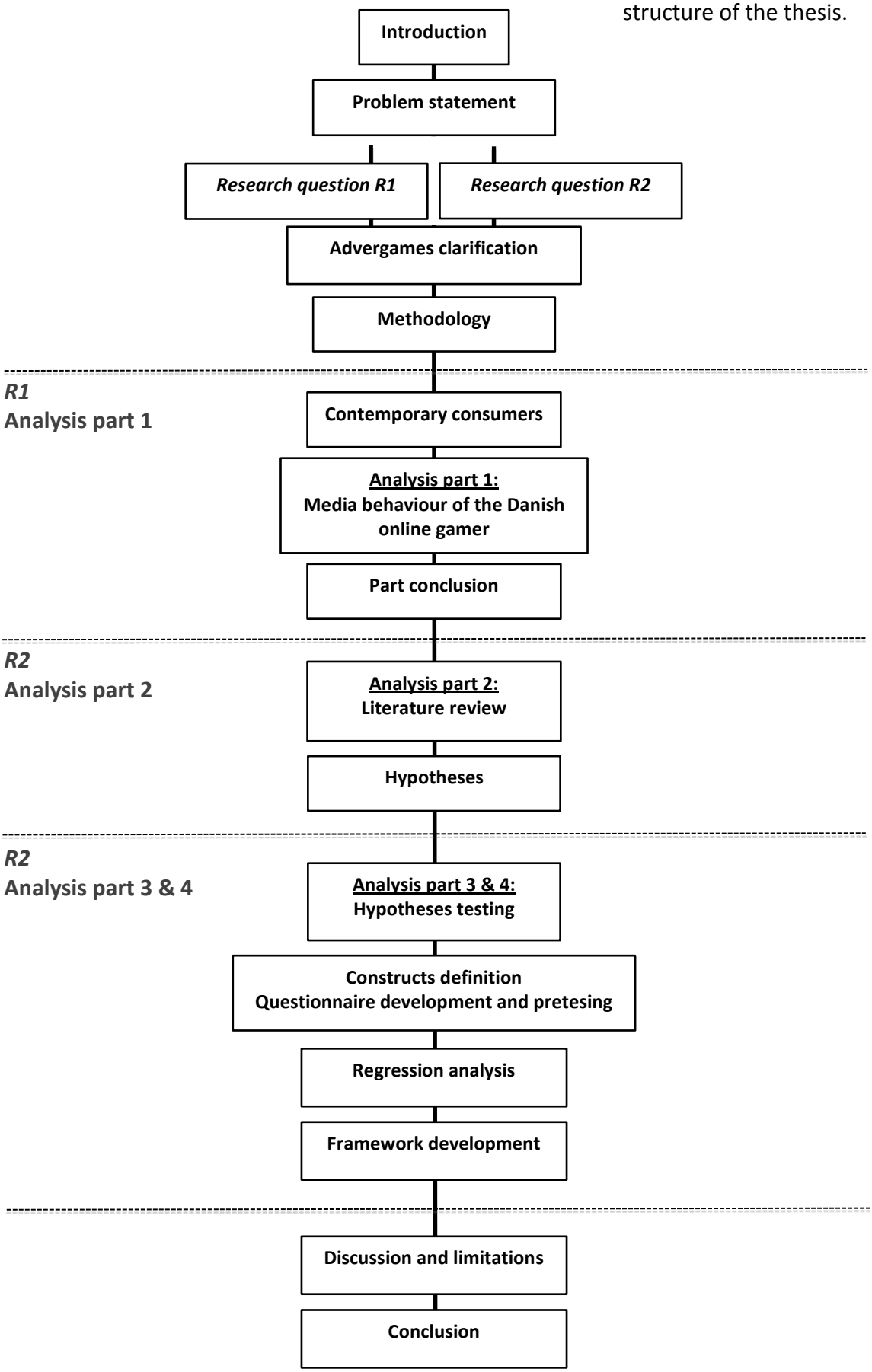
Advergames are usually used as a part of a larger marketing campaign to serve a specific purpose in a multi channels execution (Marolf, 2007). We do not consider the intended purpose of the advergame, hence we have chosen to focus specifically on the correlation between advergames' features and positive game and brand attitude. Thereby we are omitting to examine all other marketing goals and communication effects for which advergames could also serve a purpose.

We are solely examining and measuring respondents' reactions post-gameplay and only in up till 10 minutes after advergame exposure. In doing so we do not take into account wear-in and wear-out effects on respondents' perceptions derived from active gameplay, as well as we do not contemplate on what happens in the span before and after respondents' advergame exposure and questionnaire completion.

In examining the correlation between advergame features and positive brand attitude we are solely focusing on motivational compliant features as opposed by Radoff (2011). There are numerous computer game features that might be relevant for this study purpose, but we have deliberately chosen to focus on those we find most suitable in addressing the thesis' problem statement.

4. Thesis flow model

This model illustrates and describes the overall structure of the thesis.



5. About advergames

Part five explains what an advergame is and outlines what meaning we ascribe to the concept. Further, it provides two specific cases of successful advergame campaigns to demonstrate how advergames are used in practice.

5.1 What is an advergame

Generally two prominent forms of advertising through games exist today; advergames and in-game advertising (IGA). Advergames are a specific type of online game where the brand itself is embedded in game-play, whereas IGA involves the placement of real-world marketing into preexisting console and computer games (Schwarz, 2005). Product placements appeared in video games as early as the 1980s, but advergames are an evolved form of product placement where the game is designed around the brand, rather than the brand placed in the game (Entertainment Software Association, 2009). Advergames and IGA present distinctly different environments, and may not be equivalent in effectiveness, though research in the field is still in its infancy (Winkler & Buckner, 2006).

As suggested by Winkler and Buckner (2006), we differentiate advergames from other forms of in-game advertising. With IGA, marketers buy product placement space within an existing game. Multiple brands are present and usually static in the background of the main action e.g. buying a billboard in a car-racing game similar to product placement in television shows or movies (Yang et al., 2006). On the other hand, advergames are custom online games designed specifically for a brand (Adweek Media, 2009). The brand is often central to game-play and the game is the brand message (Chen & Ringel, 2001). The conceptual distinction is clear. Cognitive resources needed to play advergames versus IGA are also likely different such that some IGA games require high levels of involvement (Grigorovici & Constantin, 2004) and attention to play (Lee & Faber, 2007) compared to most advergames (Winkler & Buckner, 2006).

Advergames have been defined as online games that incorporate marketing content (Dobrow, 2004; Thomases, 2001). They are interactive games that are developed around a brand, a product, or a character associated with a brand or a product. Branding and products are incorporated into

the game itself through either associative or demonstrative methods – meaning that a game can be used to demonstrate the use of a product or to associate the product with an activity or a lifestyle (Gurău, 2008). Advergames are most commonly placed on the brand website as part of a larger marketing strategy and are free to play.

Although some sources refer to IGA and advergames interchangeably (Graft, 2006a), this thesis establishes a clear distinction between the two formats and focuses primarily on effects of advergames alone. With IGA the game platform is owned and developed by game developers, and brands have to purchase advertising space in games, limiting the flexibility of incorporating brand messages. Advergames on the other hand is developed entirely by a company allowing them full control of the brand integration as well as the interaction between players and the brand. Conclusively this makes advergames a more attractive platform for advertisers to work with, which constitutes one of the reasons for choosing advergames as our area of research.

5.2 Advergames as marketing tool

The need to develop new Internet advertising tools arose from the rapid decline in the effectiveness of rich media advertising in the late 1990s (Chen & Ringel, 2001; Yuan et al., 1998). Advergames lies in the wake of that development even though there are several earlier examples of advergames such as Danish cereals company OTA's Guldkorns Ekspressen from 1991 (Smith & Just, 2009).

During the last couple of years advergames have emerged as a field of academic interest and have slowly been working their way into the toolbox of the communications strategist together with all the other medias like TV, radio, print, PR etc. (Svahn, 2005). As a growing subject of interest the debate, both commercial and scientific, is presenting many views on what an advergame really is, and as a result the meaning of the term advergame is becoming slightly diluted. To prevent this thesis from reproducing this rhetorical confusion we ascribe to Svahn's (2005) definition of an advergame:

"*A goal-directed and competitive activity conducted within a framework of agreed rules wholly or*

partially designed and produced with the intent of actively or passively assisting in the carrying and dissemination of a message designed to persuade the player to change a behaviour in the world outside the magic circle of the game (Svahn, 2005: p. 187)"

Svahn's 2005 definition of advergames underlines the purpose of changing the player's behaviour in the world outside the circle of the game. There are many cases that successfully illustrate how this is done in practice. Two prominent examples of advergames to achieve marketing goals are the 2002 US Army and the 2007 J2O advergames (Edery & Mollick, 2009, Marolf, 2007).

In 1999 in the U.S., the soldier recruitment number hit their lowest figure in 30 years. In response, the U.S. Congress decided that 'aggressive, innovative experiments' should help find new soldiers, and the U.S. Defense Department augmented recruitment budgets to US $2.2 billion a year. Out of this initiative the advergame America's Army was designed to help the military reach America's youth (Marolf, 2007). America's Army was launched in 2002 and cost just $7 million and has to date been costing less than US $4.5 million to maintain (Edery & Mollick, 2009).
The game consists of two parts: "Soldiers: Empower Yourself," a role-playing segment that instills Army "values," and the more violent but more popular "Operations: Defend Freedom," a first-person combat simulator where players engage in virtual warfare over the Internet. By April 2006, nearly seven million users were registered on www.americasarmy.com as players and the game had won the Advergame of the Year Award in 2005 at the digital Entertainment and Media Excellence Awards (Marolf, 2007).
Advertising agency Leo Burnett recently conducted a survey, which revealed that 30% of all Americans age 16 to 24 had a more positive impression of the Army because of the game, and further that the game had more impact on recruits than all other forms of Army advertising combined (Edery & Mollick, 2009).
All in all, it is fair to state that Americas Army achieved its two main marketing goals; recruiting soldiers and teaching about the life in the Army (Edery & Mollick, 2009).

J2O is a soft drink label owned by Britvic PLC one of Europe's leading soft drinks companies. In 2007 Britvic PLC launched the advergame J2O Toilet Training Challenge with the marketing aim of

driving awareness of the J2O brand, but also to communicate the fact that J2O is a soft drink and not an alcopop – an alcoholic beverage that resembles sweet drinks such as soft drinks and lemonades (Marolf, 2007).

In the Toilet Training Challenge the player has to direct his 'urination' towards the center of a toilet bowl while getting rewarded with points based on the precision of the aim. Meanwhile the amount of beer in a glass held in the player's hand reduces (Marolf, 2007).

For the launch, the game link was sent to approximately 200 people and placed on the viral e-mail section of Internet social media portal Lycos. Within two weeks it had spread virally to half a million people, and the final campaign result reported of 4.4 million sessions played, 2.4 million unique users and 95.500 registrations (Marolf, 2007).

6. Methodology

Part six serves as an introduction to the thesis' scientific and methodological framework, hereby setting the scene for how we perceive and work with the thesis' area of research, the way in which it will be understood, and finally the method for studying it.

6.1. Theoretical framework

This thesis is not subject to any overall paradigm. Rather it seeks to involve relevant theories that support the overall elaboration on the chosen problem statement. Theories will be presented continually as they are used, but before presenting how we approach our problem statement methodologically we will account for our scientific theoretical base. Overall three main theory concepts can be identified, the contemporary consumer, attitude formation, and game design theory.

6.1.1 The contemporary consumer

In investigating the media habits of our target segment we draw on the theoretical base of the concepts of Generation Y, postmodern consumers and participatory culture as presented by Schaefer (2011), Muniz and O'Guinn (2001) and Jenkins et al. (2006). Contemporary consumer theory provides us with insights into the media consumption tendencies of our chosen target segment. Such insights will prove a valuable key in verifying the relevancy of advergames as a

pertinent and actual marketing channel.

6.1.2 Attitude formation

A key concept in this thesis is the concept of attitude formation. Attitudes can be defined as a person's overall evaluation of an object, a product, a brand, an ad etc. (Pelsmacker et al., 2007: p. 77). When we examine the communications effect of average we solely focusing on their potential in affecting our target segments attitudes.

An attitude towards a particular brand can be considered as a measure of how much a person likes or dislikes the brand, or of the extent to which the person holds a favorable or unfavorable view of it. The more favorable brand attitudes are the more likely a purchase of the brand becomes. Although attitudes are relatively stable they can be changed over time, and it is the ultimate purpose and challenge for marketing communications to change attitudes in favor of the company's brand (Pelsmacker et al., 2007).

Attitudes play an important role in hierarchy-of-effects models. According to these models consumers go through different stages in responding to marketing communications, namely a cognitive, an affective and a conative stage. Consumers are assumed to go through these three stages in a well-defined sequence, and the majority of hierarchy-of-effects models claim a cognitive-affective-conative sequence, or a think-feel-do sequence. In these models attitudes they are primarily defined as affective reactions in a hierarchical setting. In fact, an attitude can be assumed to consist of three components. The cognitive component reflects knowledge, beliefs and evaluations of the object, the affective component represents the feelings associated with the object, and finally the behavioral component refers to the action readiness with respect to the object (Pelsmacker et al., 2007).

6.1.2.1 Correlation between attitudes towards the game and attitudes towards the brand

Within the field of attitude formation an important theoretical concept for this thesis is the correlation between attitudes towards the ad and attitudes towards the brand, which is directly translated into the correlation between attitudes towards the advergame and attitudes towards the brand. As mentioned attitude towards the ad represents either favorable or unfavorable consumer feelings towards the ad itself, representing an affective mediator variable to brand attitude and purchase intention (Lutz et al., 1983; MacKenzie et al., 1986). Lutz, MacKenzie and

Belch (1983) systematically describe the relationship between attitude towards the ad and attitude towards the brand. Their relationship model with the most support uses dual mediation, through which attitude towards the ad has both a direct relationship with attitude towards the brand and an indirect relationship through brand cognitions (Brown & Stayman, 1992; Gardner, 1985; Homer, 1990; Lutz et al., 1983). Petty and Cacioppo's (1986) elaboration likelihood model of persuasion (ELM) provides the theoretical foundation for the relationship between attitude towards the ad and attitude towards the brand; their direct relationship may result from message processing that occurs in the peripheral route of the ELM (Miniard et al., 1990). Attitude towards the ad may affect processing in the central ELM route by influencing brand cognitions, which in turn affect attitude toward the brand (Miniard et al., 1990). The findings of Lutz, MacKenzie, and Belch (1983) provide the foundation in investigating gameplay motivational compliant features as antecedents to positive brand attitude formation resulting from active user-advergame interaction. Several models of ad attitude have been proposed and tested to explain the relationship between ad attitude and brand attitude in traditional advertising contexts (Brown & Stayman, 1992). Chen and Wells (1999) extended the concept of attitude toward the ad to websites, defining attitude toward the website as the online surfers' predisposition to respond favorably or unfavorably to web content in natural exposure situations (Hernandez et al., 2004). By extension, attitude toward the advergame represents an affective construct assessing favorable or unfavorable consumer predisposition toward the advergame itself resulting from active user-game interaction (Hernandez et al., 2004) thereby defining attitude towards the brand in advergames as an affective construct.

6.1.2.2 Attitude formations relation to purchase behavior

Marketers have long invoked the constructs of attitude valence and strength as key antecedents to consumer behavior (Park et al., 2010). Park et al. (2010) defines attitude valence as the degree of positivity or negativity with which an attitude object most commonly a brand is evaluated. Further, brand attitude strength is conceptualized as the positivity or negativity of an attitude weighted by the confidence or certainty with which it is held, in other words the extent to which it is seen as valid (Petty et al., 2007). Brand attitude strength has been shown to predict behaviors of

interest to marketers, including; brand consideration, intention to purchase, purchase behavior, and brand choice (Fazio & Petty, 2007; Petty et al., 1995; Priester et al., 2004).
Increasing research shows that attitude strength predicts purchase behavior, with the direction of the behavior being inclined or disinclined toward purchase varying as a function of whether attitude valence is strongly positive or strongly negative (Park et al., 2010; Fazio 1995; Petty et al., 1995). These observations present an important dimension to our study of attitude formation through advergames thus serving as an argumentation link between positive attitude formation as a result of advergame exposure and concrete market behavior.

6.1.3 Gameplay motivational compliant features

Within the field of game design theory gameplay motivations is an area of great interest. In fact, players' motivations have been thoroughly examined since the beginning of the 1990's where computer games gradually developed from subculture activity to mainstream entertainment. Using etnography in early online game environments Bartle (1990) observed a wide variety of play styles among players. On that basis he outlined four player types and linked their motivations to whether they were interested in acting or interacting, and whether they were interested in the world or in the other players. Yee (2007) reduced Bartle's player motivations using factor-analysis into three main components, while recent research by Radoff (2011) has aligned the motivational models of Bartle (1990) and Yee (2007) in one system by refactoring all their motivational categories into a single framework. In this thesis we examine the correlation between gameplay motivations and attitudes towards the brand presented in advergames, as well as attitude towards the advergame itself. Practically, gameplay motivations are sought stimulated through certain game features, in the following referred to as motivational compliant features. In studying players' motivations and game features we will apply Radoff's (2011) motivations framework as the main theoretical basis.

6.2 Research designs

Different research designs are used in the data collection at various stages in the thesis to address each dimension of the problem statement. The sample description, measures and data collection procedure will be presented prior to each analysis part, as well as the questionnaire or interview

guide used. Overall the research designs used in this thesis are as follows:

Table 1 Methodology

Research questions	*Analysis*	*Purpose*	*Type of study*	*Method*	*Data collection*	*Objective*
R1	Part 1	Mapping the media habits of our target segment; Danish males age 18-30	Descriptive	Quantitative	Online questionnaire	Confirm advergame relevancy
R2	Part 2	Identifying theory limitations and hypothesis development	Explorative	Qualitative	Information searching and gathering	Hypothesis development
R2	Part 3	Defining and testing constructs within the target group. Pretesting questionnaire within the target group.	Explorative	Qualitative	Focus-group interview and information searching and gathering	Verify constructs and questionnaire
R2	Part 4	Prove or disprove hypothesis	Causal	Quantitative	Paper-and-pencil questionnaire	Hypothesis testing

In part analysis one we aim at mapping the media habits within our chosen target segment; Danish males age 18-30. We conducted face-to-face interviews and an online survey using the online survey tool E-surveys to provide evidence of our target segment's usage of online games thus proving the relevancy of advergames as a tool in the modern marketing toolbox.

In part analysis two we aim at identifying current limitations within the available theory on advergames. Based on an extensive literature review we map out a field of theoretical importance within advergame theory that has not yet been addressed and develop 19 hypotheses for testing.

In part analysis three we use a semi-structured focus group interview to help define the constructs used in the proposed hypotheses. The constructs and their attribute items are then used to develop a questionnaire with which we can test our hypothesis. Interview inputs from the focus group are analyzed using comparison processes, where after axial coding is applied to specify the

variables that lead to the proposed constructs (Hair et al., 2009). The developed questionnaire is then pretested to make sure the questions are internally consistent and all relate to the construct they define. This is done by calculating Cronbach's Alfa (Gleim & Gleim, 2003) were questions that are not internally consistent are deleted for the final questionnaire.

In part analysis four we conduct a large study were we invite 37 Danish males to take part in our thesis experiment, to provide the empirical basis for testing hypotheses. Test participants are asked to play four different advergames to stimulate their attitudes, and then fill out a paper-and-pencil questionnaire. The data is then analyzed using both single and multiple linear regression tests to provide hypotheses verification (Hair et al., 2009).

6.3 Data

6.3.1 Primary

Primary data includes a conducted online questionnaire survey, face-to-face interviews, a focus-group interview, a paper-and-pencil questionnaire survey and an e-mail questionnaire. Primary data was collected in the period August 2011 to December 2011.

6.3.2 Secondary

Secondary data includes articles, books, websites and statistics within the field of consumer behavior, media habits and digital marketing campaigns. Secondary data was collected from March 2011 to January 2012.

6.4 Research quality

We are aware of the difficulty in obtaining a truly representative sample. It is inevitably that our samples are subject to sampling bias, which prevents our results from being accurately generalizable to the rest of the population (Hair et al., 2009).

When dealing with the quality of research methods, it is important to consider the researchers role in the research process, which entails the use of the researcher himself as instrument for the creation, conduction and analysis of the research material (Hair et al., 2009; Golafshani, 2003). In regards to quality, the terms 'validity' and 'reliability' are dealt with through the notions of the

'credibility' and 'trustworthiness' of the researcher's handling of the study (Golafshani, 2003). This entails that throughout the research process one must remain true to the theoretical perspectives drawn upon, the purpose of the study, the utterances of the interview persons, and the context within which these are made. Also, when analyzing, reflections as to whether the interpretations of logic are sound must be made (Kvale & Brinkmann, 2009). Nonetheless, it is our aim to provide unbiased interpretations of any findings within this thesis.

We are aware that our base of secondary data has been previously collected, manipulated and reported by other researchers for their own purpose – for purposes other than the research at hand (Hair et al., 2009). Consequently, prior data manipulation may have rendered the data unfit for the purpose of this thesis. Thus, prior to the implementation of secondary data a carefully evaluation of how well the thesis research purpose matches the original purpose for collecting the data has been conducted.

7. Subjects of analysis

Part seven explores our subjects of analysis in depth and outlines the underlying motivation for particularly choosing those.

7.1 Danish online gamers

We are conveying a Danish-based survey of the media behavior of our chosen consumer segment. In practice we aim at analyzing how Danish males age 18-30, a segment which we label Danish online gamers, involve themselves in online gaming thus investigating the relevancy of executing advergame campaigns in a Danish context. A main reason for choosing males age 18-30 is that they are highly engaged in gaming (McKinsey, 2011). Hence, they are already a potential target group for advergame campaigns. Another advantage is that the majority will already have a general knowledge of games, such as basic purpose and functions, which will make data collecting and lab experiments easier conductible. Finally, we wanted to narrow our target segment to an age span where we felt the group shared recognizable characteristics usable for our analysis.

The years from 18-30 represents a life period in our target segment where the independence is high, and to a certain degree it is the period where they gradually grow from boys to men (Dansk

Statestik, 2011; Hair et al., 2009). Within this time span brand preferences are explored on own hand. According to statistic from Statistics Denmark (2011) 93% of our target segment has gone from living with their parents to living on their own (Dansk Statestik, 2011; Hair et al., 2009). Therefore it is a valuable period for a brand to pitch in since many early-preferred brands tend to follow the individual during his entire lifecycle. Thus, encouraging the formation of positive brand attitude in the years from 18-30 is paramount for a brands future consumption success (Hair et al., 2009).

Our chosen segment makes up approximate 7% of the total Danish population. They are well educated and have a markedly disposable income, which is generally higher than their female counterpart (Dansk Statestik, 2011). Globally, males in this age group has popularly been dubbed *The Lost Boys*, because they are drastically increasing their time spend in front of the computer, while dismissing traditional media channels altogether. They submerge themselves in gaming both online and offline, and do not have the patience to spend time on regular ads or commercials (Wired 2004; Garcia, 2009).

Compared to younger users of computer games this segment has significant higher purchasing power, and therefore it is of relevance to marketers to pinpoint exactly how to market towards these consumers (Dansk Statestik, 2011). We have limited our target segment to males within this certain age segment, but our analysis might as well be applicable for other segments as well. In fact, current data shows that our chosen target segment is far from the only one engaged in computer gaming (Radoff, 2010).

7.2 Choice of advergames

In analyzing motivational compliant features of advergames as antecedents to positive brand attitude we have strategically selected four advergames. An important part in analyzing advergame features involves engaging respondents in active user-advergame interaction, which proposes a number of challenges for the advergames selected. First of all advergames represent a game genre defined by its brand revolving and by its purpose of achieving various marketing objectives. Hence, this does not limit the content an advergame may contain, and advergames are found in multiple different formats, spanning from high complexity games with a vast amount of features, to low complexity with straightforward gameplay. The chosen advergames for our

analysis both have to generalize a huge genre, but must also display the complexity span that advergames stretches over. Besides levels of complexity, advergames produce a large array of different experiences demonstrated through gameplay. Some games may be largely product based, letting the user interact with the product in new interesting ways – such as the *Jeep 4x4: Trail of Life* game where players experience the driving sensation of the jeep *Wrangler Rubixon*. Other games, such as Cheetos', *Battle of the Cheetos*, have little product congruity, but instead allow for competition against other human players. To avoid defining the countless different genres in significant detail, we will use the two dimensions provided by Edery and Mollick (2009) to categorize our chosen advergames, which are casual versus enthusiast games, and single player versus multiplayer games. The two dimensions cover the most important features of the advergame and encapsulate the fundamental mechanics of the games.

The first dimension of Edery and Mollick (2009) relates to the game complexity. Casual games do not require great skill, can be played for short periods – but are often played for hours – and are easy to pick up and play. On the other hand enthusiast games may involve more intricate plotlines and complex gameplay, and often require many hours of gameplay to master completely (Edery & Mollick, 2009).

The second dimension deals with the number of players and level of sociability. Whereas some games are dedicated to solo play others vary between supporting only a couple of players, to supporting teams of dozens in vast universes (Edery & Mollick, 2009).

Another important factor to be aware of in choosing the advergames for the analysis is the level of brand integration. Chen and Ringel (2001) suggest that advergames should be assessed against three critical factors: the message, the medium, and the money. This study is concerned with the first and the second of these, the message and medium, when we investigate the antecedents of attitude formation in advergames, while the last factor will be touched upon in the conclusive sections when outlining strategic guidelines for developing advergames.

To make sure that our chosen advergames reflects the diversity of advergames available and are thereby representable for the general genre it is essential to consider the different methods that are used to integrate a product or brand into the game. This can occur to various degrees. Chen and Ringel (2001) have distinguished between three levels of integration of the product or brand in advergames, ranging from associative to illustrative to 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. For example, Jack Daniel's launched a billiard game where its logo was imprinted on and around the pool table. Another example would be a soccer game where banner ads of breweries would appear around the stadium, because in many countries drinking beer while watching a soccer game is closely related. This format is most suitable when the brand image is reinforced by the content or theme of the game (Chen & Ringel, 2001)

Illustrative integration can be considered the second level of brand incorporation. Here, the product itself plays a significant role in the gameplay (Chen & Ringel, 2001). For example, Lego uses Lego characters in its online games.

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. In a Nike game, the player could select a shoe model for a virtual character in the opening sequence of the game, which would then demonstrate the various features of the different shoe models within the game (Chen & Ringel, 2001). Another example would be a digital racing game, which enables the player to select a car model whose performance could then be compared with that of other models during the course of the race.

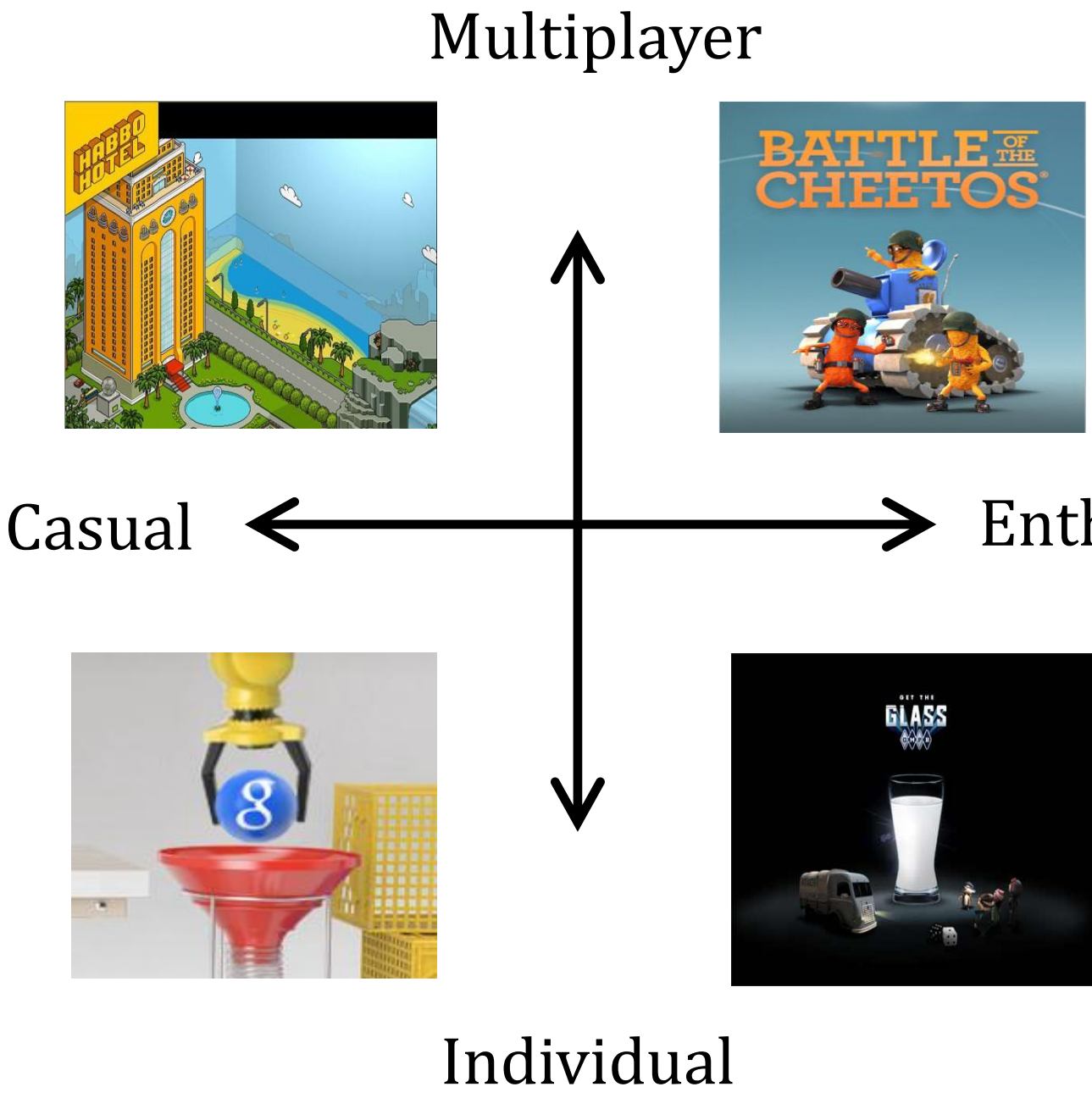
Finally the chosen advergames all together reflect the complete diversity of motivational compliant features used within game design. Each game has strategically gone through a validation process making sure that it complies with the features needed for examining the thesis problem formulation.

We have chosen four different advergames that fit into each of the four dimensions of Edery & Mollick (2009). These four categories provide us with a general outline for discussing different levels of complexity and sociability in games. Further, the games span from associative to mildly

demonstrative brand integration thus representing an acceptable sample to reflect the disparity of brand integration strategies.

Table 2 shows the four chosen advergames.

Table 2	Choosen Advergames		
Titel	***Brand***	***Link***	***Company***
Get the glass	Attitude towards Milk	www.gettheglass.com	California Milk Processor Board
Nexus Contraptions	Nexus	www.youtube.com/nexuscontraptions	Google
Battle of the Cheetos	Cheetos	www.battleofthecheetos.com	Frito-Lay, PepsiCo, Inc
Habbo Hotel	McDonald's	www.habbo.com	Saluke



Get the Glass

Get the Glass is an interactive story, where the player takes control of a family that has to steal milk from an evil villain who has robbed the country of its entire milk resources. The game relies heavily on storytelling and a rich graphical interface, which let the player explore a fun world holding several surprises and challenges. The game itself is a part of the renowned advertising campaign for the consumption of milk executed under the flag *Got Milk*, which is created on

behalf of the California Milk Processor Board. In congruity with the Got Milk campaign objective the advergame seeks to broaden the interest of milk consumption by continuously communicating milk consumption benefits (GotMilk, 2011).
The game is single player oriented and features a highly detailed narrative, which in an advergame perspective is quite complex. It presents the player with exploration options, loads of diverse content and potential hours before an actual completion can be achieved.
Get the Glass features associative brand messages. There is a direct connection between the games content and the actual product benefits in real life. The connection markedly differs in strength throughout the game and tangents to completely disappear as the player and product increasingly gets woven into the highly fictional universe.

Nexus Contraptions

Nexus Contraptions is created by Google to promote their Nexus S smartphone. It is a single player oriented advergame, which is very easily learned though the difficulty quickly rises whenever a level is completed. The gameplay is based on logic thinking and exposes the player to various puzzles that all take point of departure in putting Google's mobile applications into the smartphone.
Nexus Contraptions features associative brand messages primarily through the use of recognizable Google objects. The Nexus S logo is discreetly displayed throughout the gameplay that takes place in a landscape filled with smart gadgets and intelligent mechanical objects. In playing you get the impression of acting in of a very innovative and intelligent universe that perfectly reflects the common associations linked to the Google brand. The Nexus S smartphone appears several times in the game and interacts with the general game content, implying that the Nexus S likewise is a cool gadget designed for people that enjoy clever technology, entertaining design and innovative features. After finishing a series of puzzles minor cut scenes are shown in which brand messages appear demonstrative since they perfectly communicate certain features of Nexus S as a result of successful gameplay.

Battle of the Cheetos

Created by the snack producer Cheetos, this game is a multiplayer game that is remarkably rich on both graphical detail and storyline. The main game objective is competing against other players by

deploying an army of Cheetos soldiers in a player versus player battle. Each battle earns the player new weapons and gives access to new types of soldiers and artillery. Much work has gone into the underlying game mechanics, and the game provides a markedly level of variation and challenge, which motivates repeated play. This is further reflected by its balance between low thresholds while still being complex enough to keep people interested over time. It actively uses engaging features such as saving players' progress so they can return at any time to battle new opponents featured on the online leaderboards. Armies, uniforms and banners can be customized according to the player's preferences and the game allows players to taunt defeated opponents.
Battle of the Cheetos features illustrative brand messages. The Cheetos brand is commonly recognized in association with its mascot, an anthropomorphic cartoon cheetah named Chester Cheetah (Cheetos, 2011). The brand mascot is used actively in the game while the different soldiers represents various Cheetos crisps, lulling the player into a universe cohesive of the Cheetos brand and products.

Habbo Hotel

Habbo Hotel is a community-based advergame in which companies and brands can sponsor various parts of the website and Habbo's avatars talk about specific promotions on behalf of advertisers. It is an enormous virtual hotel containing millions of rooms each offering a different player experiences. Many rooms are "owned" by players and can be customized and decorated exactly as preferred. Other rooms are operated by Habbo itself or by Habbo's advertising partners. These rooms feature either simple games where players can win prizes or branded items and are often designed as realistic stores featuring large billboards that on interaction can lead players directly to the advertiser's website. In Spain Unilever's Calippo brand of ice lollies offered free inworld credits to users of Habbo Hotel. These could be found on-pack and more than 600.000 were exchanged for Habbo Credits at Calippo's website, generating 1.2 million visits during the campaign in 2008 (Mindshare, 2011). In Australia Wrigley's opened the Juicy Fruit Beach Café on Habbo Hotel during 2007. This created a space where players could interact with each other and the brand while engaging themselves in associated competitions to win Habbo Credits. In total Wrigley gained 300.000 entries, which can be directly translated into the same number of unique brand interactions (AdvertisingAge, 2011).
Habbo Hotel brings a vast group of people together in a virtual space where they are represented

by their own customizable avatars. It is as much a social network as it is a game, but people are clearly playing when they enter, whether it is decorating rooms, dressing up or roleplaying. Describing Habbo Hotel as a virtual playground where players build and share experiences with other players is a more precise description. The game features both demonstrative and illustrative brand integration, although players are not able to actually play in depth with products in Habbo Hotel. Numerous rooms are designed identically to flagship stores of different brands, demonstrating how shops are designed and enabling players to experience the brand in its ordinary surroundings. Furthermore, clicking on products in Habbo Hotel will often take players through new links in which the actual brands or products are displayed.
For our experiment we asked users to create a profile and go to the Habbo Hotel Room "McDonald's". This is the "official" room for McDonald's created by a private user in 2009, but with 40.691 registered Habbo Hotel participants either workers of McDonald's or McDonald lovers alike. In this room users can experience everything that goes on in a real restaurant. You can share a meal of burgers and fries while chatting with other players, or if you step behind the counter with your character, your model automatically changes to the McDonald's uniform, and you can start working there. We asked players to experience everything in the McDonald's room, while exploring the different social possibilities of the Habbo Hotel environment.

8. Defining our consumers

In the following we will discuss the chosen target segment for our thesis and map their media habits along with how they use online games. We will discuss current consumption trends within the social culture of the Danish online gamer in order to understand the actions and interactions of users involved with gaming. The objective of this section is to describe what we define as the contemporary consumers.

8.1 Contemporary consumers and gaming

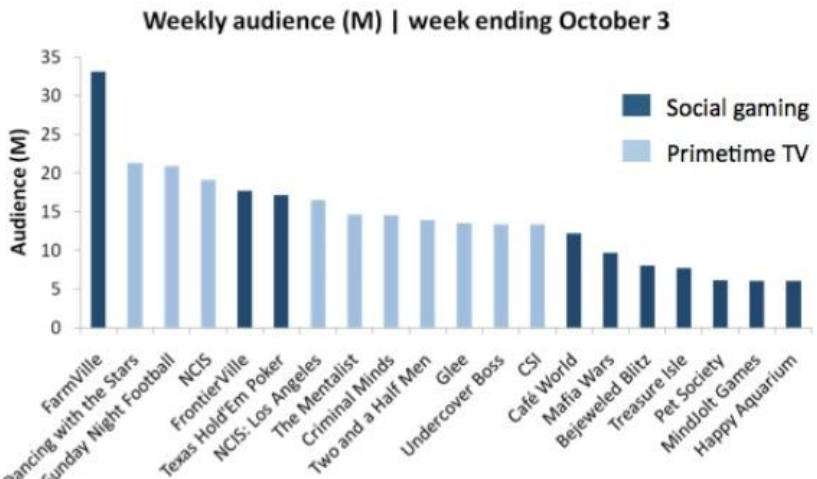
Males age 18-30 are dismissing traditional media, and are increasingly spending more time playing computer games and surfing on the internet (Cuneo, 2004). Understanding how this segment uses advergames is an opportunity for marketers to develop a knowledge base, which can help them unlock the purchasing power of the segment. Current statistics indicate that the gaming industry

has only just taken off, and that time spent on gaming across all age groups and segments are rapidly increasing. As the gaming industry keeps influencing the gaming consumption of especially our target segment, companies that are able to gain an understanding of how consumers engage in gaming and advergames, will have a competitive advantage in gaining customers through these impetuous platform.

On a North American scale males age 18-30 spend 12.5 hours each week playing video games, compared to 9.8 hours watching television each week (Kim, 2006; Lewis, 2006). According to the Interactive Digital Software Association, those aged 18-30 also purchased 50% of all video games, consoles and accessories sold in 2000 (Reynolds, 2004), and the Electronic Software Association reported that 69% of all game players are adults (Electronic Software Association, 2006). In 2006, the average age of the game player was 33, and the average age of the game purchaser was 40 (Lewis, 2006).

Research has documented the increased migration of men, aged 18-30 years, from watching television to playing console and computer games during their leisure time (Lewis, 2006). Nielsen Media Research (2004) has found a gradual decline in television viewing habits among this same audience, who make up approximately 12% of the total television audience and account for around $4.3 billion in targeted network and cable advertising (Reynolds, 2004). Figure 2 illustrates how the online social games and especially Farmville is outnumbering the weekly audience of top American television programs.

Figure 2: Weekly audience for games versus television (North American-based data October, 2011)



Although the majority of the media industry still express difficulty accepting the notion that computer games have spawned a technology of substantial importance advertisers have begun to pay increasing attention to the game industry in their attempts to reach this elusive demographic. As gaming audiences widen over the coming years, advertisers that cater primarily or exclusively to this key demographic would be remiss to ignore the immense appeal that computer games hold (Ben et al, 2010; Lewis, 2006).

8.2 Marketing to Millennials

People born in the period 1977-1998, which applies to our target segment, have recently been assigned various nicknames such as *Millennials*, *Generation Y* and *Echoboomers* (Gilbreath, 2010). While the idea of grouping together this many people in one bucket of trends can be troublesome, there are some important generalities that are relevant for marketers.

While the previous generation members *Generation X*, are considered overall as very technological-savvy, Millennials have been intertwined with the internet. The internet has a profound influence in their views of communication, and they have become accustomed to the continuous and instantaneous nature of the web (Russell, 2002). Having used these technologies since childhood, most of the Millennials have become accustomed to depending on their laptops, cell phones, instant messaging, e-mail, the web, and interactive media in almost all aspects of their lives. Everyday applications of technology are considered to be commonplace and part of Millennials environment and lifestyle, and only brand new features or gadgets would be considered to be a “technology” by this group. Prensky (2001) refers to this generation of students as *Digital Natives*, since they are native speakers of the *digital language* of computers, the internet and computer games. The internet, and particularly the technologies associated with the

Social Web, or *Web 2.0* are part of their social lives (Prensky, 2001). Millennials use new technologies to expand their social networks and to maintain contact with their families and friends. For this generation, multi-tasking is a way of life. They live in a world where choice is abundant, and they are always searching for new opportunities, and desire not to miss anything (Pew Research Centre, 2007).

Millennials are well aware that companies are eager for their business, and they are not afraid to play hard to get. They have grown up being constantly bombarded with marketing, and therefore perfectly understand the advertising scheme. Marketers cannot convince them that their viral video is homemade, and they cannot stop them from changing the TV-channel when commercials go on (Pew Research Centre, 2007). They are skilled at technology, not only to create their own entertainment, but also to contribute to their favorite's brands' marketing and participate when marketing allows them to. They are a group-orientated generation that has the tendency to define itself by affiliation, which provides brands with the opportunity to play a pivotal role. One classic example is a Facebook group created by Pringels lovers, which surged to one million fans before the Pringels marketing team ever knew it existed (Pew Research Centre, 2007).
Millennials furthermore leapfrog over traditional media formats. Many skip television altogether, opting for the laptop where they can watch video clips, chat with friends and update their blogs at the same time. Millennials are increasingly choosing to live their lives transparently – using digital tools like Facebook and Twitter to share their life with the world (Pew Research Centre, 2007). This actually opens up opportunities for marketers, as they can use this openness to learn about what these consumers are looking for and help them find it.
As shown, dealing with Millennials can be tricky. They have high demands and a big knowledge of consumption. One suggestion on how to reach this type of consumers, has been given by Zaw Thet, CEO of 4INFO: *"Brands can no longer just show up and expect that their message will be heard. Consumers trade attention for value, whether it is the entertainment of a game, or savings through a loyalty program"* (Pew Research Centre, 2007: p. 250).
When related to advergames, it is all about creating value that Millennials can relate to. This suggests that successful advergames will have to take a point of departure in the user, and not the product or brand it represents. As described above, catching the attention of Millennials can be

very rewarding. They eagerly involve themselves in brands and their corresponding marketing, while social forums like Facebook, Twitter and Flickr give them the tools to redistribute the content they love.

8.3 Active Audience

One of the main advantages of advergames is that gamers actively seek out games that appeal to them. A successful advergame has the potential of almost unlimited brand exposure towards its players, as players may return to the game again and again, and in some cases even share it with friends through social media (Marolf, 2007). Schwarz (2006) argues that the main benefit to advertisers in advergames lies in increased levels of brand engagement, which traditional advertising rarely provides (Lewis, 2006). Katz, Blumer and Gurevitch (1974) describe what can be defined as *active audiences,* which can be applied to the scenario of gamers proactively seeking out advergames. Audience activity represents the intentionality, selectivity, and involvement of the audiences with the media or content. Audiences intentionally prioritize and engage with media or content from a vast amount of alternatives to satisfy their needs or desires (Stafford & Faber, 2004). Advergames provides players with a high degree of applicable options such as choosing which games to play, when to play, how to play, who to play with, and whether or not to return to the advergame for more gameplay. These are all interactive features that characterize advergames as medium and differentiate them from the majority of other advertising mediums available. Allowing players to personalize and customize their gaming experience by providing a series of options constitutes a basis for the gameplay to go on as long as the player stays interested.

Bob Gilbreath (2010) states that similar learnings are found within the field of smartphone advertising. People want marketing with meaning, and brands can no longer show up from the dark and expect their message to be heard. Consumers trade attention for value, whether it is an entertaining gaming experience, or savings through a loyalty program (Gilbreath, 2010). Advergames has the potential of taking advantage of consumers acting as active audiences, demanding value for their time spent. In certain situations the benefits of an advergame can go well beyond increased brand preference and purchase intention. Advergames, unlike so many other forms of advertisement, enable marketers to form a direct relationship with a potential

costumer. At its most basic level this may simply mean encouraging players to register their names, email address or demographic information before they can play the game (Edery & Mollick, 2009). At a more advanced level, advergames can be used to study consumer behavior, and even test attractiveness of new product features. One concrete is from the Nike's release campaign of Nike Shox, a basketball advergame, which enabled players to customize the color of their avatars shoes before engaging in a slam-dunk contest. This provided Nike with valuable insights into potential consumers' preferred basketball shoe colors, and helped Nike pick the correct color toning of next season's collection (Edery & Mollick, 2009).

8.4 Participatory culture

One of the popular ways of describing how contemporary consumers interact with companies and each other on the internet is through the term participatory culture.

Participation has become a key concept used to frame the emerging media practice. It considers the transformation of former audiences into active participants and agents of cultural production on the internet (Schaefer, 2011). This change is first of all happening due to new possibilities of web applications that allow for consumers to actively create and produce media content. Consumers digest information and personalize it through web pages where they reproduce it. Simply through using platforms such as Flickr, YouTube or Facebook, or services such as Google and Amazon, users create value and often actively contribute to the improvement of services and information management. Older business models struggle to deal with the liberation of information on the web. Music and movie industries are hard pressed combating piracy, while new business models thrive on users implicit participation. Here, user activities are embedded into the software design of web applications benefiting from what users do with and on those platforms (Schaefer, 2011).

Jenkins et al. (2006) describes how participatory cultures often take place within communities where a specific topic or genre is discussed, and users share their work or experience. There is relatively low barrier to artistic expression and a strong support for creating and sharing one's creations. Users evaluate each other's work, and super users often serve as mentors guiding novices or modifying good and bad contributions. A participatory culture is also one in which members believe their contributions matter, and feel some degree of social connection with one

another (Jenkins et al., 2006). But what are the implications for marketers, knowing that the current consumer culture will engage in, alter and redistribute products, brands, ideas and corporate values? Schaefer (2011) describes three kinds of actions underlying a participatory culture: *Accumulation, archiving and construction*. Each refers to how consumers engage with information, and whether they co-create new information, structure current information, or create new information. Schaefer (2011) further dubs the participatory culture as the *Bastard Culture*, since nothing is holy in the participatory context. No matter whether it is protected by law or copyright, users see it as their right to meddle where they want, which often results in counter producing actions from original manufacturers. Examples of this are the hacking of the Microsoft's Xbox, or the Sony AIBO dog (Schaefer, 2011). In cases where brands or products are the topic of consumers, the community in which people communicate can be described as *Brand Communities* (Muniz & O'Guinn, 2001). A brand community is a non-geographically bound community, based on a structured set of social relationships among admires of a brand. Members of a brand community have a shared consciousness and certain rituals and traditions along with a sense of moral responsibility for the brand and the community. Brand communities are participants in the brand's larger social construction and play a vital role in the brand's ultimate legacy. In a brand community consumers enjoy a greater shared voice when communicating with companies or against other brands. Brand communities serve as an important information source, where members can easily share and discover information. Consumers in brand communities will often independently of marketers and advertisers create and disseminate documents that strongly resemble ads for brands they love (Muniz & Schau, 2007).

Current consumer trends involve a participatory culture where consumers often engage in what can be described as brand communities. From a marketer's viewpoint, it is important to understand how these consumer trends affect marketing efforts. What implications are there with executing an advergame campaign in this environment, and how can marketers use knowledge of consumer behaviour to create advergames that meet the requirement of contemporary consumers? Should companies seek to limit user interaction with the brand, or instead freely distribute brand value in order to captivate consumers? One of the implications for branding when dealing with contemporary consumers and especially brand communities is that they directly acknowledge brands as socially constructed. This challenges the traditional understanding of dyad

consumer-brand relations, and instead suggests the notion that brands are constructed in consumer-brand-consumer triad relations. Consumers are directly involved in creating brands, making brands a social construction out of the hands of marketers (Muniz & O'guinn, 2011). Following this line of thought developing a strong brand community can be the first step in attempting relationship marketing, where brand value is created in close cooperation with consumers. A strong brand community takes advantage of the nature of contemporary consumers, engaging the consumers where they are already present, and can lead to socially embedded loyalty and brand commitment (Muniz & O'guinn, 2011). Relationship marketing is the concept of not focusing on maximizing individual transactions, but instead on maintaining and developing long-term customer relations that pay off in the long run, and furthermore can provide a competitive advantage and strategic resource for the firm. Brand communities furthermore present a practical advantage for firms, providing users with support, information and assistance. These arguments suggest the conclusion that brands with a strong brand community are of a greater value. However it should also be recognized that a strong brand community has the power to collectively reject marketing efforts or product change from a company. In this instance the community becomes a threat to brand marketers that suddenly has to combat a huge amount of counter-communication on communal communications channels, which interfere with corporate values (Muniz & O'guinn, 2011).

8.5 Summary

The previous chapters have outlined current consumer trends that are popular among the target group under investigation in this thesis. These trends explain the media behavior of the segment, and their adoption of new technology as a tool to engage their social life. Advergames fit well with the description of the contemporary consumer, who spends most of his time being online and engaging in social online activities. Advergames addresses the users in their own environment, while presenting value in the form of entertainment instead of discount or loyalty programs. In the following we will build upon the description of the contemporary consumer, to explain the media needs and wants of our target segment, along with their preference for gaming and advergames.

9. Analysis 1

In answering the first research question of the thesis we have conducted a survey specifically aimed at our target group the Danish online gamer. This is due to the fact that statistics regarding young Danish males' media habits is very hard to come by, especially when focusing solely on internet and gaming habits. The somehow limited statistics available is both outdated, and usually takes point of departure in a much younger target group – children and teenagers – than that of our target group.

The following analysis is descriptive thus describing the main features of the collected quantitative data, aiming specifically at summarizing the data set (Hair et al., 2009). By questioning a large number of respondents who are representative of our target segment, we are able to make inferences about our target group (Hair et al., 2009). On the basis of the conducted survey we will analyze results to determine media habits and consumer behavior of the Danish online gamer, which will enable us to understand what kind of media channels the segment prefers. Further, the survey will provide an understanding of what the channels are used for with special regards to internet and gaming usage.

9.1 Data collection procedure and measures

Our survey was conducted as a quantitative study gathering statistical information from people in our target segment – the Danish online gamer. Our survey asked participants to choose preferred options in a questionnaire, often with the possibility to rank several options against each other depending on preference. The questions revolved around following media channels:

- Television
- Magazines and newspapers
- Radio
- Internet
- Gaming

Two different approaches where used to gather the information four our survey – *person administered surveys*, and *self-administered survey* (Hair et al., 2009). The self-administered surveys took place on the internet, where we had created our survey in an online questionnaire

that could be completed within a three minutes time span. The online survey was distributed specifically to members of our target group, using the instant messaging feature of Facebook. Benefits of web-based surveys are that the required resources for completing the questionnaire are very low, along with an easy distribution of the survey that allows for quick data collection (Hair et al., 2009). One of the downsides can be that people do not take the survey seriously and nonresponse bias can be high meaning that people answer without really thinking their answers through. Furthermore, if there are issues with understanding the survey, the internet survey platform does not provide any assistance to the completion of the survey. To comply with this observation, we correspondingly carried out person-administered surveys, where random people were asked to take part in our survey. We then went through the questionnaire interviewing respondents face-to-face while personally checking of the answers. Respondents tend to be more truthful in their responses when answering questions face-to-face (Hair et al., 2009).
Data, both online and offline were collected during September and December 2011. The respondents for our face-to-face interview were found around the campus of Copenhagen Business School while respondents for the online-based survey was found using social media and networks. Around 75% of our data came from online surveys with the remaining 25% from conducted face-to-face interviews.
The final questionnaire, which can be viewed online here: https://survey.enalyzer.com/?pid=k8ng3n6t, contained 14 questions first regarding the media habits of our target group, while the second part contained questions specifically addressing browser games and advergames. The questions were either multiple answer, where the respondent where asked to choose the options closest to their preference, or they were asked to rank several possible answers against each other.

9.2 Sample

The only requirement for respondents to take part in the survey was that the respondent was a Danish male between the ages 18-30 years. We collected data from a total of 90 respondents with an average age of 24 years. We did not screen respondents for whether they had a computer or internet access, since these were basic requirements for even participating in the online survey.

For the face-to-face interviews respondents were asked if they owned or had access to a computer with internet connection, as prerequisite for participating in the survey.

Table 3	Age of study participants	
	N	***%***
Age		
18	4	4,4
20	9	10
21	8	8,9
22	16	17,8
23	11	12,2
25	10	10
26	17	18,9
28	8	8,9
30	7	7,8

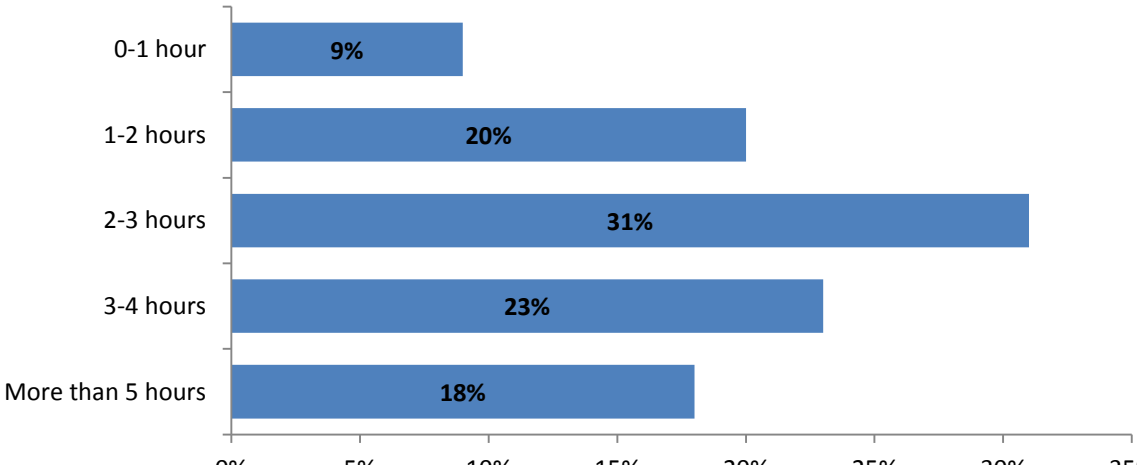
9.3 Results overview

Our survey is shown in full in the Appendix 1 along with all data gathered. Below we will present and discuss the charts we find most relevant for answering fist research question of the thesis.

9.3.1 Television consumption

The graph below shows the final results of how many hours a day in average our respondents spend on watching TV.

Figure 3: Hours a day in average spend on watching television



We see a general high consumption of television in our target group. In average our responds watch approximately 2,3 hours of television, which is almost 23% less than the total population taking the annual media development report from Danish Radio and Television (2011) into consideration.

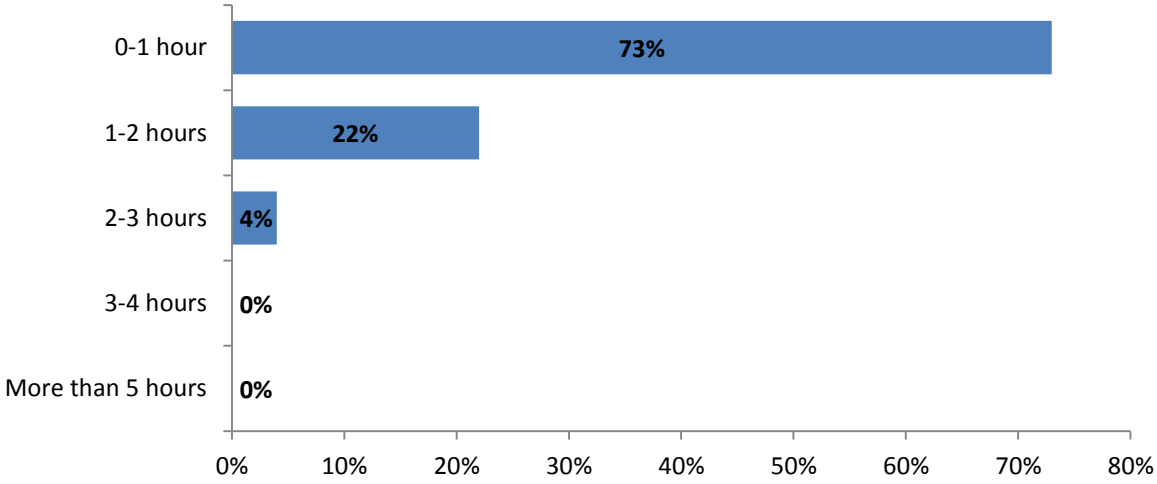
We also note that the term *watching television* in many ways has a multiply meaning. As noted in section 8.2 there is a common tendency of leaving the television turned on and keeping it running in the background while doing other activities that cannot be directly equaled to television watching. This tendency is often referred to as passive television watching and is an important notion to include in the consideration of television consumption as passive television watching has a direct impact on television-based advertising reach and effect (Pew Research Centre, 2007). In fact, many of the traditional media channels can be passively engaged with while actively carrying out other activities, since they do not require the users immediate attention and concentration. On the contrary advergaming is a medium that in most instances requires the user's full attention as well as other media with an interactive dimension. Hence, the interactive dimension of an advergame is highly interactive. You simply cannot play an advergame without giving it your complete attentiveness.

Another tendency, which is common for all three traditional channels television, radio and print media, is that the consumption is moving towards the online space. The Danish Radio and Television report (2011) as well as the Statistics Denmark's report on internet usage (2011) provides the first indications of a rise in the Danish online-based television consumption. Together the reports show that every second internet user watches television online and that that YouTube still is totally dominant in the field web-based television. Despite the rise of web-based television, it still is traditional broadcast television, which clearly dominates the total television viewing, which is also supported by figure 4 featured in section 9.3.4 of this analysis.

9.3.2 Newspaper, magazines and news consumption

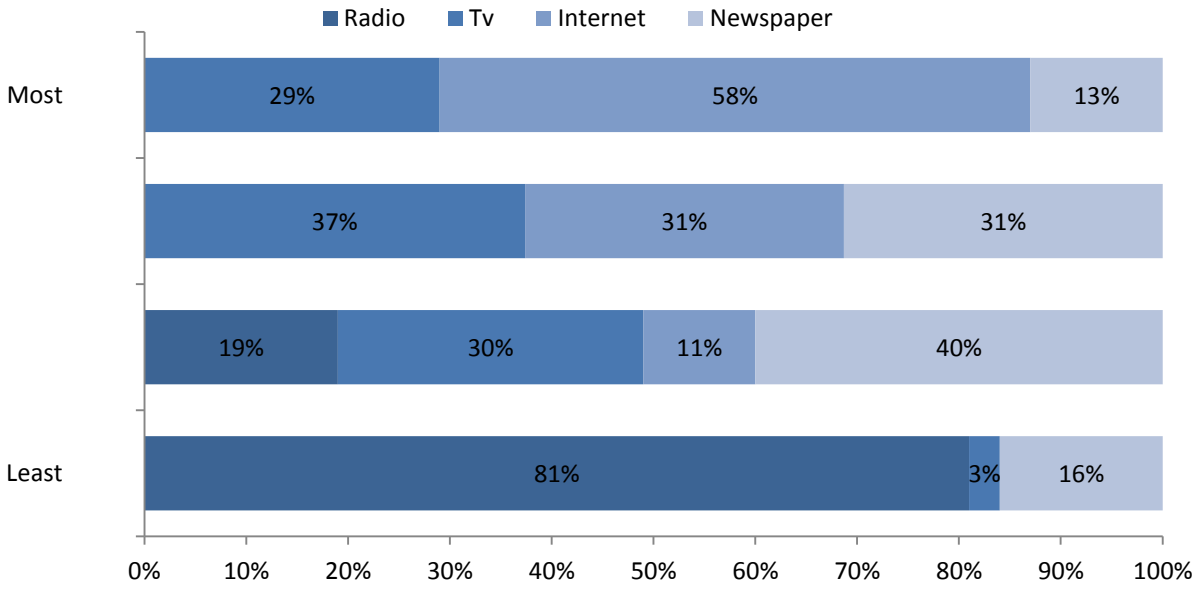
A rather large group of our respondents is engaged with either newspapers or magazines 0-1 hours a day, which is the lowest degree of consumption within any of the investigated media.

Figure 4: Hours a day in average spend on reading newspapers or magazines



The figures correspond well with current data of newspaper and magazine consumption that generally shows a low and decreasing consumption of print media. An important consideration here is that news consumption and medium consumption are two completely different observations. According to a global McKinsey (2011) study the overall news consumption rose by 20 percent in the past years from 2006 till 2009. Average news consumption has risen to 72 minutes a day, compared with 60 minutes in 2006—an increase driven almost entirely by people under the age of 35. Two-fifths of those in this age group said they felt the need to be the first to hear the news, compared with just 10 percent of people aged 55 to 64. This need for immediacy is reflected in younger news consumers' choice of media: they overwhelmingly prefer to get their news from television and the internet, which corresponds well with our survey results (Mckinsey, 2011). Figure 5 supports this observation

Figure 5: News consumption based on medium

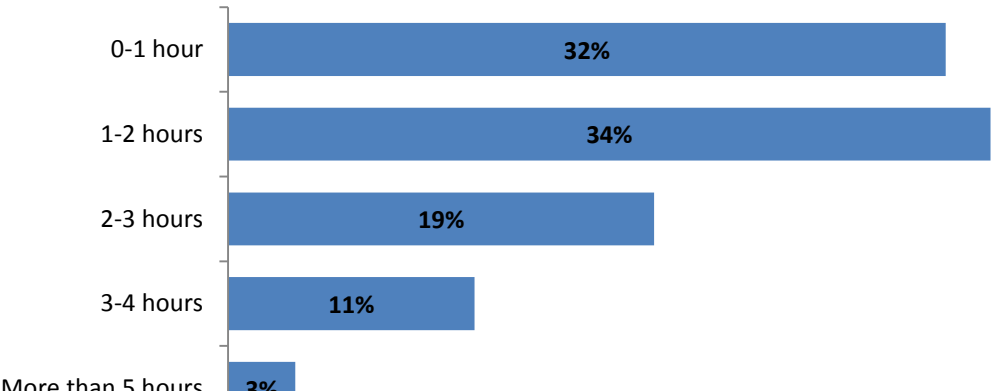


The fact that the media behavior of not only the Danish online gamer but also the general younger population preferences is moving online supports the rising relevancy of advergames as a useful marketing tool.

9.3.3 Radio consumption

Radio comes in as the second last regarding consumption just in front of newspapers and magazines.

Table 6: Hours a day in average spent hearing radio



It is interesting to explore the mediums through which radio and music is being consumed. Actually current data shows that radio and music in general is mainly consumed online through internet-based radio, Youtube, online radio services such as Spotify and Grooveshak.

Figure 7: Music consumption based on different channels

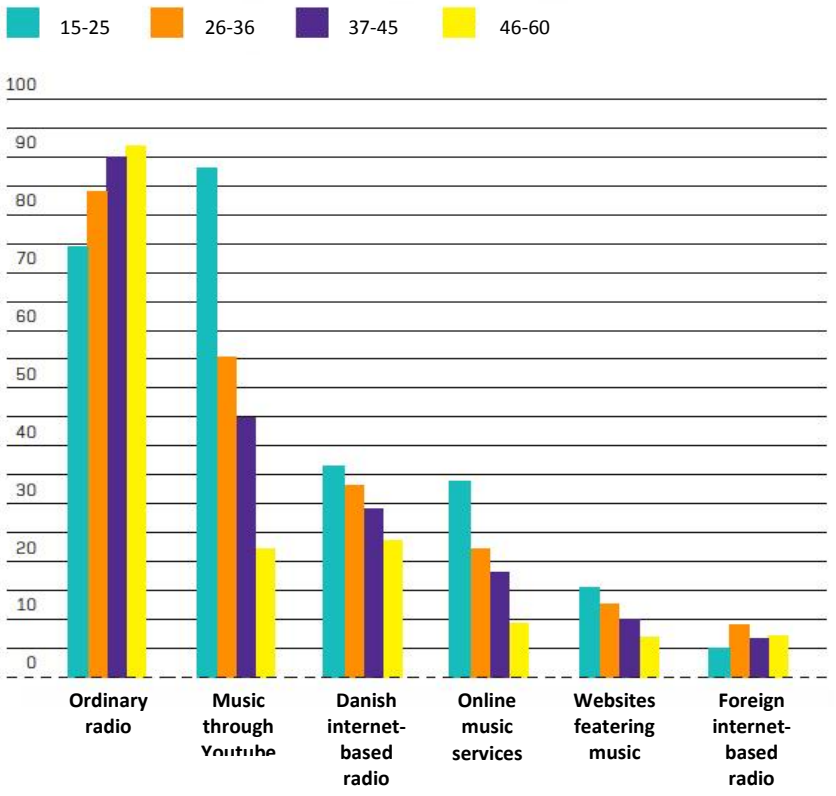


Figure 7 summarizes the music consumption habits as presented in the annual media development report from Danish Radio and Television (2011). The survey was conducted in November 2010 with 1,078 respondents through an internet panel and offers several interesting points that complement our study of the Danish online gamer. One fifth of respondents use online music services such as TDC Play, Grooveshark and Last.fm. Solely compared with the younger

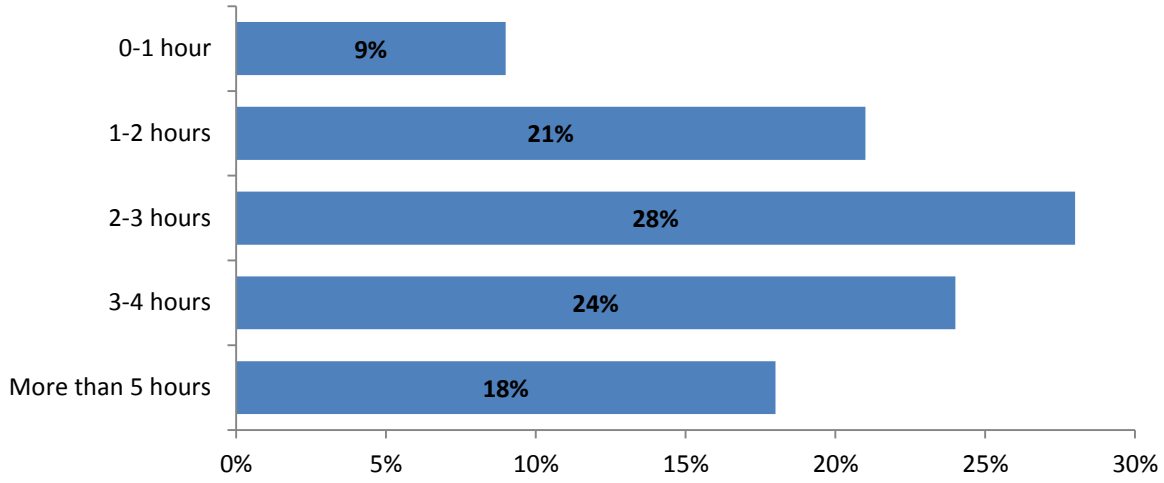
segment age 15-36 roughly one out of three uses online music services, which is almost equal to the group's use of Danish internet radio.

The study identifies three clear reasons of why users spend more time with online music services: they are easy, accessible and it gives an immediate opportunity of hearing the newest music. Immediacy or immediate accessibility seems to be the common denominator for both news and music consumption within our target segment considering the recent studies of both Danish Radio and Television (2011) and McKisney (2011).

9.3.4 Internet consumption

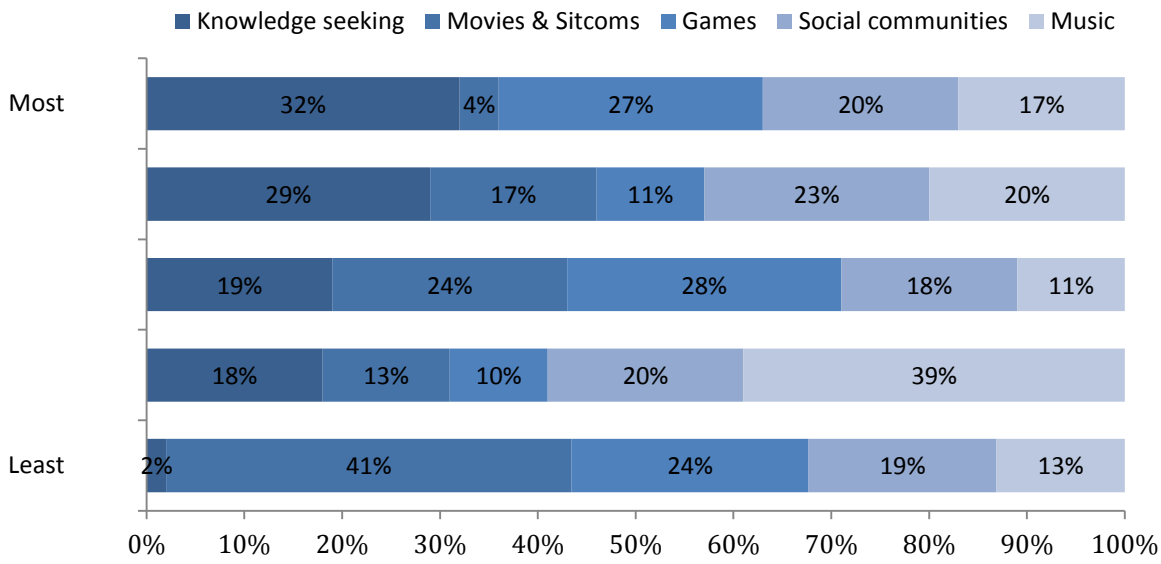
The internet consumption is presenting a very high consumption degree within our target segment as illustrated in below graph with an average of approximately 2.1 hours a week almost on height television.

Figure 8: Hours a day in average spend on the internet



Taking a closer look into the internet consumption we notice that the two most dominant activities on the internet are knowledge seeking and games playing while television watching stands out as the least preferred online activity.

Figure 9: Most frequent activities while on the internet

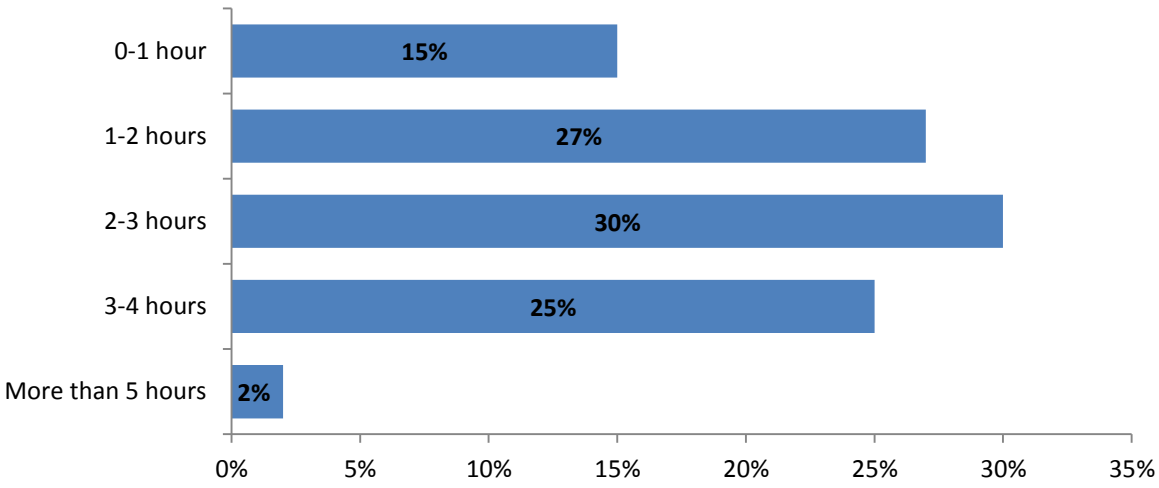


The fact that games take up such a big margin of the time spend on the internet is greatly supporting our former notion of a very high consumption online game which will be further explored in below section.

9.3.5 Computer game consumption

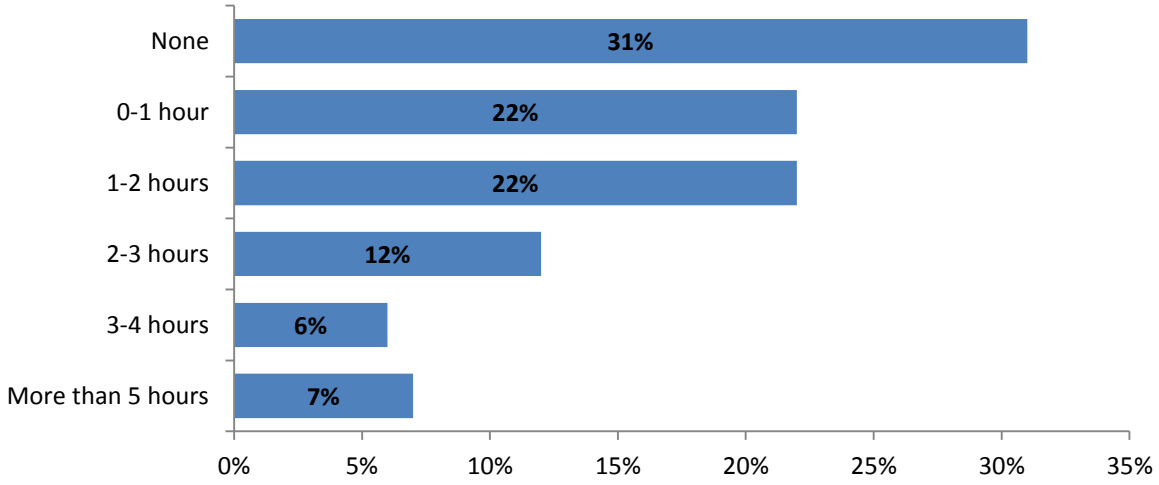
Computer games is the third most preferred medium for our target segment constituting a total of approximately 2.1 hours of daily consumption as illustrated in figure 9.

Figure 10: Hours a day in average spend on computer games



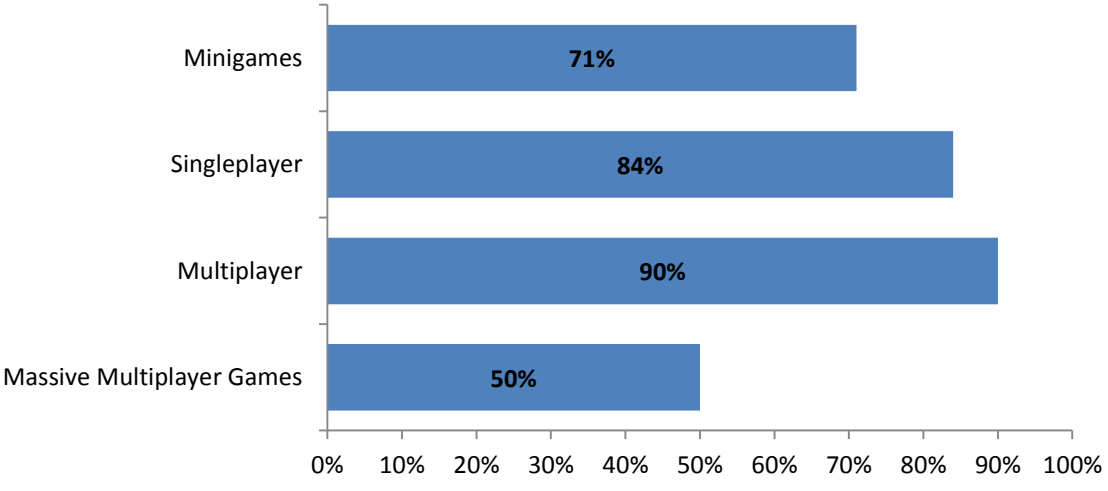
Looking at the specific niche area computer games, browser-games in which advergames and social games are the most dominant, we see a moderate high amount of our target segment engaging in browser-based games with 69% playing on a weekly basis.

Figure 11: Hours a week in average spend on browser-based games



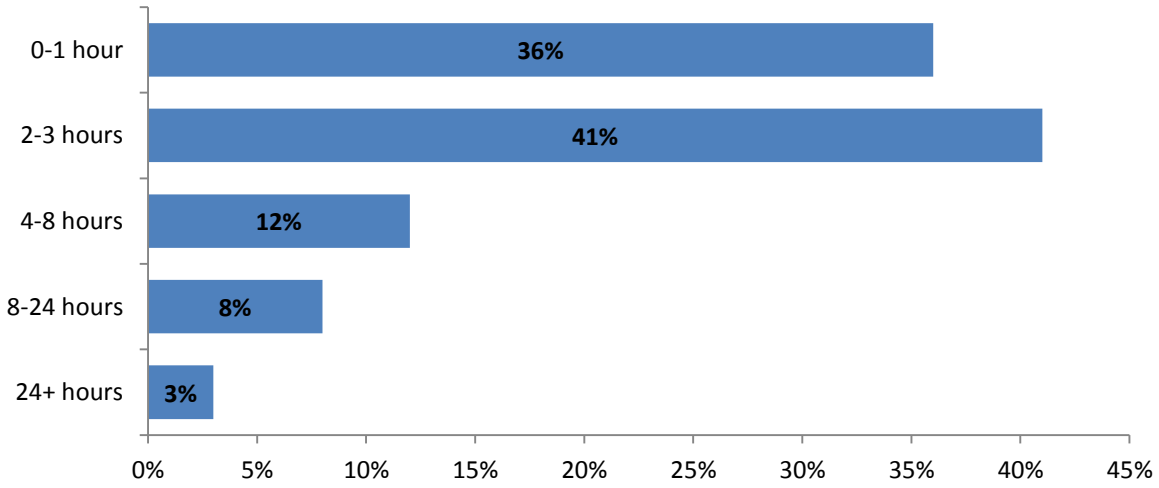
In theory, figure 10 shows that we have a potential of reaching and engaging 69% of our target segment through advergames. Further, figure 11 below underlines that the minigames, a common term for browser-based games, are highly appreciated when looking across all the various game types.

Figure 12: Game types played per game playing respondent



The amount of time spend on valued browser-based games is significantly high especially compared to the average advertising exposure time of other media. We observe a potential weekly brand exposure of 2-3 hours through a single advergame at 41% percent of the respondents, which accounts for 37 Danish online gamers.

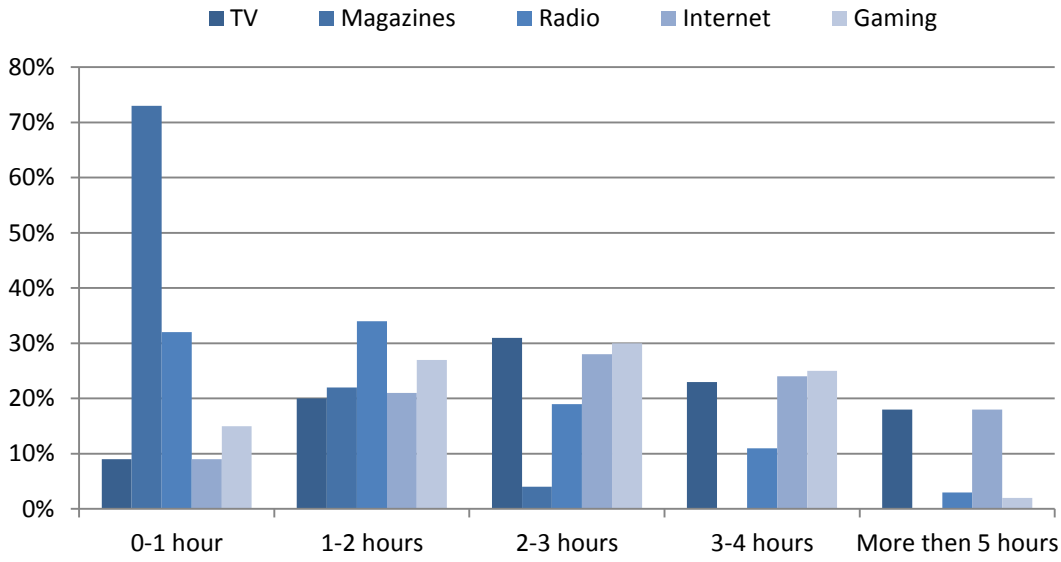
Figure 13: The most hours spend (in total) on a browser-based game



9.3.6 Total platforms summary

If we take a broader look at the cross-platform summary from the survey, we see that the respondents favor television and the internet, as supposed to radio, newspapers and magazines when it comes to daily media consumption and hours spend. In general the majority of our target segment spends around 2-3 hours each day on average, both surfing the internet and watching television as supposed to only spending between 0-1 hour reading magazines and 1-2 hours listening to radio. Playing games is also a highly prioritized activity with more than half (57%) spending 2 hours or more each day on playing computer games. Added up with the time spend surfing the internet, our survey suggests that computers are an important part of the lives of our target segment, which overall constitute the most used media channel.

Figure 14: Hours a day in average spend on each platform



When it came to searching news 68% stated that they used the internet as their primary resource, while only 29% listed television as their main source of news channel. Similarly 81% stated that radio was their least used method for gathering news while only 13% listed newspapers as their main news channel. This graph indicates how digital alternatives are shaping the behavior of our target segment. They are taking advantage of the on-demand content the internet allows for, which fit with their present-day needs as media users.

When asked what they primarily do when they use the internet, 32% said they use it for information seeking, while 27 % said that they mainly use it for gaming purposes. Least popular activity by 41% of target group where watching movies/series, while 24% stated that playing games were their least preferred activity when using the web. This generally suggests that there is an extensive usage of the internet, but with a wide range of different activities. Either the asked persons were gamers, and used the internet a lot for this purpose, or otherwise they did not game online, and instead had other purposes when going online. This also shows that even though gaming is currently popular, gaming on the internet and browser-gaming does not take up as much time as gaming in general.

On average 30% of our target group spend 2-3 hours daily playing computer games, but on a wide variety of different platforms. Among these the most popular were either PC, or consoles, with

mobile phones as a close third while only 17% of the target group listed browser gaming as their main gaming activity. While 31% answered that they did not spend any time at all playing browser games, we still see a rather frequent activity in the browser-based games with 22% spending around 1-3 hours weekly playing browser games.

Our finding suggests our target segment is highly active on the internet, and is spending a lot of time on a variety of different game platforms. They use the internet as their primary source of news and radio while television still manages to hold on to its audience through traditional broadcasting. They do not necessarily look towards browser games when they use the internet, or want to play computer games. In that case platforms designed specifically for this purpose still have a clear advantage.

9.4 Part conclusion

Our survey of the thesis' target segment's media habits documents generally high media consumption. If we look at our results in conjunction with contemporary secondary data on media behavior we find several interesting tendencies to put on top of our survey result. Immediacy or immediate accessibility seems to be a key point when our target segment is searching for entertainment whether it is regarding television watching, music listening or knowledge and news seeking. The internet has changed this game radically and we see that many of these activities are carried out through the internet in a wide extent. That can also explain our rather high daily media consumption figures since for instance watching television and being on the internet covers the exact same behavior. In regards to advergaming we see that our target segment actively seeks and finds the entertainment they find valuable online. Advergames fits well into this behavioral pattern since they aim at creating immediate entertainment value to players that either come across them by chance or deliberately seeks to find them themselves. Value creation is in fact a key term hence we see our target segment proactively searching and finding what they find valuable regards of the media platform.

Another tendency, which we find important, is that of passive media behavior. It is a known phenomenon in the case radio listening, but data indicates that the television is very much on the track. Advertisers must be aware of this tendency since passive media behavior impacts on both

advertising reach and effectiveness. You simply do not know whether our target segment is paying attention to the media platform and if they are whether they are multitasking between several platforms as well. The benefits of advergames among others is, that passive media behavior is not present when users are playing games, since advergames requires the users total engagement and involvement.

The most important finding for this thesis is the high consumption of gaming and in particular browser-based games or minigames. The interest within this specific game type indicates that there is a potential target group for advergames in a Danish context. Even though 31% of our target group does not engage in browser-based games at all we are still left with 69% of potential targets, which accounts for 76/90 of our respondents.

For the 69% that engages with browser-based games we see rather high amount of time spend playing on a weekly basis. This points in a direction of a possible long brand exposure time for advergames of in average 2,1 hours weekly and up till 5+ hours weekly for the 7% accounting for the most passionate players.

Marketing theory has yet to investigate if the overall high interest in games generally justifies advergames admittance in becoming a part of the traditional marketing channels. Our survey indicates that advergames already have a potential Danish audience, and that they fit into the media behavior of our target segment. The next analysis will focus on to verifying whether advergames can create positive marketing outcomes in the segment of Danish online gamers.

10. Analysis 2

In this analysis we aim at identifying the current limitations within the available theory on advergames. In the following we will conduct a literature review to map out a field of theoretical importance within advergame theory that has not yet been addressed. A literature review is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic (Lindlof & Taylor, 2002). Our literature review is based on secondary sources, and as such, do not report any

new or original experimental work. The review will present a logical flow of current and relevant references, as well as an unbiased and comprehensive view of the previous research on the topic is sought conveyed.

10.1 Models of attitudes toward advergames

Attitudes toward advergames can be defined as an "affective construct assessing favorable or unfavorable consumer predisposition toward the advergame itself resulting from active user-game interaction" (Hernandez et al., 2004: p. 74). Five different models have been proposed listing antecedents to the formation of attitudes toward advergames:

1. The proposed model by Youn and Lee (2003) integrated escapism, competition, boredom relief, and fun as antecedents toward positive attitudes, whereas curiosity was identified as a negative antecedent. Identified consequences of attitudes included attitude toward the site, relationship building, and purchase intentions.

2. The second model proposed by Hernandez et al. (2004) included negative aspects that might lead to negative attitudes, such as incongruity, lack of entertaining, intrusiveness, and irritation. The significance of their study was in the mediating role that attitudes play in influencing brand attitude and purchase intentions.

3. The third model by Hernandez investigated proposed entertainment, sociability and escape as antecedents to attitudes toward advergames. The study revealed that entertainment and sociability positively related to positive attitudes toward advergames, whereas escapism was found negatively related, which stands in contrast to the finding of Youn and Lee (2003). The most robust finding was the significant effect of entertainment on attitudes.

4. The fourth model by Sukoco and Wu (2011) addressed two specific areas of telepresence (interactivity and vividness) and their effect on attitudes toward the advergame and toward the brand. The findings revealed that both interactivity and vividness led to an increase of positive affective responses.

5. More recently, a proposed model by Hernandez (2011) provided evidence supporting a model

of antecedents to positive attitudes toward advergames, including arousal, flow, telepresence, and positive gameplay experience resulting from a balance from individual skills and game challenges.

All five models are summed up in table 3, which provides an overview of the antecedents – referred to as attitude drivers – to the formation of either positive or negative attitudes towards advergames.

Table 4	**Drivers of advergame attitude**		
Author	*Year*	*Attitude driver*	*Impact on attitude*
Youn, S. and Lee, M.	2003	Escapism	Positive
		Competition	Positive
		Boredom relief	Positive
		Fun	Positive
		Curiosity	Negative
Hernandez et al	2004	Congruence	Positive
		Extended exposure	Positive/negative
		Entertainment	Positive
		Intrusiveness	Negative
		Irritation	Positive/negative
Hernandez	2004	Entertainment	Positive
		Escape	Positive
		Sociability	Positive
Sukoco and Wu	2011	Interactivity	Positive
		Vividness	Positive
Hernandez	2011	Skills	Positive
		Challenge	Positive
		Telepresence	Positive
		Arousal	Positive

Collectively, these studies have neglected most of the common theory on gameplay motivations within the field of game design. This thesis is the first study to thoroughly explore the coherence between gameplay motivations and attitude towards the advergame and attitudes towards the brand.

10.2 Player motivations

People play computer games for many different reasons, which are also reflected by the variety of

features that are included in computer games.

Using ethnography in early online game environments Bartle (1990) observed a wide variety of play styles among players. On that basis he outline four player types and linked them to whether they were interested in acting or interacting, and whether they were interested in the world or in the other players.

Yee (2007) reduced Bartle's (1990) player motivations using factor-analysis into three main components:

Table 5 Gameplay motivations

Achievement	Social	Immersion
Advancement Progress, Power, Accumulation, Status	**Socializing** Casual Chat, Helping Others, Making Friends	**Discovery** Exploration, Lore, Finding Hidden Things
Mechanics Numbers, Optimization, Teamplaying, Analysis	**Relationship** Personal, Self-Disclosure, Find and Give Support	**Role-Playing** Story Line, Character History, Roles, Fantasy
Competition Challenging Others, Provocation, Domination	**Teamwork** Collaboration, Groups, Group Achievements	**Customization** Appearances, Accessories, Style, Color Schemes
		Escapism Relax, Escape from real life, Avoid real life Problems

Recent research by Radoff (2011) seeks to align the motivational models of Bartle and Yee in one system by refactoring their categories into a single framework. The vertical axis considers motivations more clearly quantitative such as a level that a player can measure and moves towards that increasingly qualitative such as a feeling of fulfillment. This enables the scattering of various motivations across the field of gameplay, all of which can be captures by four quadrants:

Figure 15: Gameplay motivations framework (Radoff, 2011: p. 214)

Achievement is anything that gives the player a sense of progress. It can be measured in many ways, including but not limited to collecting or owning things, gaining levels or badges, or earning prestige. For example, seeing a progress bar fill all the way up as a player gains a level represents a form of the achievement feeling.

Immersion is the sense of forming an enduring emotional connection to a game by a feeling as if the player was actually a part of something. Immersion is satisfied by content to explore, stories to unravel and secrets to learn. Immersion often refers to the level of immediate absorption and is stimulated by features that enable a player to individualize, or to think of the game even when the player is not playing.

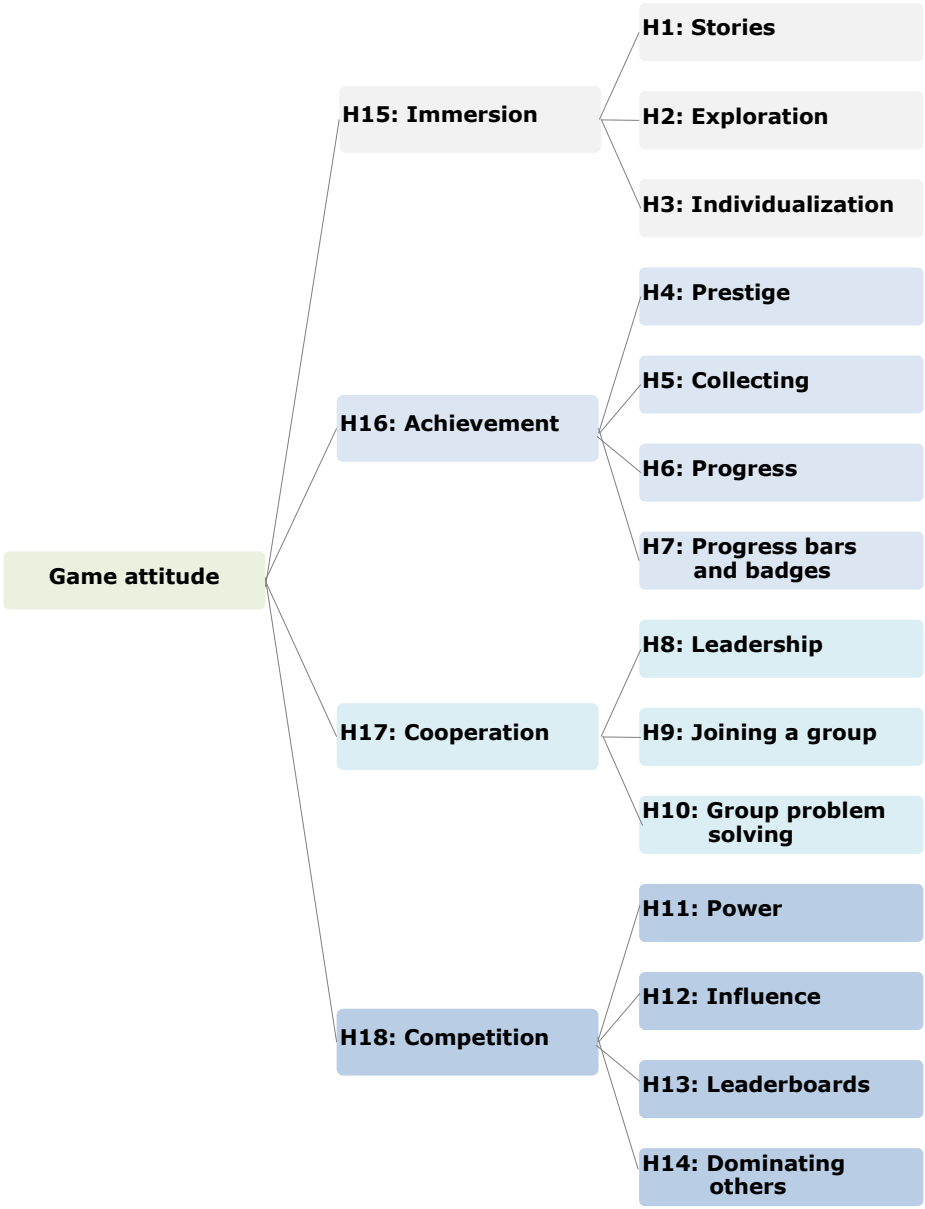
Many players are not satisfied with simply beating the computer. This makes competition inherently social. Most of the time, competition is quantitative. It can be reinforced through features such as competitive leaderboards, which increase the prestige of winning a competition. Competition also involves trying to win scarce resources, such as bidding for virtual goods in an auction house or convincing a talented player to contribute to your agenda.

Cooperative gameplay is when players interact with each other in a non-competitive way. It includes teaming up to solve problems that might be hard or impossible to do alone, leading and forming groups, helping each other with information or gifts, or simply getting to know other

players.

This thesis seeks to build a framework that explicates the correlation between motivational complaint features influence on attitude towards the advergame to help advertisers build more effective and engaging advergames. This is done by taking point of departure in Radoff's (2011) framework of player motivations combined with the concept of attitude towards the game as shown in figure 16 below.

Figure 16: Hypothesis-tree and correlation model – initial regression model



Combining Radoff's (2011) framework of gameplay motivations and specific game features with game attitude constitutes a feasible platform for hypothesis development. Table 6 presents the developed hypotheses.

Table 6	Derived hypothesis overview		
H	***Immersion***	***H***	***Achievement***
1	Advergames that support stories as a game feature drives a positive feeling of immersion.	4	Advergames that support prestige as a game feature drives a positive feeling of achievement
2	Advergames that support exploration as a game feature drives a positive feeling of immersion.	5	Advergames that support collecting as a game feature drives a positive feeling of achievement.
3	Advergames that support individualization as a game feature drives a positive feeling of immersion.	6	Advergames that support progress as a game feature drives a positive feeling of achievement.
15	Greater feeling of immersion will exhibit a positive relationship with positive attitudes toward advergame.	7	Advergames that support progress bars and badges as a game feature drives a positive feeling of achievement.
		16	Greater feeling of achievement will exhibit a positive relationship with positive attitudes toward advergame
H	***Cooperation***	***H***	***Competition***
8	Advergames that support leadership as a game feature drives a positive feeling of cooperation.	11	Advergames that support power as a game feature drives a positive feeling of competition.
9	Advergames that support joining a group as a game feature drives a positive feeling of cooperation.	12	Advergames that support influence as a game feature drives a positive feeling of competetion.
10	Advergames that support group problem solving as a game feature drives a positive feeling of cooperation.	13	Advergames that support leaderboards as a game feature drives a positive feeling of competition.
17	Greater feeling of cooperation will exhibit a positive relationship with positive attitudes toward advergame	14	Advergames that support dominating others as a game feature drives a positive feeling of competition.
		18	Greater feeling of competition will exhibit a positive relationship with positive attitudes toward advergames.

10.3 Correlation between attitudes towards advergames and attitudes towards the brand

As previously discussed the concept of ad transfer can be used to explain the relationship between attitude toward the advergame and attitude toward the brand. Advergame likability is an important factor because of its ability to attract attention and facilitate information processing. The dual mediation model outlines that the evaluation of the advergame not only has an immediate impact on the evaluation of the brand, but also an indirect effect on brand attitude via brand cognitions. Dual mediation prescribes that consumers who hold a positive attitude towards the communication are more likely to be receptive to arguments in favor of the brand advertised (Pelsmacker et al., 2007).

Several models of ad attitude have been proposed and tested to explain the relationship between ad attitude and brand attitude in traditional advertising contexts (Brown and Stayman 1992). Previous research further explicates the relationship between attitude toward the ad and attitude toward the brand in terms of general paths. However, no extensive research identifies the specific features that may influence relationship strength.

Advergaming presents a unique opportunity for researchers to study variation in the strength of the relationship between attitude toward the ad and attitude toward the brand in a branded entertainment context, because it is easy to manipulate the game features and then measure any changes in attitudes. This study therefore focuses on how player motivation compliant features influences this relationship.

Previous research suggests that positive attitudes evoked by exposure to an ad translate into positive attitudes toward the brand through conditioning procedures (Allen and Janiszewski 1989; Shimp, Stuart, and Engle 1987). One specific mechanism, direct affect transfer (Kim, Allen, and Kardes 1996), involves attitude conditioning through the transfer of positive affect evoked by exposure to an unconditioned stimulus (i.e., advergame) to an unconditioned stimulus (i.e., the brand) (Allen and Shimp, 1990). Attitudes also can be conditioned through cognitive mechanisms, in that people can draw inferences about a conditioned stimulus on the basis of properties or information present in the unconditioned stimulus (Fishbein and Ajzen, 1975). Kim, Allen, and Kardes (1996) support conditioning of brand attitudes evoked by the presentation of attractive visual images through both cognitive mechanisms and the direct transfer of positive affect. This

finding makes sense in light of more recent theoretical views suggesting that exposure to a media message engages both cognitive and emotional processes and that emotion and cognition are intertwined in the human information processing system (Lang, 2006).

If people draw inferences about a brand from information presented in an advergame and transfer the positive affect evoked by playing the game to the brand, the features of advergames that make it easier to engage in attitude conditioning procedures should strengthen the relationship between attitude toward the game and attitude toward the brand. Alternatively, advergame features that make it more difficult to engage in conditioning procedures should weaken this relationship. The features that comply with players' motivations could be such features.

Information processing of ads also requires encoding information from the message into working memory and storing it in long-term memory, where consumers can retrieve it later in their evaluation and decision-making tasks (Lang, 2006). Conceptualizations of human memory as an integrated network of concepts, attributes of objects, and beliefs (Anderson 1990) imply that information encountered in the environment, such as stimuli in an advergame, gets stored in a pattern of interconnected nodes. Lang (2006) also proposes that the strength and number of connections between nodes containing information from a media message determines how well the message becomes stored in memory and, ultimately, how easily it can be retrieved.

In addition to information contained in an ad, people store attitudes in their associated memory network (Roskos-Ewoldsen, Arpan-Ralstin, and St. Pierre 2002). Thus, both the evaluative experience of playing an advergame and conditioned attitudes toward the brand may represent interconnected nodes in an associative memory network. Because conditioning of brand attitudes involves the systematic pairing of ad information with existing information about the brand, games that strengthen this pairing should result in a stronger connection in memory between attitude toward the game and attitude toward the brand. A high degree of game features that comply with players' motivation for playing games therefore should strengthen the pairing between the game and the brand, resulting in a stronger connection between conditioned brand attitudes and attitude toward the game in people's associated memory network. This pattern of

attitude conditioning should become manifest in a stronger observed relationship between attitude toward the game and attitude toward the brand as a result of playing advergames with a high degree motivation compliant features, compared with playing advergames with a low degree of motivation compliant features. The final hypothesis of this thesis therefore posits:

Figure 17: Brand and game attitude correlation model – initial regression model

Brand attitude **H19: Game attitude**

H19**:** *There is a stronger positive relationship between attitude toward the game and attitude toward the brand for advergames with a high degree of motivational compliant features than for advergames with a low degree of motivational compliant features.*

10.4 Part conclusion

Based on our literature review we have developed 19 hypotheses for testing all of which address an incomplete area of research within advergame theory. Preliminary research has been conducted on game motivations and game attitude, but as our literature review proposes this thesis will be the first to thoroughly explore game features and motivations and their correlation with advergame and brand attitude.

By taking point of departure in ad transfer theory we already assume the positive relationship of advergame attitude and brand attitude, therefore our main focus in the following analysis will be on the direct correlation between motivational compliant features and advergame attitude. This relates to hypothesis 1-18. Furthermore the purpose of hypothesis 19 to provide a preliminary insight into the strength by which brand attitude is influenced by positive advergame attitude stimulated through specific advergame features.

11. Analysis 3

In this analysis we seek to develop the tools for testing our hypotheses. In the previous analysis we indentified four overlying game motivations that influence game attitude. These motivations each consist of several game features that are antecedents to the four motivations. In this analysis

these motivations and game features are defined as constructs. The goal is to identify them properly, so that the target group in our experiment can understand and relate to them in the developed questionnaire for testing attitude towards advergames.

It is critical that data collecting is based on well-constructed measurement procedures (Hair et al., 2009). Establishing a valid measurement procedure involves two distinctly different development processes, construct development and scale measurement development. It is important to make sure that the constructs we investigate are defined in a way so that they resonate with the perceptions of our test segment. Practically, this prerequisites an accurate definition of the constructs and the meaning they describe, as well as developing the questions that allow for precise measuring of the attitudes towards the given constructs (Hair et al., 2009).
In this thesis we suggest that attitude towards the advergame could represent an affective construct that assesses positive consumer predispositions toward the advergame itself resulting from active user-game interaction (Hernandez, 2004). The affective component of attitude is an individual's emotional feelings towards a given object. This component is most frequently revealed when the individual is asked to verbalize his or her attitude towards an object, person or phenomenon. Attitude often changes as individuals are exposed to stimuli, hence it may remain essentially the same. It is a volatile construct and two individuals may have different affective responses to the same experience thus predicting attitude change is a somehow difficult task (Hair et al., 2009).
We wish to test how motivational compliant features in advergames influence attitudes towards the advergame and brand. As shown in figure 16 we have proposed the relationship of motivational compliant features as antecedents to positive attitudes towards advergames, and it is the purpose of analysis three to make sure we are able to encapsulate measure it properly.

11.1 Constructs definition

When collecting primary data it is pivotal for researchers to fully understand the constructs, variables and relationships sought investigated. A variable is an observable, measurable element or attribute of an object. Variables have concrete properties and are measured directly, representing anything from gender and age to marital status or brand usage (Hair et al., 2009).

In contrast, a construct is an unobservable abstract concept that is measured indirectly through a group of related variables. Common measures of constructs within marketing include service quality, product value, customer satisfaction and brand attitude. A clearly specified construct serves as the fundamental basis for judging the quality of an assessment, as well as for judging the inferences that may legitimately be drawn post-testing. Further, it is imperative that scores are directly interpretable in terms of explaining the examined construct (Dwyer et al., 2003). Relationships are associations between constructs and variables. Relationships between variables or constructs can either be dependent or independent. An independent variable is the variable or construct that predicts or explains the outcome variable of interest. A dependent variable is the construct or variable that researchers are seeking to explain (Hair et al., 2009). Attitude towards the advergame is our construct of interest defined by the four antecedents immersion, achievement, cooperation and competition as defined by Radoff (2011). These four antecedents are constructs of their own and have their own antecedents, which can be translated into the actual features or functions in advergames. Figure 16 displayed earlier summarize the proposed relationships between antecedents of attitude towards advergames.

In the following we will discuss the several steps of defining constructs, measurement scales and items used in our questionnaire. The steps include:

1. Sum-up outline of constructs as proposed in previous analysis
2. Define and limit pool of attributes items
3. Select attribute items
4. Develop statements and scale
5. Validity
6. Pre-test statements and questionnaire
7. Refine statements and questionnaire based on feedback

11.2 Method

Table 7 Methodology

Research questions	*Analysis*	*Purpose*	*Type of study*	*Method*	*Data collection*	*Objective*
R2	Part 3.1	Defining constructs within the target group	Explorative	Qualitative	Focus Group	Verify constructs and attributes
R2	Part 3.2	Pretesting questionnaire within the target group	Descriptive	Quantitative	Questionnaire & data analysis	Raise validity

This part of our analysis is explorative qualitative, but later in the analysis we use quantitative methods to process data. We use secondary data and a focus group to gather qualitative data, which helps us to define and limit our constructs. Results are used to generate appropriate measurement tools that are grounded in the perceptions of our target segment. This is particularly important when dealing with measuring advergame features, since the development of technology and game mechanics constantly renews gaming concepts thus shaping new definitions. We need to make sure that our game construct definitions are completely up to date with our respondents' perceptions. The advantages of using a focus group for this purpose are found in the richness of the data collected. Group discussion produces data and insights that would be less accessible without the interaction found in a group setting, listening to others' verbalized experiences stimulates memories, ideas, and experiences in participants. This is also known as the group effect where group members engage in a chaining or cascading effect; talk links to, or tumbles out of, the topics and expressions preceding it. Group members discover a common language to describe similar experiences. This enables the capture of a form of native language or vernacular speech to understand what meaning is ascribed to the constructs we investigate and how to capture it (Lindlof & Taylor, 2002).

11.2.1 Constructs outline

As described in our literature review we used secondary data from earlier research on player motivations to outline the constructs on which we based our hypotheses. In the following we will

label the 14 identified constructs, motivational compliant features, from A1 (Stories) to A14 (Dominating others) in line with figure 16. Our four constructs, the general gameplay motivations, are labeled A15 (Immersion), A16 (Achievement), A17 (Cooperation) and A18 (Competition), while game attitude is labeled A19 and brand attitude A20. Since we are using Radoff's (2011) constructs definition of A15, A16, A17 and A18, as proposed in figure 15, the primary task in testing these constructs will be to investigate how they are interpreted by our target segment, and how they can be measured.

11.2.2. Data collection procedure

In mid August 2011 we invited eight individuals to take part in a focus group interview regarding electronic games. The interview was conducted in a neutral meeting room setting cleared of any computer game-related objects. Eight individuals from our target segment, mainly friends or contacts within our network, were screened and selected. The only requirement to participate in the survey was basic knowledge of game features and prior experience with different types of computer games. Prior knowledge of gaming was proposed as a prerequisite in order to secure spontaneous collaborative discussions, which could provide detailed information about the topic (Hair et al., 2009).

The focus group interview was conducted as a semi-structured discussion, using figure 16 as moderator guide, outlining topics and questions. Mark Gaardbo served as focus group moderator while Johan Koefoed observed and noted important conclusions and observations. The focus group was conducted using a simple interview guide which is displayed in Appendix 2. The participants were briefly instructed to discuss each question chronological as they were presented, and encouraged to share concrete gaming experiences. Each question revolved around a given construct, hence participants were asked to encapsulate the construct meaning and ascribe its perceived relevance in computer games. Subsequently, participants were asked what specific feelings the construct brought to their gaming experience, and finally they were told to discuss and sum up the group's common findings. In cases where construct definitions appeared to be similar to that of other constructs the group moderator asked participants to compare those constructs with each other, and revaluate their answers. For instance, the discussion on construct A8 (Leadership) was summarized into the feeling of power, which appeared too similar to

construct A11 (Power).

We asked group members to discuss constructs A15-A18, and afterwards each of the related subcomponents A1-14. An actual sequence would for example be a discussion of A15 following a discussion of A1-A3. The interview took approximately 90 minutes, and upon completion the conclusions were discussed and evaluated for variance between the moderator and observer.

11.3 Construct definitions and attribute items

After completing the focus group interview the result where analyzed and interpreted. Axial coding where used to specify the conditions, context and variable that related to a particular category or construct, and the outcomes from the construct. Axial coding is the disaggregation of core themes during qualitative data analysis and has been described by Straus and Corbin (1998) as the process of developing a *coding paradigm* to include categories related to the following: (1) the phenomenon under study, (2) the conditions related to that phenomenon (context conditions, intervening -structural- conditions or causal conditions), (3) the actions and interactional strategies directed at managing or handling the phenomenon and (4) the consequences of the actions/interactions related to the phenomenon (Straus & Corbin, 1998).

Using this method we defined the conditions related to each construct, which allowed us to separate statements related to a specific constructs. The selected attributes to each of the constructs represent the attributes that are important to participants when assessing the construct. The definitions and related items that were deduced from the analysis are summarized in table 8 below.

Table 8 **Definitions of constructs and attribute items**

Construct	*Definitions*	*Attribute items*
A1	I am involved in a greater plot	Narrators, movie clips, quest story lines, lore
A2	I can discover new things	New worlds/cultures/creatures
A3	I can make the game/player look exactly as I want	Model customization, appearances and style
A4	My achievements will be know by others	In game public rewards
A5	I can collect items that are special	Unlocking things from actions, rare spawns, showcase rooms
A6	Playing leads me to new content	Game levels, story unfolding, completing game

A7	Playing rewards my achievements	Character levels, upgrades, rewards
A8	Taking charge of other people/groups	Group/clan/raid/guild leader, teaching other players
A9	I can take part in a game community	Joining groups, making friends, chatting
A10	Some challenges are easier with other people	Group quest or raid, creating strategies
A11	Playing longer makes me stronger then others	Character development, skill development
A12	I can control public or shared commodities in the game	Scarce resources
A13	My actions are recorded and compared with others	Stats, ratings, top ten
A14	When I win others loose	Killing/stealing/gaining from other players
A15	When playing I feel like I am inside the game	Stories, exploration, individualization
A16	The game presents me with goals I can accomplish	Prestige, collecting, progress, progress bars and badges
A17	The game lets me interact friendly with other players	Leadership, joining a group, group problem solving
A18	The game lets me test my skills against others	Power, influence, leaderboards, domination others

In general the results provide us with the knowledge and tools to accurately define constructs and statements for our further analysis. Although few overlapping of attribute items did occur when relating attributes to A1-A14, there was a fairly clear consensus among participants when discussing constructs A15-A18. This made assessing and selecting a reduced set of attributes for further development a fairly simple task, and only a minor number of attributes were left out due to redundancy.

11.4 Developing statements and scale

Measuring constructs requires researchers to ask individuals to translate subjective features onto a continuum of intensity using carefully designed questions (Hair et al., 2009). Regardless of whether researchers want to collect secondary or primary data, all information is drawn from question responses based on; verifiable facts, mental thought or emotional feelings, past and current behavior, or planned future behaviors (Hair et al., 2009). Since we have defined brand attitude as an affective construct, we are interested in measuring the state-of-mind data from consumers, represented by their attitude towards the advergame. State-of-mind data represents

the mental attributed or emotional feelings of individuals that are not directly observable or available through some type or external source. To gather such data researchers will have to ask individuals to respond to questions, therefore data quality and accuracy is limited to the degree of honesty of the person providing the responses (Hair et al., 2009).

Researchers consider measurement scales to consist of three critical components, the question, the attributes and the scale point descriptors. Although problem statement and research objectives dictate which type of scale measurements researchers can use, there are several types of attitudinal scaling formats available. We have chosen a Likert scale as proposed by Likert (1932) as our method of assessing attitude (Hair et al., 2009).

A Likert scale asks respondents to indicate the extent to which they either agree or disagree with a series of mental or behavioral statements about a given object (Hair et al., 2009.) We will use the modified Likert scale holding seven points with scale descriptors ranging from *definitely agree*, *generally agree*, *slightly agree*, *not sure*, *slightly disagree*, *generally disagree*, and *definitely disagree*. The Likert scale is the only summated rating scale that uses a set of agreement/disagreement scale descriptors. By using the summation of the weights associated with all the statements, researchers can tell whether an individual's attitude towards the object is overall positive or negative. Likert scales are best suited research designs that uses self-administered surveys, personal interviews or online methods to collect data, which fits our research design (Hair et al., 2009).

Based on our prior definitions of constructs and attributes, we generated 76 belief statements concerning gamers' sentiments towards advergames. Each statement was then classified as having either a favorable or an unfavorable relationship to the specific construct. Statements were grouped accordingly and 4-7 statements were developed for each construct. The full questionnaire can be found in Appendix 3.

11.5 Validity

When defining constructs and Likert scales there are several factors to evaluate in order to assess if conclusions drawn from the experiment can be viewed as valid. First of all the differences in the dependent variable found through experimental manipulations of the independent variable have to reflect a cause-effect relationship (Hair et al., 2009). Construct validity is viewed as the extent

to which the variables under investigation are accurately identified prior to defining relationships between them. If the construct cannot be identified or measured correctly, the conclusions of the experiments will be less accurate or valid. One of the threats to construct validity is in some cases that respondents will try to guess the purpose of the research, and respond as they feel researchers want them to respond to the demand characteristics. This is especially important in our experiment, as we are relying on individuals in our social network to perform as test participants. Our participants have volunteered to take part in our experiment and may subconsciously want to *aid* us in reaching our research objective by trying to figure out the goal of the research and answer accordingly. To meet this challenge we strategically articulated the experiment purpose in broader terms while limiting participants' information of our actual objectives. By using several different statements relating to the same construct we made it more difficult for participants' to forecast how their answers might affect the outcome of the experiment. These precautions were implemented to prevent the mono-operation bias. Several statements produce more responses, which provide us with more data to base analysis on. The more responses we have the more accurate results we are able to produce.
When developing the Likert scales and the corresponding statements that define each construct we need to consider the reliability of the scale. Scale reliability refers to the extent to which the scale can reproduce the same result in repeated trials. When investigating multidimensional constructs, summated scales measurements tend to be the most appropriate scales (Gleim & Gleim, 2003). By comparing the reliability of a summated multi-item scale versus a single-item question, Gleim & Gleim (2003) showed that a single-item question is unreliable and not appropriate to make inferences on when measuring a construct.

In a multi-item scale each dimension represents some aspect of the construct, so measuring all items defines the construct. This is represented in our questionnaire by each construct being defined by several statements. To make sure the scale is reliable, there needs to be internal consistency between the different statements and the scale. The set of items that make up a construct need to correspond to the scale, and the way other constructs are measured within the same scale. In other words, an individual favorable to competition in advergames, should answer correspondingly to all questions defining competition. If the answers do not correspond internal consistency will be low suggesting that the items that define the given construct are flawed.

Either, a statement that defines a construct does not accurately define the construct, or the articulation of the statement did not make sense to the respondents', making them answer differently. These statements will then have to be deleted from the final questionnaire, since they will not contribute to the construct definition (Hair et al., 2009).

There are two popular techniques used to assess internal consistency, split-half tests and coefficient alpha, also referred to as Cronbach's alpha. In a split half-test the items in a scale are divided into two halves and the resulting halves scores are correlated against one another. High correlations between the halves indicate good consistency. A Cronbach's alpha takes the average of all possible split-half measures that result from different ways of splitting the scale items. Cronbach's alpha will generally increase as the intercorrelations among test items increase. This is is often referred to as the internal consistency estimate of reliability of test scores because intercorrelations among test items are maximized when all items measure the same construct (Hair et al., 2009).

Cronbach's alpha indirectly indicates the degree to which a set of items measures a single construct. The Cronbach's coefficient value range from 0 to 1 and in most cases a value of less than 0.6 would indicate marginal to low internal consistency which is unsatisfactory (Johns, 2010).

Table 7 **Consistency scores**

Cronbach's alpha	*Internal consistency*
$\alpha \geq .9$	Excellent
$.9 > \alpha \geq .8$	Good
$.8 > \alpha \geq .7$	Acceptable
$.7 > \alpha \geq .6$	Questionable
$.6 > \alpha \geq .5$	Poor
$.5 > \alpha$	Unacceptable

Besides internal consistency, balancing in Likert scales in the form of positive and negative statements is another important aspect of creating valid experiments (Johns, 2010). When dealing with the articulation of statements for a Likert scale, statements can either be positive or negative towards the examined construct. To maintain scale objectivity ideally each construct is defined equally of negative and positive statements, leaving the construct to be balanced between statements of agreement and disagreement. Research suggests that respondents are led by the

formulation of questions. There is a tendency to agree with statements, to some extent irrespective of their content, which has long been known to be a problem with the Likert format (Johns, 2010). As mentioned earlier we are using individuals from our network as test participants in the experiment, and therefore it is arguable that participants will tend to agree with the statements, with the intent of supporting our research. Therefore, when we defined statements for the questionnaire, we sought to balance negative and positive statements to keep objectivity high. This proved difficult though, since our focus group had mainly ascribed positive attributes when discussing the definitions of constructs. One way to force objectivity by balancing negative and positive statements is simply to copy each statement in a negative and positive wording. The problem with this approach is that it creates a huge amount of items, which often will not have any effect on the test scores, since people will – or should – answer correspondingly to negative wordings as they do to positive. Instead we choose the approach of adding only some negative statements, where our focus group had expressed them, to limit the extent of our questionnaire. Adding statements with negative wording in a non-pattern fashion furthermore has the benefit of serving as a control making people consider each question instead of just assuming that all questions are positive.

11.6 Pre-testing statements and questionnaire

Pretesting our questionnaire was done using the same eight participants as used in our focus group session. We did not have the resources to perform an actual pilot study of our full experiment, so for the purpose of pretesting, we limited the data extent to e-mailing each participant independently. All eight participants were emailed the original questionnaire in Excel-format, along with instructions of how to proceed along with links to the four chosen advergames to be used in the actual experiment. Playing the advergames prior to filling the questionnaire was optional. All respondents had already had gone through a screening in regards to gaming experience and knowledge prior to our focus group session. Data was collected start September 2011, and the original questionnaire, Appendix 3, included 76 items addressing constructs A1-A19. The data collected and used for further analysis can be viewed in Appendix 4. The purpose of pretesting was to test for internal consistency and measure Cronbach's Alpha for all constructs in order to verify whether questionnaire and statements were acceptable for actual hypothesis

testing. Data was processed using the statistical application, SPSS, were each item was typed in and Cronbach's alpha calculated for each of the in total 19 constructs. Table 9 and table 10 below display how each construct were analyzed using the first construct A1 (Stories) as an example.

Table 9 Reliability statistics

Cronbach's alpha	*Number of items*	*Item*	*Corrected correlation*	*If item deleted*
0,412	8	A1	0,539	0,256
		A1.1	0,347	0,191
		A1.2	0,555	0,24
		A1.3	0,312	0,329
		A1.4	0,127	0,401
		A1.5	0,181	0,378
		A1.6	-0,498	0,754
		A1.7	0,518	0,142

Eight statements A1-A1.7 constitute the construct stories. For each statement a value of 1-7 was given as input from each of the eight participants, through the 7-point Likert scale format provided, while negative questions had their value inverted. A high Cronbach's alpha indicates strong internal consistency among the eight items. This means respondents who tended to assign high scores for one item also tended to assign high scores for the others. Likewise respondents who assigned a low score for one item tended to assign low scores for the other items. Since our alpha is low (0,412) predicting scores from one single item would not be possible. Table 8 shows the output from SPSS. Corrected item correlation for each item displays the correlation between the scores of one item, and the combined score of the others. This is a means to assess how well one item's score is internally consistent with scores from all other items. If the correlation is weak (less than 0,30) between items, then the item should be considered removed since it is not internally consistent with other items (Griffin, 2005). The item deleted column in Table 9 displays the alpha that would appear if a given item were deleted, which is valuable for determining which items from among a set of items contribute to the total alpha.

Looking at our items results we notice that A1.4, A.1.5 and A.1.6 all have poor item correlation and should be considered removed. Deleting items A1.4 and A1.5 would not though increase overall internal consistency or alpha value, hence we solely deleted item A1.6 and ran the data again.

Table 10 Refined statistics

Cronbach's alpha	*Number of items*	*Item*	*Corrected correlation*	*If item deleted*
.754	7	A1	.739	.679
		A1.1	.742	.656
		A1.2	.616	.699
		A1.3	.386	.741
		A1.4	.215	.765
		A1.5	.203	.784
		A1.7	.548	.717

By removing the item A1.6 we raised the alpha value to an acceptable level of 0.754. Items A1.4 and A1.5 still show below 0.3 item correlation, but since they do not increase alpha significantly if deleted we decided to keep them in our questionnaire. Furthermore, due to our relatively low level of respondents we would rather include extra items, instead of leaving too many out. For the final survey the item/statement A1.6 will not be included in the questionnaire, since our data suggests that our participants did not relate it to the construct of stories.

Table 11 shows the results of data analysis and correction of all the constructs due to pretesting questionnaires.

Table 11 Cronbach's alpha

Construct	Internal consistency	Items deleted	New internal consistency
Stories	.412	1	.754
Exploration	.558	1	.61
Individualization	-.02	2	.443
Prestige	.316	1	.643
Collecting	.394	1	.679
Progress	.224	1	.526
Progress bars & Badges	.056	2	.569
Leadership	.394	1	.548
Joining a group	.754	0	.754
Group problems solving	.703	0	.703
Power	.486	1	.597
Influence	.491	1	.703
Leaderboards	.343	1	.515
Dominating others	.63	0	.63
Immersion	.551	0	.551
Achievement	.762	0	.762
Cooperation	.535	0	.535
Competition	.947	0	.947
Game attitude	.853	0	.853

In general the calculated Cronbach's alpha showed a rather low internal consistency among the items in the questionnaire. Many constructs required items deleted and still the alpha could not be increased to an acceptable level. However, we deleted items to raise the internal consistency to a level where we still maintained the general structure of the constructs, instead of removing the constructs completely. Using the refined questionnaire and a larger test group for the actual lab experiment will lower variance, and it is our conclusion that the overall questionnaire will prove valid enough to draw conclusions from thus being useful for hypothesis testing.
The final questionnaire consisted of 63 items with an average reliability of 0.65 and is shown in Appendix 5.

12. Analysis 4

This final part of our analysis deals with testing our proposed hypotheses. So far we have used descriptive methods to investigate the relevance of advergames within our target segment along with examining their current media behavior. Furthermore, we have through our conducted literature review proposed hypotheses that seek to describe and identify a positive relationship between positive brand attitude and gameplay motivations in advergames. Finally, we have described and developed a method and a questionnaire to test hypotheses, which is the actual purpose of our fourth analysis.
We seek to build a framework that documents the correlation between motivational complaint features and attitude towards advergame. This correlation between several variables can assist marketers and advertisers in building effective and engaging advergames. The correlation will be examined through regression analysis in order to identify whether a relationship exists between game attitude and motivational complaint game features, and if so how strong this relationship might be. In the following our analysis method will be described.

12.1 Examining relationships

Relationships between variables can be described in several ways, which are *presence, direction, strength of association* and *type* (Hair et al., 2009).
Presence is the occurring if two or more variables are related. If variables relate to each other in a systematic way, then a relationship is present. Systematic indicates that the behavior of one

variable enables us to make useful predictions about the behavior of another. This is tested through the concept of statistical significance, and when statistical significance exists, a relationship between variables is present (Hair et al., 2009).

When a relationship is present the next step is to investigate the direction of the relationship. Direction means that the relationship can be either negative or positive. A positive relationship is present when a variable raises as a consequence of another variable raising, or when respondents' score one variable high, the other variable scores high as well (Hair et al., 2009). Likewise the negative relationship means that when one variable is rated high, the related variable is rated low. This last example is present when one variable actually has a negative impact on the other.

The strength of association describes how strongly the two variables are related. These variables can generally be described as having no relationship, weak relationship, moderate or strong relationship. If a consistent and systematic relationship is not present, then there is no relationship. A weak association means that the variables may have something in common, but not much. A moderate or strong association means that there is a consistent and systematic relationship, and the relationship is much more evident when it is strong (Hair et al., 2009).

The last concept is the type of relationship between variables. If you align the variables in a coordinate system, the type of relationship is the link between how the values of two variables can be described. Variables can have a *linear relationship,* which means that the strength and nature of relationship between them remain the same over the range of both variables. A linear relationship will be displayed as a straight line. *Curvilinear relationships* are when the strength and/or direction of relationships change over the range of both variables. An example of this is when one variable's relationship with another variable gets stronger as the first variable increases, but then gets weaker as the value of the other variable continues to increase (Hair et al., 2009). Linear relationships are much simpler to work with, since a variable can be explained by a straight line to determine another variable (Hair et al., 2009). In our case we will assume that the connection between variables is linear, meaning that variables either increase or decrease evenly. In our framework we are interested in describing the relationship between two and more variables, which we propose impacts on respondents' brand attitude. Relating the description of relationships between variables to our framework is a question of asking whether there exists a relationship between the variables we are interested in.

Since we are interested in examining whether our variables describing advergames are related, we can introduce the concept of *covariation* to explain how much these variables interrelates. Covariation is defined as the amount of change in one variable that is consistently related to change in another variable. It can also be explained as the degree to which associations between two variables are shared (Hair et al., 2005). When testing for attitude towards advergames and its various antecedents, the covariation can for example explicate that positive attitude towards immersion can be highly explained by stories in advergames meaning that these variables change together through a high covariation. In other words, when the feeling of stories are present in an advergame the feeling of immersion increases.

Visually describing covariation can be done using a scatter diagram. A scatter diagram plots the relative position of two variables using the axes to represent each variables value. If the variables have high covariation a pattern emerges from the scatter diagram that either shows no relationship, positive or negative, or curvilinear (Hair et al. 2005). In the following we will assume that the relationship between our discovered variables are linear, given our research deals with attitudes towards advergames, there are definitely some cases where variables will have a curvilinear relationship instead. Gaming is a physical activity that often requires hand dexterity and keen motoric and sensoric skills. These are trained trough repetitive gameplay as the users get more experienced and better at handling the challenges presented in computer games. Often new users tend to favor casual games where they can relax and improve their skills, while experiences players likewise tend to favor gameplay features that are more competitive and allow them to compare their skills with others (Radoff, 2011). This is an example of how a curvilinear relationship could take place between variables in our experiment. As the gamers get more experienced their positive attitude towards gaming can no longer be explained by the same variable. A similar example can occur when players play the same specific game repetitively. Since many games have content limitations it is fair to assume that features, which originally motivated a player to get engaged in the game, will be perceived differently over time as continuous play dilutes features impact on the player's immediate feeling. This curvilinear relationship between *times played the game* and *attitude towards the game* is likewise hard for us to describe and test thoroughly.

12.2 Regression and correlation analysis

A correlation coefficient is a statistical measure of the strength of a linear relationship between two variables. That means it is a quantitative method of determining the covariation between two items. The correlation coefficient varies between -1.00 and 1.00 with 0 representing absolutely no association between two variables, and -1.00 and 1.00 representing a perfect link between the two. The correlation coefficient can either be negative or positive depending of the direction of the relationship between two variables while the size of the correlation coefficient can be used to quantitatively describe the strength of the association between two variables (Hair et al., 2009). Table 12 shows relationship between coefficient range and relationship strength as suggested by Hair et al. (2009).

Table 12	Correlation Coefficient
Range of Coefficient	**Description of strength**
.81-1.00	Very strong
.61-.80	Strong
.41-.60	Moderate
.21-.40	Weak
.00-.20	Weak to none

When the correlation coefficient is squared it will output the coefficient of determination. This value indicates the proportion of variation explained in one variable by another (Hair et al., 2009). An example of this could be a correlation coefficient of 0.776 squared equaling a coefficient of determination of 0.602. In fact this translates to that 60.2 percent of the variance in one variable can be explained or accounted for by the independent variable.

When calculating correlation coefficient and testing our hypotheses the level of significance for the experiment needs to be determined prior to the data interpretation. The level of significance is the amount of risk regarding the accuracy of the test that the researcher is willing to accept. Meaning how accurate does the results have to be, in order for the researcher to accept or discard the hypothesis (Hair et al., 2009). Assuming that we strive for a 95 percent certainty of our results in order to accept proposed hypotheses the significance level will be set at 0.05. This means that if the survey was conducted many times, the probability of incorrectly rejecting the hypothesis

when it is true would happen less than five times out of a 100 (Hair et al., 2009).
When calculating correlation coefficient through applications like SPSS, the application will automatically show the significance level of the test. The application shows significance, as the probability of the hypothesis being true. A significance level of 0.05 or less indicates that there are only five or less chances out of a 100, that no relationship between the analyzed variables exists, which occur when there is a strong correlation coefficient. Therefore it is important not only to consider correlation strength between variables, but also the likely significance of the results being true.

Correlation can determine if a relationship exists between two variables, along with the overall strength of the association and direction of the relationship. Sometimes however, like in our experiment, we are interested in describing the relationship between our variables in greater detail, in order for us to draw satisfactory conclusions from our results. One suitable method of achieving this is through regression analysis.

Regression analysis is a statistical technique that analyzes the linear relationship between two variables by estimating coefficients for a straight line. One variable is designed as a dependent variable while the other variable is called the independent or predictor variable (Brace et al., 2006). This technique uses information about the relationship between an independent variable and a dependent variable to make predictions. The general formula for a straight line is Y = a + bX + e.

Table 13	**Straight line Formula**
	Y = a + bX + ei
y	The dependent variable
a	The intercept (When x is 0)
b	The slope
x	The independent variable
ei	The error for the prediction

A fundamental basis of regression analysis is the assumption of a straight-line relationship between the independent and dependent variables. We examine the relationship between the

variables X and Y by using the known value for X and Y and then computing values for *a* and *b*. The calculation made by determining the best fitting line for minimizing the vertical distances of all the points from the line. The best fitting line is the regression line. Any point that does not fall on the line is the result of unexplained variance, or the variance in Y that is not explained by X. The unexplained variance is called error and is represented by the vertical distance between the regression straight line and the points not on the line. The distances of all the points not on the line are squared and added together to determine the sum of the squared error, which is a measure of the total error in the regression (Brace et al., 2006).
Regression analysis can make predictions about a constant based on changes in variables. This is a useful tool for marketers, since it answers not only, if one variable affects another, but also what will happen to Y if changes are applied to X, and further how much changes applied to Y will affect X. This change is the slope (b) in the straight-line formula and is referred to as the regression coefficient. Regression coefficient is the change in Y when the independent variable X is changed by 1. In other words it tells what will happen to Y if X is change (Hair et al., 2009). Using regression analysis enables us to make recommendations to marketers by explicating the effects on game attitude by changing the given variables of an advergame.

In our lab experiment we hypothesize that several different gameplay motivations affect game and brand attitude. This proposition can be examined through a multiple regression. When using this technique multiple independent variables are entered into the regression equation, and for each variable a separate regression is calculated that describes its relationship with the variable (Hair et al., 2009). This coefficient allows us to examine the relative influence of each independent variable on the dependent variable. Results of a multiple regression analysis will yield several regression coefficients (beta) for each independent variable. Coefficients can either be negative or positive. A positive coefficient means that if the size of an independent variable increases, then the size of the dependent does as well while negative coefficients suggest that if an independent variable increases, the dependent variable actually decreases instead (Brace et al., 2006).

The appropriate procedure following a multiple regression analysis starts by assessing the obtained correlation coefficient to see how large is it, meaning how much change can be explained by the independent variables. Second step is examining the individual regression

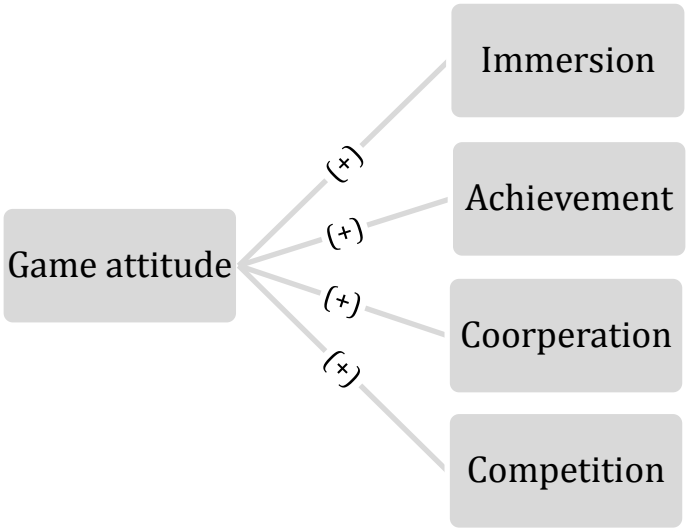
coefficients and determine if their level of significance is acceptable. Third step involves evaluating each regression coefficient to assess their relative influence on the dependent variable. All together this enables us to determine the relationship between variables, and thus prove or disprove our hypotheses (Hair et al., 2009).

12.3 Applying regression analysis to hypotheses

We are testing the hypothesis that there exists a positive relationship between positive brand attitude and positive attitude towards the advergame as a consequence of gameplay. As described in our conceptual model we measure game attitude through four overall quadrants of gameplay motivations that stimulates positive attitude towards the game. The proposition is that if an advergame stimulate player motivations it will likewise stimulate positive attitude towards the game, which transfers to the brand exposed in the advergame. We will use regression analysis to test if the four overall motivations actually affect positive game attitude, and if that is the case, which motivations show the most positive relationship with game attitude. An important notion needs to be stated here. Even though the terminology in regression analysis uses the labels of dependent and independent variables, it does not mean that we can say that one variable causes the behavior of the others. Regression analysis uses knowledge about the type and strength of associations between two variables to make predictions. Statements about the ability of one variable to cause change to another must be based on conceptual logic or information other than just statistics (Hair et al., 2009).

We wish to test how positive game attitude shares associations with the four overall gameplay motivations. In doing so we will measure correlation and regression coefficients for each of these motivations, both to determine if associations exist and if so how strong they might be. When developing hypotheses, relationships can either be “null” or “alternative”. Null hypothesis states that there is no relationship between variables, or if there is one it is random. Alternative hypothesis states that there is a relationship between two variables that is significant (Hair et al., 2009). Our null hypothesis is that there is no shared relationship between gameplay attitude and immersion, achievement, cooperation and competition. The alternative hypothesis states there *is* a significant relationship between the variables that is not random. The figure below summarizes the structural equation between the variables and presents the proposed relationship between

attitude towards the advergame and its antecedents.

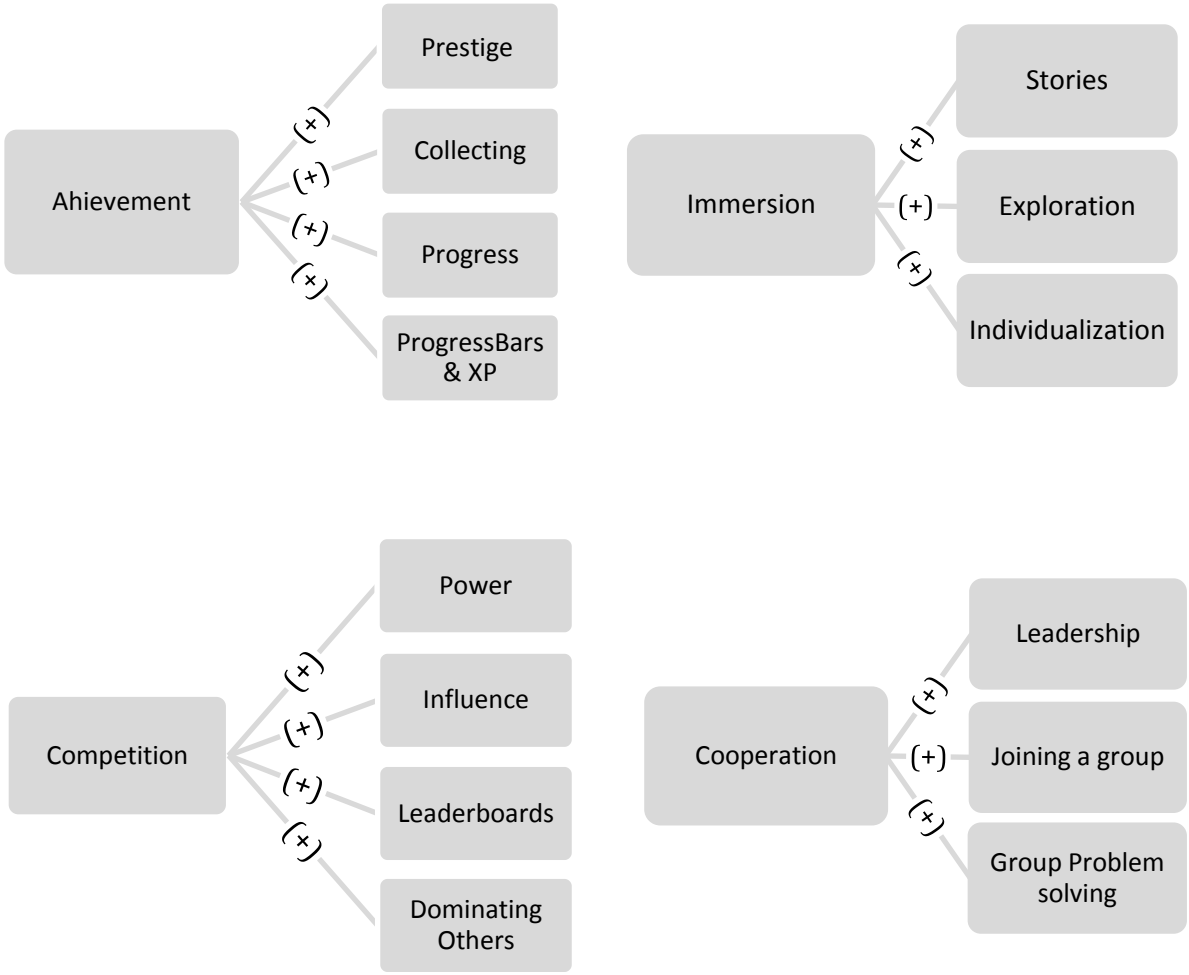


Since we are interested in the conclusions that can be drawn from this experiment, a further definition of the four quadrants of gameplay motivations, will allow for a better understand of how to create and manipulate the motivations of gameplay. As displayed in our literature review we have translated the gameplay motivations into actual advergame features. Each of the four quadrants of gameplay motivation has been deconstructed into features that can be incorporated into games, each of which correlates with its related construct. The game features differ from game to game and allow for different gaming experiences. This deconstruction of gameplay motivations into features, allows for an easier evaluation of how to stimulate the motivations that are important to the target segment. For example creating the feeling of immersion in games can be a confusing concept, while it is easier to relate to the gameplay features of stories, exploration and individualization, which are defined as antecedents to the concept of immersion.

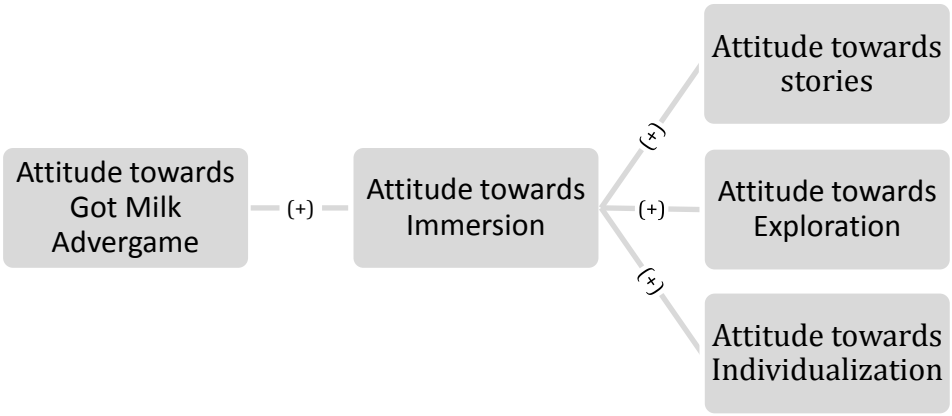
We will use regression analysis, to test each of the overall motivations and their antecedents separately. This will allow us to explain which antecedents that share associations with their overall construct, and will give us the ability to predict what influence it will have on the four main constructs, if corresponding game features are raised or decreased. In other words, how big an impact will it have on the feeling of immersion in an advergame, if the game has more focus on the feature of stories rather than on exploration and individualization?

Our null hypothesis is that the four main constructs are not related to their antecedents, while the alternate hypothesis is that there is a significant relationship between the variables. We

furthermore hypothesize a positive relationship between the constructs and their antecedents, explained by the logic that positive attitude towards gameplay features affects positive attitude towards the related construct. The models below summarize the relationships along with displaying the practical analysis approach.



Testing each of these constructs was done using the advergames presented in section 7.2. Each of the four games corresponds to a quadrant of gameplay motivation, and was used as a stimulus for participants to experience the gameplay features prior to answering our questionnaire. The model below explains how the data was analyzed through regression analysis for each test, using the game Got Milk as a stimulus for an immersive game.



Each construct was tested accordingly using the corresponding advergame to stimulate associations for its antecedents. This allows us to perform regression analysis for each specific construct and its antecedents along with the constructs relationship with game attitude.

12.4 Data Collection Procedure

Data were collected during late winter 2011. Four groups of 18-30 year old men from the Copenhagen areas were personally invited to participate in the study. A total of 37 men participated in two groups of ten, one of nine and a single group of eight, the latter two due to respondent apostasy.

The experiments were carried out individually for each group with an interval of up to three weeks till next group experiment was conducted. In average each group session took approximately 1,5 hours. Lab experiments were conducted in a computer lab in a casual office environment in the Copenhagen Ø area. The participants were asked to bring their own laptop while headphones were individually assigned to each of the participants. To avoid demand artifacts, the participants were told this was an ordinary computer games study. Specifically, as opposed to explicitly telling them to be aware of particular features, the incidental exposure method was used in which the respondents were not cued beforehand that the purpose of their activity actually was to measure brand attitude through the chosen advergames. Another threat to validity is when individuals exhibit evaluation apprehension, fearing that their responses and actions will be known to others. To prevent this we guaranteed test participants complete anonymity, and carefully briefed them regarding how results from the test would be handled and published. Furthermore, we aimed at

creating a familiar and relaxed atmosphere to get our participants to relax and enjoy the experiment. This presented us with another challenge though, as we wanted to avoid diffusion of treatment in our experiment. Diffusion of treatment is contamination of test results due to test subjects discussing results and the experiment with other members who may not yet completed that part of the testing. Since we were limited in space and test subjects were exposed to different games in close proximity within each other, we tried hard to emphasize that people should not discuss their results with each other. This was to avoid dominant participants to influences others, and to keep the test results as individual as possible.

The participants had to play their way through four games. The gameplay sequence was as follows:

- First game played: *Get the Glass* from California Milk Processor Board
- Second game played: *Nexus Contraptions* from Google
- Third game played: *Battle of the Cheetos* from Frito-Lay, PepsiCo, Inc
- Fourth game played: *Habbo Hotel* by Saluke

The same routine was followed for each game. Prior to gameplay the participants were provided with collective instructions on when to start playing the game and were instructed to play the game for 10 minutes. Following the gameplay, participants completed a paper-and-pencil questionnaire. Four individual paper-and-pencil questionnaires were produced each of which were handed out prior to playing the corresponding game. After completion questionnaires were gathered and a new that corresponded to the next game in line was handed out.

12.5 Sample

The participant group had an average age of 26 years placing them in the older end of our target segment's age span.

Table 14	Description of study participants	
	n	***%***
Age		
18	1	2,7
19	1	2,7
22	3	8,1
24	3	8,1
25	7	18,9
26	6	16,2
27	8	21,6
28	5	13,5
29	3	8,1

12.6 Regression analysis results

Values from the lab experiment were collected from the completed questionnaires and data was analyzed with the statistical program SPSS. The data used from the questionnaires can be viewed in Appendix 6. SPSS (Statitistical Package for the Social Sciences) is among the most widely used programs for statistical analysis in social sciences, and is used by a wide range of market researchers and marketing organizations. With this program bivariate and multiple linear regression analysis where performed, and the computed results are presented and discussed below.

Table 15	Regression analysis			
Dependent		*Immersion*	***Mean***	*5.94*
Predictor		Stories, exploration, individualization		
R	.775	**R Square**	.600 - 60%	
ANOVA	F3.144(72.029)	P > .0005		
Variable		**Beta**	**Significance**	**Mean**
Stories		.329	p < .0005	5.85
Exploration		-.28	p = .633	5.73
Individualization		.511	p < .0005	5.96

Our first test was a multiple regression using immersion as the dependent variable and stories, exploration and individualization as independent or predictor variables. The test showed a correlation coefficient (R) of .775 and R-square .600. The stronger the correlation the closer the scores are located to the regression line, and therefore the more accurate the prediction. In this case we have a strong correlation coefficient meaning that stories, exploration and individualization account for a 60% of the variation we can explain in immersion. The R-square shows the percentage of variation in one variable that is accounted for by the other variables. It shows that more than half of the players' perception of immersion in the game could be explained by the presence of stories, exploration and individualization. Furthermore, the overall model had an acceptable significance of $p<.0005$, which makes the model useful (significant) in predicting immersion from the predictor variables. A significance value of $p<.0005$ states that there were less than 5 out of 100 chances for rejecting a null hypothesis that was correct. If we regard the beta values for the predictor variables, we can determine how strongly each predictor variable influences immersion. The beta is measured in units of standard deviation, meaning that a change of 1 unit in the predictor will result in a change according to the beta in the dependent variable. In this case individualization has the best in the regression. Every time individualization is increased by 1 unit immersion is increased with .511. This means if enhancing the experience of individualization in a game by 1 unit, the overall experience of immersion in the game will raise .511 accordingly. The beta regression coefficient is computed in a way that allows for comparing the strength of the relationship between each predictor and the dependent. The variable stories does not influence immersion as much as individualization, but with a beta of .329 it still showed a minor influence. Exploration on the other hand has a negative beta of -.28 meaning that exploration actually affects immersion negatively. Exploration was not significant though, with a significance of $P=.633$ so we will have to discard the results of significance and its influence on immersion. Both stories and individualization were significant $p <.0005$ thus we can conclude that our construct immersion can be explained by stories and individualization, but not by exploration. These findings indicate that we can reject the null hypothesis that immersion is not related to stories and individualization in the Got Milk advergame. The regression analysis tells us that respondents' perceptions of the level of stories and individualization are predictors to the level of immersion in the game.

Besides the regression test results, the mean values for the variables are interesting, which represents the average score given to each construct. These scores can be interpreted as an overall positive or negative attitude towards the related game feature. The scores range from 1-7 where a mean of below 4 can be considered as a negative attitude towards the feature, while a mean of above 4 equals a positive attitude. In other words the mean score is an expression of how much our test participants liked or disliked the feature, and needs to be evaluated along with the regression weights to fully understand the relationship of each game feature and its related construct. The mean is interesting when compared to the regression weights (beta) because it shows how to interpret them. Individualization has the highest mean with a score of 5,96, indicating that it is the preferred game feature among the three within the immersion construct. Since individualization also has the highest beta score the importance of individualization becomes even more apparent, likewise considering its popularity among the respondents. For game designers this represents a valuable insight into the means of heightening the feeling of immersion. Stories have both a lower mean score and beta coefficient, meaning that although it is still popular among the respondents, individualization might be the first priority to focus on when designing an average. Exploration is interpreted a positive feature as well, but since it is not significant in driving immersion, game designers might prefer to look for other alternatives than including this game feature.

Table 16	Regression analysis			
Dependent		*Achievement*	***Mean***	*5.95*
Predictor		Prestige, Collecting, Progress, ProgressBars		
R	.707	**R Square**	.500 - 50%	
ANOVA	F4.106(26.550)	P > 0.0005		
Variable		**Beta**	**Significance**	**Mean**
Prestige		.493	p < .0005	5.34

Collecting	.304	p < .0005	6.32
Progress	.129	P = .126	5.57
ProgressBars	.098	p = .198	5.69

The second test was conducted using the four variables prestige, collecting, progress and progress bars & XP to explain the construct achievement. A linear regression was run and a significant model emerged with p< .0005. The model had a strong correlation among predictor and dependent variables with a regressions coefficient of .707 and an adjusted R-square of .500, illustrating that 50% of the change in achievement can be explained by the four predictor variables. Further, the R-square value is able to tell us anything about the strength and design of our construct achievement and the four chosen game features as its antecedents. Since only 50% of achievement can be explained by our predictor variables, the data suggests that the variables are not adequate to predict achievement fully. Although the emerged model is significant, it suggests that unknown variables that are not visible through our experiment have a high influence on achievement as well. Maybe our chosen antecedents of achievement are not correct enough, or possibly the advergame chosen to stimulate the four antecedents did not do so in a proper manor, leaving respondents unable to experience correlation between antecedents and achievement when playing the game.

Out of the four predictor variables only two significant relationships emerged; prestige and collecting each showed a significance of p<.0005. Prestige had the highest standardized regression coefficient of .493 indicating that increasing prestige in games by 1 unit, will effect achievement by .493. This means that games that allow users to showcase their artifacts, items or rewards thus encouraging the feeling of prestige, will raise the feeling of achievement in the game. The values are interesting when compared to the non-significant variables from the test, progress and progress bars & XP. In function and purpose these two variables are closely related to achievement and prestige, but since test scores were non-significant they cannot be assumed to predict a change in achievement. Our test shows that if progress and progress bars & XP are to have any influence on the feeling of achievement prestige will have to be incorporated in the gameplay in some way.

The other significant predictor variable collecting, had a standardized regression coefficient of

.304 meaning that is was able to predict the behavior of achievement, although not as much as in the case of prestige. Comparing mean scores shows that collecting had a very high mean of 6.32, suggesting a markedly favorable attitude towards collecting in the Nexus Contradictions advergame. Conversely, prestige had the lowest mean score at 5.34, although still favorable, but almost 20% lower than that of the others variables. Even though collecting is perceived most popular, prestige still has a bigger impact on respondents' feeling of achievement.

The predictor variables progress and progress bars & XP showed quite similar values. Not only did they show a closely related beta coefficient of .129 and .098, but also their significance at P=.126 and P=.198 were closely related and not acceptable. Finally, their mean scores were alike at 5.57 and 5.69, all in all indicating that our test participants were not able to distinguish very well between these two different antecedents, and therefore answered somewhat similar to both. This could reflect that the questionnaire was not well enough constructed in order for our participants to differentiate between the two features of progressing in games, and filling up progress bars and gaining XP. When we pre-tested the questionnaire we did not conduct any qualitative test, but instead focused on measuring and maintaining a high internal consistency between attributes. Pre-testing the questionnaire with more emphasis on diversion between game features might have helped in preventing similar answers to different features while the chance still remain that result similarities are a completely random case.

Table 17 Regression analysis

Dependent		*Cooperation*	***Mean***	*5.47*
Predictor		Leadership, JoiningGroup, GroupProb		
R	.701	**R Square**	.491 - 49%	
ANOVA	F3.146(62.930)	P > 0.0005		
Variable		**Beta**	**Significance**	**Mean**
Leadership		.307	p < .0005	5.28
JoiningGroup		.556	p < .0005	4.94

GroupProblem	-.003	P = .066	5.01

The third test ran was aimed at testing the construct coorperation based on the predictors leadership, joining a group and group problem solving. A linear regression was run resulting in a the emergence of a significant model with a correlation coefficient of .703 and an R square of .491 stating that regression and predictor variables account for 49% of the change in the construct coorperation. The model was significant with p> .0005 hence we can determine a linear relationship does exist between cooperation and the proposed predictors. The antecedents to coorperation were hypothesizes as leadership, joining a group and group problem solving. All of which incorporates multiplayer activities and are inherently social in their definition. Out of the three predictor variables only two emerged significant with p<.0005. These were leadership and joining a group. Group problem solving showed a significance close to being acceptable with p = .066 (6,6%) though still above the acceptable significance level of 5% or less. The standardized regression for group problem solving gave a value of -.003, significant or not it would have been irrelevant to further examine its effect on cooperation.

Joining a group showed the highest standardized beta of .556 and thus a large impact on the feeling of cooperation in the Habbo Hotel advergame. In Habbo Hotel joining a group is a central part of the playing experience, and it is almost impossible to experience the game without interacting with other players. Habbo Hotel is also a game that rewards players for active social behavior, which encourages players to cooperate in groups. The game is interesting in this way, because unlike many other games players have to interact with other players, in order to gain advantages for themselves and their character. Our data suggests that joining a group should be a central part of any social game that seeks to strengthen the feeling or cooperation in a game. Leadership was the other significant predictor of cooperation and deals with their characters role in a social context within the game. Leadership shows a standardized beta of .307 affirming that increasing leadership by 1 unit will result in cooperation rising by .307. Leadership also displayed a higher mean score than for the other features related to cooperation. Although, all antecedents to cooperation were associated with positive attitudes, the values were the generally lowest in the experiment. Leadership showed a mean core of 5.28, a mean of only 4.94 while group problem

solving displayed a mean of 5.01. This shows that although leadership did not have the prevalent influence on cooperation, it was still the most popular gameplay feature within the advergame.

Table 18	Regression analysis			
Dependent		*Competition*	***Mean***	*5.76*
Predictor		Power, influence, Leaderboards, Dominating		
R	.736	**R Square**	.541 - 54%	
ANOVA	F4.106(31.276)	P > .0005		
Variable		**Beta**	**Significance**	**Mean**
Power		.364	P < .0005	5.81
Influence		.023	P = .753	5.61
Leaderboards		.047	P = .569	5.55
Dominating		.429	P < .0005	5.39

The last test of overlying gameplay motivations we did was for competition. Like cooperation competition is also a social gameplay feature, but instead deals with social interaction where people compete or test their skills against each other. We performed a linear regression and a significant model emerged with a correlation coefficient of .736. Following the recommendations of Hair et al. (2009) this can be stated as a strong correlation, further showing an R-square of .541 meaning the model accounts for 54% of the change in competition on the basis of predictor variables. We can therefore reject the null hypothesis for at least two of the predictor variables, which emerged significant and conclude that there is an expressive relationship between competition and its antecedents power and dominating others.

We can only explain 54% of the change in competition from the gameplay features power and dominating others. Since we cannot interpret the non-significant variables of influence and leaderboards, we have to conclude that there are other gameplay features that effect competition, which we were not able to identify or measure through our experiment.

Dominating others emerged as the variable with the most profound influence on competition showing a standardized beta of .429 while power displayed a relatively lower beta of .364. Power and dominating others are features in advergames that promote competitive behavior and an environment where the players fight for dominance.

12.6.1 Multicollinearity

When choosing predictor variables in regression analysis those that might correlate with the dependent variable are usually selected. Furthermore, it is not preferable to have predictor variables correlating with each other, since this makes the process of evaluating their relative association with the dependent variable difficult. Multicollinearity is used to describe the situation when a high correlation is detected between two or more predictor variables (Brace et al., 2006). Such high correlations cause problems when trying to draw inferences about the relative contribution of each predictor variable to the success of the model. When conducting our multiple regression analysis using several antecedents to the overlying gameplay motivations, the issue of multicollinearity is very relevant. The antecedents that constitute the feeling of our overlying gameplay motivations are closely related, and some might even affect each other. Taking cooperation as an example leadership, joining a group and group problem solving are all activities that are closely related in a game. For instance joining a group is a prerequisite for group problem solving to take place in a game. Furthermore, the attitude of leadership in game may be closely related to the attitude towards joining a group. If the process of joining a group creates frustration, it is very likely that the attitude towards leadership in the game will be affected as well. This makes it difficult to pinpoint the exact significance of each gameplay feature. If one feature does not appear significant in the regression, do we dismiss it altogether, even though we suspect it also might affect the other variables? In our case we acknowledge that simply leaving out game features because they do not emerge significantly in our analysis would be an inappropriate approach to advergames development. The variables constituting our constructs may be further interconnected than we are able to uncover in our experiment.

12.6.2 Mean scores

Taking a look at the mean scores of all antecedents to the overlying game motivations, we can deduct what game feature were the most preferred among our target group. When this data is analysed along with the regression weight (beta) for subcomponent, we can identify not only what is popular, but also what has the biggest influence in predicting and driving its related overlying game play motivation. This combined score is valuable information for marketers creating advergames because it described in full what game features are popular among the target group, but also how strong they are at influencing their overlying game motivation.

Table 19 Subcomponents comparison

Subcomponent	***Mean***
Stories	5.85
Exploration	5.73
Individualization	**5.96**
Prestige	5.34
Collecting	**6.32**
Progress	5.57
ProgressBars	5.69
Leadership	**5.28**
JoiningGroup	4.94
GroupProblem	5.01
Power	**5.81**
Influence	5.61
Leaderboards	5.55
Dominating	5.39

Collecting and Individualization where the subcomponents that our respondents had the highest favourable attitude towards. Stories and power also scored relatively high in the experiment, while the three subcomponents of Cooperation had the overall lowers of all the subcomponents. This data suggest that our respondents preferred games that were not focussed around social game play, but instead preferred the features that dealt with single player experience. An important part of the results, is that the overall attitude towards game subcomponents where positive, and that there were no game features that resolved in negative attitude or mean scores of 4 and below.

12.6.3 Attitude towards the game

Next part of our analysis deals with calculating the influence each of the four overlying game play motivations has on attitude towards the advergame. This analysis will allow us to compare what overlying game motivation has the biggest effect of respondent's attitude towards the game. This is a central part of our analysis where we hypothesize a positive relationship between the overlying game motivations and positive attitude towards the game. The regression coefficients in these tests are an indicator of how much you can expect to increase or decrease your positive attitude towards the advergame, by incorporating the overlying gameplay motivation. These tests are central to our thesis, since they display not only if a relationship exist between game attitude and the overlying game motivations, but also the individual strength and contribution of each motivations. The tests were done using the data from each specific game and its related scores. That means e.g. that attitude towards the game with Immersion as the predictor variable was measured using the scores of our respondents attitude towards the Immersive game (Got the Milk)

Table 20	Regression analysis			
Dependent	*Game Attitude Immersion*		***Mean***	*5.53*
Predictor	Immersion			
R	.664	**R Square**	.440 - 44%	
ANOVA	F1.72(56.637)	P > .0005		
Construct		**B**	**Significance**	**Mean**
Immersion		.710	p < .0005	5.94

A linear regression was done using Immersion as predictor variable for attitude towards the game. A significant model emerged with correlation coefficient of .664 and R square of .440 (44%). Immersion turned out to have a high strength in predicting Attitude towards the game. For each one unit increase of Immersion in the Got Milk advergame, the positive attitude towards the game raises by .664. Below are the results from all the tests done using the overlying gameplay motivation as predictor for attitude towards the advergame.

Table 21	Regression analysis			
Dependent	*Game Attitude Achievement*		***Mean***	*5.97*
Predictor	Achievement			
R	.765	**R Square**	.586 - 59%	
ANOVA	F1.72(101.721)	P > .0005		
Construct		**B**	**Significance**	**Mean**
Achievement		.752	p < .0005	5.94

Table 22	Regression analysis			
Dependent	*Game Attitude Cooperation*		***Mean***	*4.66*
Predictor		Cooperation		
R	.499	**R Square**	.249 - 25 %	
ANOVA	F1,72(23,891)	P > .0005		
Construct		**Beta**	**Significance**	**Mean**
Cooperation		.405	p < ,0005	5.47

Table 23	Regression analysis			
Dependent	*Game Attitude Coompetition*		***Mean***	*6.3*
Predictor	Competition			
R	.857	**R Square**	.735 - 73 %	
ANOVA	F1.72(200.000)	P > .0005		
Construct		**B**	**Significance**	**Mean**
Competition		.499	p < .0005	5.76

The first question that is interesting to answer looking at these tests is: Will a more favorable attitude towards overlying game motivations be associated with a higher positive attitude towards the played advergame? The answer is a clear yes. The null hypothesis can be rejected for all 4 tests that no relationship exists between the defined overlying gameplay motivations and attitude towards the game. Each linear regression that we did, all created significant models with p<.0005, and therefore we can conclude: That if attitude towards the gameplay motivation in advergames are perceived as positive, it will be associated with a higher positive attitude towards the games played. The next interesting question is how closely the relationships are related, and how accurate our results are. Doing regression analysis with a single predictor instead of several is called bivariate regression. Here we only interpret the relationship between two variables and the change we can expect in Y given a 1-unit change in X. Comparing the models Competition had the highest correlation coefficient of .857 with an R square of .735. This indicates that there is a very high level of association between Competition and attitude towards the game. They have a covariation of 73% and a positive linear relationship that is very strong. The slope of Competition is also high with a B of .499. Achievement and Immersion actually have higher regressions coefficient, but they don't have as high model fits, indicating that we cannot account for same amount of change in the dependent variables as we can with Game attitude Competition and Competition construct. Achievement had a significant influence on Game Attitude with an R squared of .586 and a B of .752. Immersion had an Rsquare of 44% and a beta of .710. This tells us that the results for Competition where more accurate at describing game attitude then Achievement and Immersion, but that Immersion and Achievement had a higher impact (slope) on game attitude. Cooperation presented the poorest results regarding game attitude. Not only where the correlation coefficient lower than the other constructs, also the b where significantly smaller. Coorperation had an R of .499 with a b of .405. If we take a look at the preference of our participants the Battle of the Cheetos competition game was the most popular with a very high mean score of 6.3. The coorperate game (Habbo Hotel) was the least popular, although still with a positive score of 4.66

If we regard the results overall it's clear that our test participants had an overall positive attitude towards gaming and the different motivations involved. Our tests did not display any overall

negative attitude, and we only experienced few test results that were non significant and thus couldn't be interpreted.

12.6.4 Brand attitude in advergames

Finally we tested hypothesis 19 thus examining the relationship between game attitude and attitude towards the exposed brand in the advergame. Results were based on questioning participants whether they liked the brand more post-gameplay than prior to gameplay. In fact we directly questioned them whether they felt more positively towards the brand after actively having played the advergame as shown in our questionnaire (Appendix 5).

Table 24 presents the test results based on immersion. We see a positive correlation between attitude towards the advergame and attitude towards the sponsoring brand with a coefficient score of .508 while the relationship strength is of a moderate nature. Further, we see a high mean value for brand attitude indicating that our participants perceived the brand more positive after having played the advergame.

Table 24	**Regression analysis**			
Dependent	*Brand Attitude Immersion*		***Mean***	*5.43*
Predictor	Game attitude Immersion			
R	.584	**R Square**	.341 34%	
ANOVA	F1.72(37.195)	P > .0005		
Construct		**B**	**Significance**	**Mean**
Game attitude Immersion		.508	p < .0005	5.53

Table 25 presents the test results based on achievement. We likewise see a correlation between attitude towards the advergame and attitude towards the sponsoring brand with a coefficient score of .578. Relationship strength is shown moderate while we see a slightly higher mean value 5.99 for brand attitude than for advergame attitude 5.97 consistently indicating that playing the advergame improved partcipants' positive attitude towards the brand.

Table 25	Regression analysis			
Dependent	*Brand Attitude achievement*		***Mean***	*5.99*
Predictor	Game attitude achievement			
R	.602	**R Square**	.362 36%	
ANOVA	F1.72(40.832)	P > 0,0005		
Construct		**B**	**Significance**	**Mean**
Game attitude achievement		.578	p < .0005	5.97

Regression values based on test results for brand attitude in both the competitive and cooperative advergames came out non-significant.

Table 26	Regression analysis			
Dependent	*Brand Attitude Coorperation*		***Mean***	*4.34*
Predictor	Game attitude Coorperation			
R	.037	**R Square**	-.012 %	
ANOVA	F1.72(.099)	P = .276		
Construct		**B**	**Significance**	**Mean**
Game attitude coorperation		-.046	P = .754	4.66

Table 27	Regression analysis			
Dependent	*Brand Attitude Competition*		***Mean***	*5.96*
Predictor	Game attitude Competition			
R	.064	**R Square**	.004 0%	

ANOVA	F1.72(.298)	P = .587		
Construct		**B**	**Significance**	**Mean**
Game attitude competition		-.083	P = .587	6.30

In the case of competition, which was the advergame rated highest in regards of game attitude we found a high brand attitude mean value of 5.96 while the cooperation advergame showed a lower mean value of 4.34. Even though the regression analysis did not provide us with any significant correlation results between the two variables we can still argue that our participants did feel more positive about the sponsoring brands after having played the advergame on the basis of mean values.

Based on our test results we see maiden indications that increasing the motivational compliant features within an advergame makes attitude towards the game a stronger predictor of attitude toward the brand. This observation is consistent with a theoretical explanation of the phenomenon based on affect transfer, since the advergames found entertaining show a greater positive attitude towards the sponsored brand than the advergames not found entertaining. Our results provide further evidence that the transfer of positive affect to the sponsoring brand elicited by motivational compliment advergame features, likely involves a mental process that improves brand attitudes. The study shows that advergame features that increase players' motivational states through specific game features also increase the ease of positive affect transfer, leading to a stronger relationship between attitudes toward the advergame and brand attitudes. This is for instance what we see in comparing the mean values of game attitude and brand attitude as shown in table 28, where higher game attitude values tend to create higher brand attitude values.

Table 28	Mean values	
Game	*Game attitude*	*Brand attitude*
Immersion	5.53	5.43
Achievement	5.97	5.99
Cooperation	4.66	4.34
Competition	6.30	5.96

We know from the affect transfer argument that a consumer's preference for an advertisement will influence his brand attitude under low involvement. In other words, the brand appraisal is transferred based on its attitudes toward the relevant clues through the peripheral route as proposed by Petty et al. (1983). Our findings suggest that the higher entertainment or motivational value in an advergame the higher brand attitude. In the case of our experiment we propose that affect transfer refers to the advergame attitude directly influencing brand attitude without going through brand cognition. Mackenzie et al. (1986) explained that such a transfer only occurs in situations marked by low involvement, which means that the affect about an advergame is transferred to the affect of a brand without much thought. As discussed this is consistent with the Peripheral Route concept included in the ELM. Petty, Cacioppo, and Schumann (1983) explained that the attitude toward one object can be changed through peripheral or central routes. When a particular attitude is changed through the peripheral route, the object's positive or negative appraisal is not given directly, but is decided on by the positive and negative inclinations from the other clues of the object. In other words, peripheral route is the one where individuals directly choose the clue that is easily contacted – which is the entertainment value of the advergame – to make an appraisal when the actual attributes of the brand are not considered. If the consumer likes the advergame, he or she will – most probably – transfer this attitude to the brand, and we can argue that this is what we practically observe in our presented study.

12.7 Advergames – affection versus cognition

We argue that attitude creation through advergames involves an affective process, but it might as well be cognitive founded. It all depends on the brand messages implemented in the advergame. The four advergames examined in this thesis have no direct cognitive stimuli messages such as product or brand features. The closest we get to feature-based messages is in the Habbo Hotel

advergame, which is also the advergame producing the lowest attitude scores. Since there are several other possible factors for the low attitude score in Habbo Hotel we cannot draw any conclusions on that particular basis.

An emotional ad format is an ad execution designed to appeal to the receiver's emotions by using drama, mood, music and other emotion-eliciting strategies. On the other hand an informational ad format is an ad execution designed to appeal to the rationality of the receiver by using objective information describing a brand's attributes or benefits (Yoo & MacInnis, 2005). Advergame executions can vary in brand integration as we earlier argued based on the three brand integration strategies outlined by Chen and Ringell (2002). Our study demonstrates that advergames can be an effective means to create positive affection-based brand attitude, which we will argue is most common for associative and illustrative advergames where the brand is not playing a dominant and active role in the advergame. Specifically, attitudes based on affect tend to have a more unidimensional structure organized along a global evaluative dimension that allows specific attributes to be readily assimilated or discounted (Edwards, 1990; Zajonc, 1980). In contrast, predominantly cognitive attitudes tend to have a more multidimensional structure based on specific attributes. To illustrate, an individual could hold a number of cognitive beliefs about an attitude object e.g. Cheetos are crispy, have a great flavor, hold good nutrition values. However, affect tends to be a more abstract and global response to the attitude object and so has fewer dimensions e.g. I like Cheetos. In this way, the number of cognitive beliefs or attributes associated with an attitude object tends to be greater relative to the number of affective responses (Fishbein & Ajzen, 1975).

As a result of these structural differences involving dimensionality, individuals with predominantly cognitive relative to affective attitudes may be somewhat impervious to persuasive appeals. Appeals consisting of specific information about an attitude object, i.e., cognitive appeals, may only be effective to the degree that they directly refute or weaken the specific belief(s) comprising the cognitive attitude. In this light, the multidimensional structure and specific nature of predominantly cognitive attitudes makes them more difficult to target than affective attitudes and thus to change (Drolet & Aaker, 2002).

Whether advergames should be build to target affection-based or cognition-based attitude dimensions of a brand is hard to tell, but the discussion is very relevant and pinpoints interesting

areas within advergame marketing for future research to explore. In the wake of our study we can at least conclude that advergames including no or only a minority of features and benefits based brand messages drive a positive brand attitude.

12.8 Brand attitude and purchase intention

Given the fact that advergames can be used as positive brand drivers it is further interesting to look into how brand attitude is driving purchase intention. Based on the early tripartite views of attitude, it has served as a collective name for cognition, attitude and intention (Lutz, 1991). Attitude unidimensionalists have demonstrated that cognition will influence attitude and that, in turn, attitude will influence the purchase intention. As stated by Mackenzie, Lutz, and Belch (1986), "…within a general hierarchy-of-effects framework, will cognition preceding affect which in turn precedes conation…" (p. 131). Meanwhile, Fishbein and Ajzen (1975), "…a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object…" (p.6). Hence, it is the accumulated affectional appraisal, which generates overall impressions on the object.

Improving an individual's purchase intention on one brand can be initiated by uplifting the brand attitude through advergames. The brand attitude can be improved by enhancing cognition and aside from this, it can also adopt the means recommended by Silk and Vavra (1974), wherein an individual would have positive comments on one brand if he or she appreciated the advertisement; advergame. Therefore, a company can uplift brand attitude and purchase intention by transferring the average attitude to brand attitude along the route stipulating that "cognition influences attitude."

The most famous study about the transfer between advertisement attitude and brand attitude includes the four models proposed by Mackenzie et al. (1986). This architecture comprises the respective influences of advertisement cognition on advertisement attitude, brand cognition on brand attitude, and brand attitude on brand purchase intention. The causality between those constructs underlines the argument that advergames can drive purchase intention by driving game and brand attitude. Increasing research show that attitude strength predicts purchase behavior, such as purchase intentions or product choice, with the direction of the behavior (being inclined or disinclined toward purchase) varying as a function of whether attitude valence is strongly positive

or strongly negative (Fazio 1995; Petty, Haugtvedt, and Smith 1995). At the same time, marketers have long invoked the constructs of attitude valence and strength as key antecedents to consumer behavior. Attitude valence can be defined as the degree of positivity or negativity with which an attitude object is evaluated. Brand attitude strength is conceptualized as the positivity or negativity of an attitude weighted by the confidence or certainty with which it is held (Petty, Briñol, and DeMarree 2007). It would be interesting for future research to look at the formation of attitude strength for different online and offline marketing channels e.g. comparing the strength of attitude formation based on advergames contra television. This could provide further insights into the coupling of brand attitudes and purchase intentions.

13. Framework development

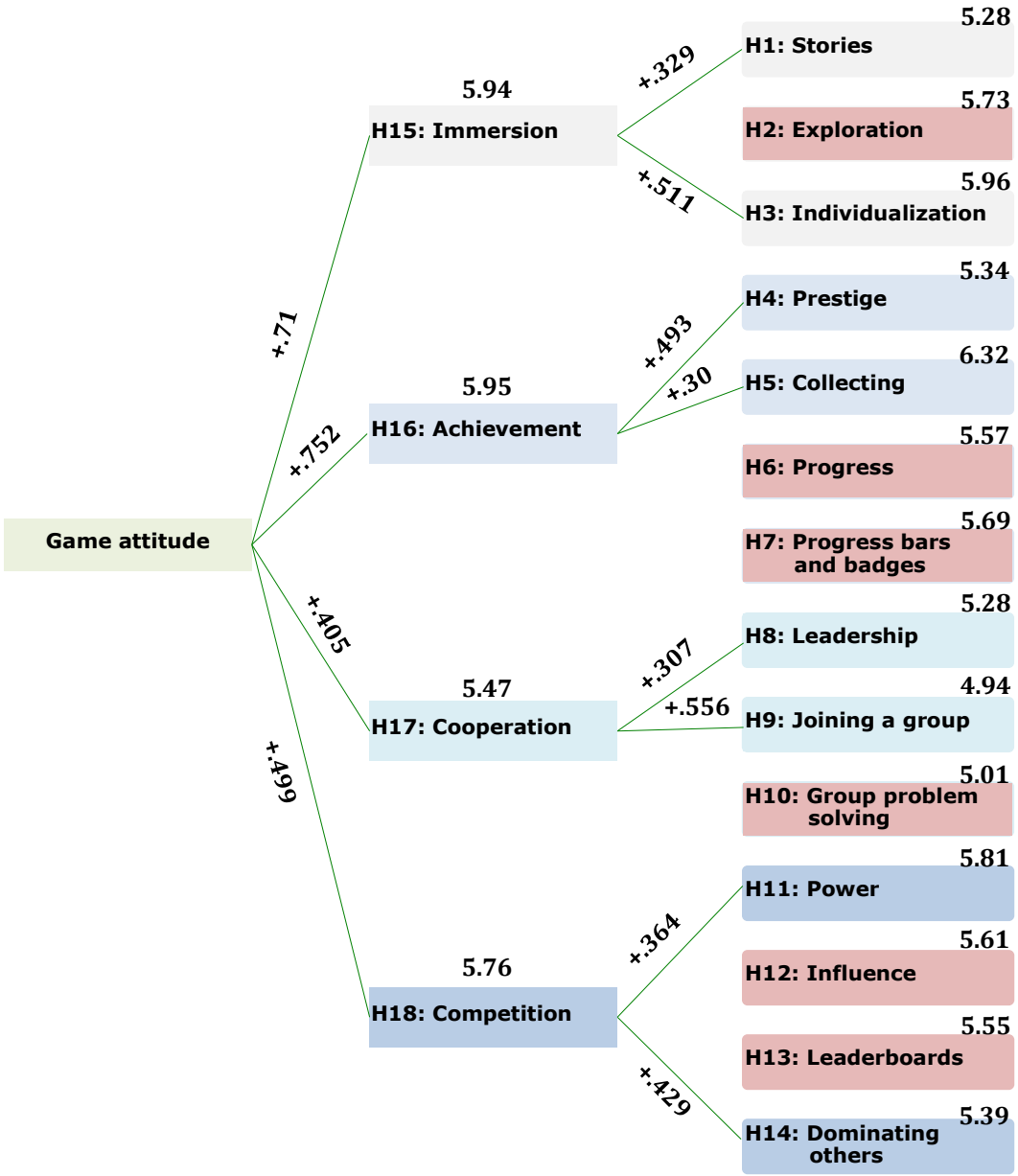
A main intention of this thesis was to develop an overall framework illustrating how to design and tailor an advergame that drives positive brand attitude. As we earlier explored there are many possible features to include in an advergame, and focusing on the right ones is pivotal in achieving the best outcome.

Our study shows that on feature level our respondents favored collecting (6.32), individualization (5.96) and power (5.81) while the least favored included joining a group (4.41), group problem solving (5.01), and leadership and stories with a common value of 5.28. As mentioned all results showed relatively high mean scores indicating that all features in general were liked by our respondents.

Six motivational compliant features came out with a non-significant relationship to their corresponding overall motivation. There are three possible explanations for this. First of all we could assume that our questionnaire did not manage to properly define and capture the constructs investigated thus leading to non-significant results. Secondly, we could argue that the six motivational compliant features do not have a relationship with their overall motivations. If this is the case it disproves previous findings of Yee (2005) and Radoff (2011). Thirdly, we could assume that the advergames chosen simply do not manage to reflect or communicate the non-significant features explicitly enough leaving respondents with vaguer basis to evaluate these features on.

On the other hand we find eight positive relationships with joining a group (.556) individualization (.511) and prestige (.493) as the features that drives their overall motivation most considerably. Our four overall motivations all come out with a high mean score demonstrating that respondents react favorable to overall motivational stimulation. Achievement (5.95) and immersion (5.94) are both showing the highest mean score and the most significant relationship values with game attitude respectively .752 for achievement and .710 for immersion. In fact, all four of our motivations show a significant positive relationship with game attitude.

All test results are summed up in our in figure 18 below where features marked red represents non-significant test results.



Conclusively we can pinpoint that advergames build to target the Danish online gamer should focus on driving immersion and achievement as they impact greatest on the game players' game attitude. Any motivational compliant feature that drives the feeling of immersion and achievement will be a strategic good choice to incorporate in an advergame. That includes implementing motivational compliant features such as stories and individualization for driving immersion and collecting and prestige for driving achievement.
As a marketer engaging in advergames our proposed framework, figure 18, can function as an indicative guideline on how to approach. It can be applied as a strategic tool for building and designing advergames that drives positive game and brand attitude telling marketers what to focus on and what to omit.

13.1 Advergames as marketing tool

In this section we will take a broader look at possible usages of advergames in a marketing campaigns context. In our thesis we show that there exists a potential target group for advergames within the segment Danish males age 18-30. We further show that advergames can drive a positive brand attitude, which we argue is predominantly affective-based, among respondents. Like all advertisements, it is essential to use the right medium to reach the right audience; considering other aspects such as when the audience will use the medium, how long they will use it, and how much competitors are spending on the medium.
We see from our analysis of the Danish online gamer that this generation of consumers is intently avoiding marketing efforts, while they on the other hand have no issue with proactively tracking the media content they find entertaining. As a means to meet this media behavior advergames fit right in. Consumers, faced with repetitive and obtrusive advertisements, will typically react with irritation and experience negative feelings towards the product (Ipe, 2008). In this case advergames differentiate from most other online advertising means such as pop-up ads, banner ads and forced registrations since they add real value to their exponents. Consumers can log onto advergames at any time, and the replayable nature of the games helps increase the time players are exposed to the ad, and given the game is involving enough keeps them coming back. That advergames have the potential of providing long brand exposures is further underlined by our analysis of the Danish online gamer, which showed that the segment can spend a tremendously

amount of time playing a single causal game. Well crafted advergame display a clear connection between the game value they provide, and the time spent playing them, which clearly shows that the more value provided by a game, the longer brand exposure.

Companies can use advergames as a viral form of advertisement, with in-built features allowing players to pass on the game to their friends. 86% of internet users pass on viral content to one friend, and 49% pass them on to three friends (Ipe, 2008, p. 9). This exposes a larger number of consumers to the game.

Previously we discussed advergames potential in driving either cognitive or affective brand attitude. We argued on a theoretical basis that advergames can drive purchase intention given the causal relationship between ad attitude, brand attitude and purchase intention as proposed by Mackenzie et al. (1986). It is however interesting to further discuss how advergames could be used in multi-channel strategies to achieve marketing objectives. We see marketing efforts with the purpose of moving consumers from offline media to online media and vice versa depending on the campaign strategy. Advergames could become a valuable tool in facilitating campaigns that has value in driving consumers from online into the store or from offline media to advergames and on to companies' website.

Last point to consider before engaging in advergames is that companies are increasingly spending a large amount of money on advergames, indicating there would be pressure for companies to explore this medium and use it effectively. The Veronis Suhler Stevenson's communications industry forecast calculates that total U.S. spending on advergames was estimated at $264 million in 2006 and was expected to grow to $676 million in 2009 (Johannes & Odell, as cited in Lee et al. 2009). Given these figures we still believe that the competitive environment for advergames is in its infancy.

14. Discussion and limitations

With our study we set the precedence for an experiment that can be repeated for other segments, which could provide greater insights into the population as a whole, or towards a certain target group. One of these segments could be the increasing amount of female gamers that are becoming present at many online game platforms. It is likely that repeating this experiment with female participants instead would create markedly different results. If we where to evaluate on

the process of our experiment and the results gathered, there are several implications to mention. We chose to base our experiment on four advergames to stimulate the overlying gameplay motivations and their subcomponents among our target group prior to completing the questionnaire. This was done to ensure that our target group had been exposed to the relevant features before expressing their attitude towards them. Finding advergames that contained all the subcomponents of overlying gameplay motivations proved very difficult, and it is very likely that the games we chose did not contain an even degree of the expected game features divided among all the subcomponents. In other words the immersive Got Milk game did not contain a level of stories, exploration and individualization. This may have affected our results in such a way that the respondents favored subcomponents, which were more apparent in the game thus giving them higher ratings in the questionnaire. Putting more work into finding better suited advergames for testing or having respondents play a different advergame with a higher degree of an individual game feature might have resulted in more valid outcomes.

Ideally the chosen advergames should include brands that respondents had no predispositions towards. For instance, we used an advergame that contained Google's Nexus smartphone in our experiment, but it is very unlikely that respondents formed their positive or negative attitude towards the well-known Google brand, solely on the basis of ten minutes gameplay during our experiment. This makes it difficult to evaluate the results on attitude towards the brand, since respondents are probably using their preformed attitude towards Google as point of departure in answering the questionnaire.

Since we are measuring attitudes in our experiment, it is possible that our test results would have emerged more valid and interesting if we had focused on pretesting attitudes prior to the experiment, as well as post-testing the attitudes after a certain time period. This would allow us not only to measure the direct change in attitudes after advergame exposures, but also to measure how long the brand stayed present in the respondents' memory. This is interesting since we define advergames as a predominantly affective attitude driver, and traditionally affective marketing do not perform well in creating long lasting attitudes. Conducting both pre- and post-testing of attitudes would have allowed us to embrace a wider span of advergames potential in driving attitude formation, hereunder long-term brand attitude.

Our results indicate that several different game features are of value to advergame developers. One issue here is that game features cannot be mixed and matched randomly across different overlying game motivations. It would be interesting to look at the impact it have on the attitude towards the game when game features are not arranged as proposed in our deconstruction. The question arises of whether our results could be used in an environment where e.g. both competitive and cooperative game features are present simultaneously in an advergame. Or are our results only applicable for more mono-dimensional games that are easily placed within each of the four overlying motivation quadrants. It is very hard to describe how different compositions of gameplay features affect attitude towards the game, and whether corresponding regression weights would resemble those of our findings. Our construction of gameplay motivations is definitely believed to have had an influence on the thesis' results.

When discussing our constructs of overlying gameplay motivation, it is important to point out that many of the constructs are hard to define and conceptualize in games. Immersion as an example is a term that has different meaning to different people, which makes it hard to define. We used a focus group to define all constructs used along with their corresponding attribute items, but still there is definitely room for improving constructs definitions so they resonate better with the target segment's perceptions. It is also very likely that if this experiment were to be repeated with respondents from a different target segment, the constructs would have to be defined and pretested again. Simply because preferences will vary from on segment to another, along with perceived definitions of and expectations to game features and motivations.

Our analysis revolves around advergames as a tool for marketers to achieve marketing objectives of creating brand attitude. We suggest that advergames has the potential of driving marketing objectives, in similar fashion as traditional media channels. This claim is not pursued further in our thesis, but we instead suggest that there is the need for further research on comparing advergames as a media channel with the more traditional marketing channels such as television, radio, billboards etc. A further analysis of advergames as a channel for conveying marketing messages will contribute to recognizing advergames as a legitimate tool for marketers.

The results from our analysis of gameplay features show that respondents' favors the game features of power, collecting, and individualization. All of these displays high mean scores and

each share significant associations with their overlying gameplay motivation, shown by a positive beta. Still there are many ways to interpret these results and especially the regression coefficient can be difficult to translate into conclusions and practical managerial recommendations. This is because the regression coefficient explains a relationship between game motivations and features, which is hard to actually translate into recommendations for advergame development. For instance, how is power increase in an advergame by 1 unit, and what is the production cost of implementing power when developing an advergame in comparison to the production cost of implementing individualization? Regression analysis enables us to calculate predicted values of the dependent variable using the regression equation y = a + BX + ei. In our proposed framework we provide marketers with regression equations for calculating values for predicted game attitude, for each of the overlying gameplay motivations. This allows for a comparison of which gameplay motivation that predicts the most profound attitude. Since our knowledge of designing advergames is somehow limited, we do not specifically calculate these values, but instead present the regression equations as a tool for future use. Our research can assist marketers in navigating through the balancing act of aligning marketing budgets and advergame's extent. Based on our research we define the benefits to brand attitude from incorporating each of the different gameplay motivations advergames as well as the features that support them. With this knowledge marketers can identify the motivations that are most feasible to focus on based on their available marketing budget.

Our regression analyses were performed using SPSS, an application that present a vast amount of possibilities analyses methods and results. Regression analysis through SPSS displays large amounts of information that can be interpreted in many different ways depending on what question that are sought explained. For this thesis we have tried to limit the amount of data and information provided by SPSS, to an amount that allows us to answer our problem statement in concrete and profound manner. Therefore there are data from the regression analysis that we strategically have chosen not to present and interpret in this thesis. Furthermore, there are additional tests closely related to that of regression that likewise could have provided us with interesting information regarding the relationship of variables in our experiment. These have also been omitted in order to sustain our thesis focused on the problem statement at hand.

15. Conclusion

This thesis took its point of departure in a niche area within the emerging field of branded entertainment, the advergame. Our thesis approach was somehow two-folded, and presented two overall directions. First of all we aimed at proving the relevancy of using advergames as a marketing tool in a Danish context by uncovering the media and gaming habits of Danish males age 18-30. Secondly we aimed at developing a non-proprietary and academic-based framework for marketers to develop, structure and evaluate advergames that drives positive brand attitude.

We found that our chosen target segment is very active on game platforms and spend a markedly amount time playing computer games. Most interesting was their high usage degree of the advergame equivalent: the casual or browser game, which directly indicates that there exists a large potential Danish target group for advgergames.
General tendencies of media behavior also point in the direction of advergames relevancy. We saw that the Danish online gamer is spending most of his time online, and that the majority of the traditional media usage has moved online in the wake of this behavior. Our analysis shows that watching television, listening to the radio or reading news are mainly carried out as online activities through websites or platforms, which provide the individual with options of immediately accessing the content he or she finds valuable. In fact, value is a key term for marketing communications since our target segment seems to proactively pursue the content they find entertaining, and if it is found valuable enough share it with their social network.

Through an analysis of the existing literature on advergames and attitude formation, 20 hypotheses were outlined proposing relationships between player motivations and attitudes towards the game and its sponsoring brand. On the basis of our literature review we found an interesting gab within the existing research on advergames impact and brand attitudes by merging the views of game design theory and marking-based theory. In game design theory gameplay motivations have long been known to entertain and motivate players. Investigating how the presence of certain motivational compliant game features affected game and brand attitude was therefore considered a pertinent route in widening the current research on advergames and attitude formation. The understanding of practical advergame features relationships with game

and brand attitude further provided an evident foundation on which to build our advergame framework.

A method for hypotheses testing was developed and tested using both qualitative and quantitative data gathering and analysis. The actual lab experiment was conducted on an empirical basis of four specifically chosen advergames, and results were analyzed using regression analysis through the statistical application SPPS. We were able to confirm the majority of the proposed hypotheses with only six construct relationships found non-significant as shown in figure 18. Conclusively, we were not able to confirm hypothesis H2, H6, H7, H10, H12 and H14 while all reaming hypotheses could be successfully confirmed.

Most significantly findings were that immersion and achievement were the best drivers of a positive game attitude. This enables us to conclusively outline that advergames should focus on incorporating immersion and achievement as they impact greatest on the players' game attitude. Any motivational compliant feature that drives the feeling of immersion and achievement will prove a preferable choice when designing an advergame targeting Danes age 18-30 rather than focusing on cooperative and competitive elements. That includes implementing motivational compliant features such as stories and individualization for driving immersion and collecting and prestige for driving achievement.

Based on test results we were able to document reasonable indications of the correlation between positive game attitude and positive attitudes towards the sponsoring brand. Our study shows that respondents who conveyed a favorable attitude towards the advergame likewise conveyed a positive attitude towards the brand displayed, a finding that is consistent with the general theory on ad transfer processes.

All in all we can conclude that the Danish online gamer is receptive to and a noticeable potential target for advergames. Companies wanting to target this segment can with good reason use advergame as a channel for communicating their advertising messages and achieve marketing objectives. Our proposed framework provides a suggestive guideline on how to strategically approach the structuration of an advergame. It can be applied as a strategic tool for building and designing advergames that drives positive game and brand attitude giving marketers a valuable understanding of what to focus on and what to omit.

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17. Appendix

17.1 Appendix 1 – Online survey data

	Total	
Hvor mange timer om dagen bruger du i gennemsnit på at se tv på dit fjernsyn?	**Procent**	**Antal**
0-1 time	9%	9
1-2 timer	20%	18
2-3 timer	31%	28
3-4 timer	23%	21
Mere end 5 timer	18%	14
Total	**100%**	**90**

	Total	
Hvor mange timer om dagen bruger du i gennemsnit på at læse aviser eller magasiner? (ikke online)	**Procent**	**Antal**
0-1 time	73%	66
1-2 timer	22%	20
2-3 timer	4%	4
3-4 timer	0%	0
Mere end 5 timer	0%	0
Total	**100%**	**90**

	Total	
Hvor mange timer om dagen bruger du i gennemsnit på at høre radio?	**Procent**	**Antal**
0-1 time	32%	29
1-2 timer	34%	31
2-3 timer	19%	17
3-4 timer	11%	10
Mere end 5 timer	3%	3
Total	**100%**	**90**

	Total	
Hvor mange timer om dagen bruger du i gennemsnit på at surfe på internettet?	**Procent**	**Antal**
0-1 time	9%	8
1-2 timer	21%	19
2-3 timer	28%	25
3-4 timer	24%	22
Mere end 5 timer	18%	16
Total	**100%**	**90**

	Total	
Hvor mange timer om dagen bruger du i gennemsnit på at spille computerspil?	**Procent**	**Antal**
0-1 time	15%	14
1-2 timer	27%	24
2-3 timer	30%	27
3-4 timer	25%	23
Mere end 5 timer	2%	2
Total	**100%**	**90**

	Total	
Hvilke typer spil spiller du?	**Procent**	**Antal**
Minigames	71%	64
singleplayer	84%	76
Multiplayer	90%	81
Massive Multiplayer Games	50%	44
Total	**%**	**90**

	Total	
Hvor mange timer om ugen bruger du i gennemsnit på at spille browserspil?	**Procent**	**Antal**
Ingen	31%	28
0-1 time	22%	20
1-2 timer	22%	20
2-3 timer	12%	11

3-4 timer	6%	5
5+ timer	7%	6
Total	**100%**	**90**

	Total
Kan du nævne 3 hjemmesider hvor du for nyligt har fundet et browser spil?	54

	Total	
Hvad er den længste periode du har brugt på at spille et browser spil? (sammenlagt)	**Procent**	**Antal**
0-1 time	36%	32
2-3 timer	41%	37
4-8 timer	12%	11
8-24 timer	8%	7
24+ timer	3%	3
Total	**100%**	**3**

									Total	
Når du skal finde nyheder, hvilket medie benytter du da oftest?	**Radio**		**Tv**		**Internet**		**Aviser**		**Procent**	**Antal**
Oftest	0%	0	29%	26	58%	52	13%	12	100%	90
*****	0%	0	37%	34	31%	28	31%	28	100%	90
*****	19%	17	30%	27	11%	10	40%	36	100%	90
Mindst	81%	73	3%	3	0%	0	16%	14	100%	90
Total	25%	90	25%	90	25%	90	25%	90	100%	360

											Total	
Hvad beskæftiger du dig mest med når du er på internettet? (ranger i rækkefælge)	**søge viden**		**film/serier**		**spil**		**sociale fællesskaber**		**musik**		**%**	**Antal**
Mest	**32%**	**29**	**4%**	**4**	**27%**	**24**	**20%**	**18**	**17%**	**15**	100%	90
*****	**29%**	**26**	**17%**	**15**	**11%**	**10**	**23%**	**21**	**20%**	**18**	100%	90

*	19%	17	24%	22	28%	25	18%	16	11%	10	100%	90
*	18%	16	13%	12	10%	9	20%	18	39%	35	100%	90
Mindst	2%	2	41%	37	24%	22	19%	17	13%	12	100%	90
Total	20%	90	20%	90	20%	90	20%	90	20%	90	100%	450

											Total	
Hvilke platforme spiller du mest computerspil på? (ranger i rækkefølge)	PC		konsol		browser		håndholdt		mobil		%	Antal
Mest	29%	26	30%	27	17%	15	0%	0	24%	22	100%	90
*	31%	28	22%	20	13%	12	11%	10	22%	20	100%	90
*	16%	14	17%	15	24%	22	26%	23	18%	16	100%	90
*	17%	15	20%	18	36%	32	23%	21	4%	4	100%	90
Mindst	8%	7	11%	10	10%	9	40%	36	31%	28	100%	90
Total	20%	90	20%	90	20%	90	20%	90	20%	90	100%	450

											Total	
Hvordan finder du oftest browser spil? (Ranger i rækkefølge)	Venner		søgemaskiner		faste sider		tilfældigt		forums/chat		%	Antal
Oftest	20%	18	12%	11	39%	35	23%	21	6%	5	100%	90
*	32%	29	16%	14	27%	24	22%	20	3%	3	100%	90
*	21%	19	30%	27	13%	12	18%	16	18%	16	100%	90
*	18%	16	23%	21	13%	12	26%	23	20%	18	100%	90
Mindst	9%	8	19%	17	8%	7	11%	10	53%	48	100%	90
Total	20%	90	20%	90	20%	90	20%	90	20%	90	100%	450

17.2 Appendix 2 – Interview guide

(Using Immersion as an example of the discussed construct)

Q1: What is your definition of Immersion in computer games?

Q2: What does Immersion in a computer game mean to you?

Q3: How would you recognize Immersion in a computer game?

Q4: What attributes do you associate with Immersion?

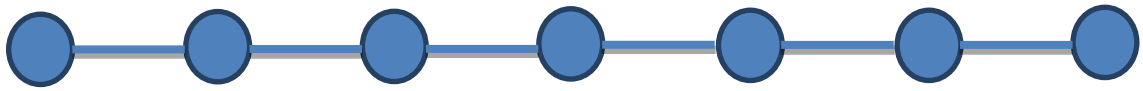
Q5: Are you able to share any experiences, were you encountered Immersion?

The constructs where discussed in the following order, with the above 5 questions being repeated for each.

- Immersion
    - Stories
    - Exploration
    - Individualization
- Achievement
    - Prestige
    - Collecting
    - Progress
    - Progress bars & XP
- Cooperation
    - Leadership
    - Joining a group
    - Group problem solving
- Competition
    - Power
    - Influence
    - Leaderboards
    - Dominating others

17.3 Appendix 3 – Questionnaire before pretesting

Definitely disagree Not sure Definitely agree



1 2 3 4 5 6 7

A1	Stories	*I dislike to feel that I am playing a role in a grand story*
A1.1		*I love to feel that I am a part of a narrative*
A1.2		I like to feel that I am playing a role in a grand story
A1.3		I hate feeling that I am a part of a narrative
A1.4		Following a quest storyline makes me relate to the character(s)
A1.5		Without a storyline I cannot relate to the game
A1.6		Interacting with other characters is a good way of making the game feel more real
A1.7		Listening to stories takes time away from my gaming
A2	Exploration	Discovering new areas make me feel excited
A2.1		I am one of the few that are able to explore all corners of the game world
A2.2		Learning everything about the game is more important than completing
A2.3		If there is no new places to reach I don't know what I am playing for
A2.4		Travelling in games is a waste of time
A2.5		Exploring is the best way to experience a game
	Individualization	
A3		It is important that my avatar/character looks specifically like I want it to
A3.1		My friends can't recognize me, if I don't stand out
A3.2		Having an unique model is more important then having the strongest
A3.3		The game feels more real if I can decide how things look
A3.4		Playing a character that resembles me make me invest more time in a game
A3.5		*I dislike when there are no items or skills to learn for my character*
A4	Prestige	Completing games gives me a sense of accomplishment
A4.1		I like to complete levels that others find difficult
A4.2		Solving difficult tasks makes me want to play more
A4.3		The best rewards are those *that gives me recognition*
A4.4		When playing games I like to feel like I am a hero
A5	Collecting	Completing difficult tasks should unlock rare/unique rewards or items

A5.1		I like to gather things that are rare
A5.2		Collecting special items are more interesting than powerful items
A5.3		Completing sets of related items gets me excited
A6	Progress	Completing levels is what games are about
A6.1		I prefer games that are constantly moving forward
A6.2		I always find the fastest way to complete quests/levels
A6.3		If I don't have an objective, games bore me
A6.4		I don't really need to progress, as long as I am having fun
	Progress bars and badges	
A7		I can't stop the game until I reach the next level
A7.1		When I see badges in a game I feel like collecting them all
A7.2		Experience points are important, because otherwise I don't know if I move forward
A7.3		When I play games with character levels and XP points it feels like a grind
A7.4		I do weird things in games, just to achieve special badges
A7.5		Gaining experience points motivates me to keep playing
A8	Leadership	Leading others is exciting
A8.1		Teaching my skills to other players is an important part of games
A8.2		I do not like telling others what to do
A8.3		If I have a responsibility I enjoy playing the game more
A8.4		Clan leaders often have a bad attitude
	Joining a group	
A9		Joining and being part of a group makes the games fun
A9.1		I like to chat or talk with other players
A9.2		Groups are a good way to better learn the game
A9.3		Joining groups is a fun way to make friends
A9.4		Its annoying when I need other players to complete quests
A9.5		Interaction with other players make the game more interesting
	Group problem solving	
A10		Creating group strategies is enjoyable
A10.1		I focus more on the game if I am working with other people
A10.2		I prefer games that promotes group activities
A10.3		"Playing my part" in a group is very satisfying
A10.4		*Interacting with other people in games makes me irritated*
A11	Power	Becoming powerful is what drives me in games
A11.1		The stronger my character is the more I enjoy the game
A11.2		It's very important to me that my character reaches its top potential

A11.3		Only the powerful players gets maximum out of the game
A11.4		Power promotes bad behaviour in games
A11.5		Powerful players are more important than non powerful ones
A12	Influence	Influencing others is a satisfying feeling
A12.1		I like it when others take notice of my authority
A12.2		Controlling scarce resources makes the game fun
A12.3		Games where some people can control others take too much time
A13	Leaderboards	Leaderboards is a fun way to compare your skills with others
A13.1		Leaderboards make me put more time and effort into the game
A13.2		I prefer games where my stats are recorded and visible
A13.3		Top player lists are only for people who spend to much time on gaming
A13.4		Public ratings make it hard for me to relax when playing
	Domination others	
A14		I enjoy killing/dominating other players
A14.1		Competing against players is the best part of playing
A14.2		When I win, others have to loose
A14.3		Beating others gives me a real kick when playing
A14.4		Fighting others is a waste of time
A14.5		I often try to provoke or taunt players I defeat
A15	Immersion	I prefer games that draw me into their universe
A15.1		A good game makes me forget the real world
A15.2		The best games feels like they are real life
A15.3		Playing games is a good way to avoid thinking of real life
A15.4		I don't like games where they talk a lot
A16	Achievement	Quests, levels and experience gives me a sense of accomplishment
A16.1		I prefer games that have steady progress of challenges
A16.2		Raising virtual skills and abilities should be a fundamental part of all games
A16.3		*I do not play the game to complete objectives or tasks*
A17	Cooperation	I prefer games that have a social aspect
A17.1		I enjoy having a character that works well in a group
A17.2		It's not important that my character solos well
A17.3		Chatting and talking to other playing are the best part of gaming
A17.4		Other players get in the way of my gameplay
A18	Competition	I prefer games where I can compete against others
A18.1		Defeating other players is a thrill

A18.2		Testing my skills against other players is the most exciting challenge
A19	Game Attitude	I like the advergames
A19.1		I found the advergame boring
A20	Brand attitude	I like the brand in the advergame
A20.1		I like the brand in the advergame more after playing the game

17.4 Appendix 4 – Data inputs from pretesting questionnaires

Case Summaries

	A1	A1.1	A1.2	A1.3	A1.4	A1.5	A1.6	A1.7
1	7	7	7	7	4	5	1	6
2	6	6	6	4	5	2	4	3
3	5	5	5	7	5	3	6	2
4	7	7	7	7	5	6	7	7
5	6	4	5	4	5	3	6	6
6	7	6	5	7	6	6	1	4
7	7	6	5	7	4	6	4	3
8	7	6	5	6	5	5	3	7
9	4	5	5	5	5	5	6	3
10	5	2	3	6	3	6	7	2
Total N	10	10	10	10	10	10	10	10

Case Summaries

	A2	A2.1	A2.2	A2.3	A2.4	A2.5
1	7	7	5	2	3	7
2	5	6	2	2	4	3
3	5	3	2	4	5	3
4	7	4	3	4	7	7
5	7	4	6	2	5	4
6	7	5	5	7	7	7
7	7	6	3	4	4	5
8	5	2	2	3	6	5
9	5	2	2	3	6	5
10	3	4	5	7	5	7
Total N	10	10	10	10	10	10

Case Summaries

	A3	A3.1	A3.2	A3.3	A3.4	A3.5

1		7	4	1	7	6	7
2		2	5	2	5	1	6
3		1	4	3	5	5	6
4		6	1	5	7	6	7
5		7	5	6	2	2	7
6		7	3	3	6	7	7
7		4	5	4	1	5	3
8		1	2	3	6	6	3
9		7	5	5	7	2	4
10		5	1	5	6	2	6
Total	N	10	10	10	10	10	10

Case Summaries

	A4	A4.1	A4.2	A4.3	A4.4
1	7	7	7	7	4
2	6	7	6	6	5
3	7	5	5	4	5
4	7	6	7	2	6
5	2	3	6	2	6
6	7	6	7	7	2
7	7	7	5	6	3
8	7	6	5	7	6
9	7	6	4	2	2
10	4	5	5	6	6
Total N	10	10	10	10	10

Case Summaries

	A5	A5.1	A5.2	A5.3
1	7	7	3	6
2	7	7	2	5
3	7	7	4	7
4	7	7	5	6
5	6	6	4	7

6		7	7	3	6
7		7	7	7	7
8		3	2	4	5
9		6	5	7	6
10		7	1	6	5
Total	N	10	10	10	10

Case Summaries

	A6	A6.1	A6.2	A6.3	A6.4
1	7	6	6	7	3
2	5	6	7	7	3
3	6	6	5	6	6
4	5	7	5	5	6
5	2	6	4	3	3
6	7	6	6	7	3
7	6	6	7	5	5
8	4	7	7	6	5
9	7	3	3	6	6
10	5	5	6	5	7
Total N	10	10	10	10	10

Case Summaries

	A7	A7.1	A7.2	A7.3	A7.4	A7.5
1	5	7	4	1	7	5
2	6	5	5	6	6	6
3	5	5	6	2	4	6
4	7	6	7	1	6	7
5	1	2	6	6	4	6
6	5	7	4	1	7	5
7	4	4	5	6	7	6
8	3	1	6	2	1	6
9	3	7	6	4	6	4

Case Summaries

		A8	A8.1	A8.2	A8.3	A8.4
1		7	1	7	6	1
2		5	3	6	5	3
3		4	3	4	4	4
4		5	3	5	4	5
5		6	6	3	2	4
6		1	1	3	3	3
7		4	7	6	4	5
8		6	6	5	4	4
9		2	1	3	4	5
10		3	2	6	5	5
Total	N	10	10	10	10	10

Case Summaries

		A9	A9.1	A9.2	A9.3	A9.4	A9.5
1		2	2	3	1	1	3
2		6	2	3	5	6	6
3		5	4	7	3	4	5
4		5	5	4	2	3	7
5		7	7	7	5	4	6
6		6	2	2	4	5	7
7		3	3	3	7	4	7
8		2	1	5	3	2	5
9		4	1	6	4	3	4
10		7	3	6	5	7	6
Total	N	10	10	10	10	10	10

Case Summaries

		A10	A10.1	A10.2	A10.3	A10.4
1		1	1	1	4	6
2		6	3	5	6	6

3		4	2	2	4	5
4		4	3	4	4	3
5		6	6	6	6	6
6		1	6	4	4	6
7		1	3	2	3	6
8		1	5	2	4	6
9		4	6	4	4	6
10		6	6	5	3	6
Total	N	10	10	10	10	10

Case Summaries

	A11	A11.1	A11.2	A11.3	A11.4	A11.5
1	7	7	7	7	7	4
2	7	7	7	3	3	4
3	7	7	7	4	3	2
4	5	6	7	5	7	5
5	7	7	7	1	2	1
6	7	7	7	5	7	4
7	7	7	7	6	7	5
8	7	7	7	7	7	3
9	7	3	4	5	1	5
10	7	3	3	7	2	6
Total N	10	10	10	10	10	10

Case Summaries

	A12	A12.1	A12.2	A12.3
1	7	5	5	5
2	5	6	5	3
3	5	4	4	4
4	7	5	6	7
5	6	5	7	6
6	7	5	5	7
7	5	7	6	5

8		5	5	6	6
9		7	5	6	7
10		6	7	6	5
Total	N	10	10	10	10

Case Summaries

		A13	A13.1	A13.2	A13.3	A13.4
1		1	1	1	1	7
2		6	6	6	3	3
3		6	6	6	3	6
4		5	6	5	4	6
5		3	3	6	2	4
6		6	1	6	6	5
7		5	1	6	6	6
8		7	1	6	6	5
9		6	1	3	3	4
10		3	7	3	6	6
Total	N	10	10	10	10	10

Case Summaries

		A14	A14.1	A14.2	A14.3	A14.4	A14.5
1		7	7	7	7	7	1
2		7	6	6	6	6	6
3		7	5	4	5	5	4
4		5	4	4	6	7	4
5		2	2	2	1	5	3
6		7	7	7	5	2	4
7		7	6	5	4	2	6
8		7	6	4	4	2	1
9		7	6	5	6	1	3
10		7	6	5	7	5	2
Total	N	10	10	10	10	10	10

Case Summaries

		A15	A15.1	A15.2	A15.3	A15.4
1		1	1	1	1	5
2		6	7	4	1	6
3		6	5	2	6	4
4		7	7	6	4	7
5		7	7	2	7	5
6		1	6	6	7	7
7		1	7	5	7	7
8		1	4	2	6	2
9		1	1	6	4	7
10		5	6	4	7	5
Total	N	10	10	10	10	10

Case Summaries

		A16	A16.1	A16.2	A16.3
1		7	7	7	7
2		7	5	6	4
3		7	7	7	7
4		6	7	7	6
5		5	5	1	4
6		7	7	7	6
7		7	5	7	7
8		7	6	7	7
9		7	4	7	6
10		6	6	5	6
Total	N	10	10	10	10

Case Summaries

		A17	A17.1	A17.2	A17.3	A17.4
1		6	1	1	1	7
2		6	2	2	4	6

3		5	4	2	2	4
4		5	2	2	3	6
5		6	4	2	3	7
6		5	1	2	4	2
7		5	1	2	2	2
8		1	1	4	2	3
9		4	7	6	4	6
10		5	6	2	3	6
Total	N	10	10	10	10	10

Case Summaries

		A18	A18.1	A18.2
1		7	7	7
2		7	6	7
3		5	5	5
4		4	4	5
5		1	1	1
6		7	7	5
7		7	6	5
8		7	7	5
9		6	6	5
10		5	6	6
Total	N	10	10	10

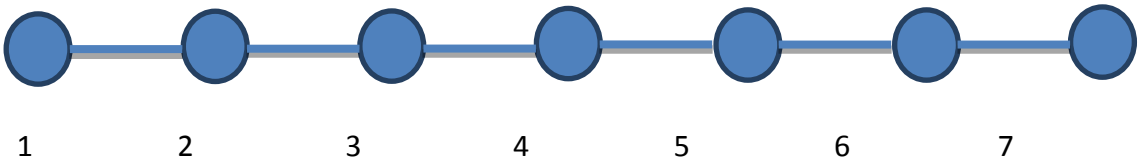
Case Summaries

		A19	A19.1
1		6	6
2		6	7
3		5	6
4		6	5
5		5	5
6		4	4
7		4	4

8		5	6
9		6	7
10		6	6
Total	N	10	10

17.5 Appendix 5 – Final questionnaire

Definitely disagree Not sure Definitely agree



1 2 3 4 5 6 7

A1	Stories	*I dislike to feel that I am playing a role in a grand story*
A1.1		*I love to feel that I am a part of a narrative*
A1.2		I like to feel that I am playing a role in a grand story
A1.3		I hate feeling that I am a part of a narrative
A1.4		Following a quest storyline makes me relate to the character(s)
A1.5		Without a storyline I cannot relate to the game
A1.7		Listening to stories takes time away from my gaming
A2	Exploration	Discovering new areas make me feel excited
A2.1		I am one of the few that are able to explore all corners of the game world
A2.2		Learning everything about the game is more important than completing
A2.3		If there is no new places to reach I don't know what I am playing for
A2.5		Exploring is the best way to experience a game
A3	Individualization	It is important that my avatar/character looks specifically like I want it to
A3.3		The game feels more real if I can decide how things look
A3.4		Playing a character that resembles me make me invest more time in a game
A3.5		*I dislike when there are no items or skills to learn for my character*
A4	Prestige	Completing games gives me a sense of accomplishment
A4.1		I like to complete levels that others find difficult
A4.2		Solving difficult tasks makes me want to play more
A4.3		The best rewards are those *that gives me recognition*
A5	Collecting	Completing difficult tasks should unlock rare/unique rewards or items
A5.1		I like to gather things that are rare
A5.3		Completing sets of related items gets me excited
A6	Progress	Completing levels is what games are about
A6.1		I prefer games that are constantly moving forward
A6.2		I always find the fastest way to complete quests/levels

A6.3	Progress bars and badges	If I don't have an objective, games bore me
A7		I can't stop the game until I reach the next level
A7.1		When I see badges in a game I feel like collecting them all
A7.4		I do weird things in games, just to achieve special badges
A7.5		Gaining experience points motivates me to keep playing
A8	Leadership	Leading others is exciting
A8.1		Teaching my skills to other players is an important part of games
A8.2		I do not like telling others what to do
A8.3		If I have a responsibility I enjoy playing the game more
A9	Joining a group	Joining and being part of a group makes the games fun
A9.1		I like to chat or talk with other players
A9.2		Groups are a good way to better learn the game
A9.3		Joining groups is a fun way to make friends
A9.4		Its annoying when I need other players to complete quests
A9.5		Interaction with other players make the game more interesting
	Group problem solving	
A10		Creating group strategies is enjoyable
A10.1		I focus more on the game if I am working with other people
A10.2		I prefer games that promotes group activities
A10.3		"Playing my part" in a group is very satisfying
A10.4		*Interacting with other people in games makes me irritated*
A11	Power	Becoming powerful is what drives me in games
A11.1		The stronger my character is the more I enjoy the game
A11.2		It's very important to me that my character reaches its top potential
A11.3		Only the powerful players gets maximum out of the game
A11.4		Power promotes bad behaviour in games
A12	Influence	Influencing others is a satisfying feeling
A12.2		Controlling scarce resources makes the game fun
A12.3		Games where some people can control others take to much time
A13	Leaderboards	Leaderboards is a fun way to compare your skills with others
A13.1		Leaderboards make me put more time and effort into the game
A13.2		I prefer games where my stats are recorded and visible
A13.3		Top player lists are only for people who spend to much time on gaming

	Domination others	
A14		I enjoy killing/dominating other players
A14.1		Competing against players is the best part of playing
A14.2		When I win, others have to loose
A14.3		Beating others gives me a real kick when playing
A14.4		Fighting others is a waste of time
A14.5		I often try to provoke or taunt players I defeat
A15	Immersion	I prefer games that draw me into their universe
A15.1		A good game makes me forget the real world
A15.2		The best games feels like they are real life
A15.3		Playing games is a good way to avoid thinking of real life
A15.4		I don't like games where they talk alot
A16	Achievement	Quests, levels and experience gives me a sense of accomplishment
A16.1		I prefer games that have steady progress of challenges
A16.2		Raising virtual skills and abilities should be a fundamental part of all games
A16.3		*I do not play the game to complete objectives or tasks*
A17	Cooperation	I prefer games that have a social aspect
A17.1		I enjoy having a character that works well in a group
A17.2		It's not important that my character solos well
A17.3		Chatting and talking to other playing are the best part of gaming
A17.4		Other players get in the way of my gameplay
A18	Competition	I prefer games where I can compete against others
A18.1		Defeating other players is a thrill
A18.2		Testing my skills against other players is the most exciting challenge
A19	Game Attitude	I like the advergames
A19.1		I found the advergame boring
A20	Brand attitude	I like the brand in the advergame
A20.1		I like the brand in the advergame more after playing the game

17.6 Appendix 6 – Data inputs from lab experiment

Frequency tables

Stories

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	6	2,3	2,3	2,3
	3	11	4,2	4,2	6,6
	4	15	5,8	5,8	12,4
	5	51	19,7	19,7	32,0
	6	78	30,1	30,1	62,2
	7	98	37,8	37,8	100,0
	Total	259	100,0	100,0	

Exploration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	,8	1,1	1,1
	2	6	2,3	3,2	4,3
	3	12	4,6	6,5	10,8
	4	6	2,3	3,2	14,1
	5	39	15,1	21,1	35,1
	6	49	18,9	26,5	61,6
	7	71	27,4	38,4	100,0
	Total	185	71,4	100,0	
Missing	System	74	28,6		
Total		259	100,0		

Individualization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	,7	,7
	3	4	1,5	2,7	3,4
	4	7	2,7	4,7	8,1
	5	36	13,9	24,3	32,4
	6	39	15,1	26,4	58,8
	7	61	23,6	41,2	100,0
	Total	148	57,1	100,0	
Missing	System	111	42,9		
Total		259	100,0		

Prestige

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	,7	,7
	2	8	3,1	5,4	6,1
	3	9	3,5	6,1	12,2
	4	16	6,2	10,8	23,0
	5	45	17,4	30,4	53,4
	6	25	9,7	16,9	70,3
	7	44	17,0	29,7	100,0
	Total	148	57,1	100,0	
Missing	System	111	42,9		
Total		259	100,0		

Collecting

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	3	1,2	2,7	2,7
	3	2	,8	1,8	4,5

	4	6	2,3	5,4	9,9
	5	6	2,3	5,4	15,3
	6	23	8,9	20,7	36,0
	7	71	27,4	64,0	100,0
	Total	111	42,9	100,0	
Missing	System	148	57,1		
Total		259	100,0		

Progress

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	10	3,9	6,8	6,8
	3	4	1,5	2,7	9,5
	4	8	3,1	5,4	14,9
	5	30	11,6	20,3	35,1
	6	61	23,6	41,2	76,4
	7	35	13,5	23,6	100,0
	Total	148	57,1	100,0	
Missing	System	111	42,9		
Total		259	100,0		

ProgressBars

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	3	1,2	2,0	2,0
	3	6	2,3	4,1	6,1
	4	3	1,2	2,0	8,1
	5	45	17,4	30,4	38,5
	6	56	21,6	37,8	76,4
	7	35	13,5	23,6	100,0
	Total	148	57,1	100,0	

Missing	System	111	42,9		
Total		259	100,0		

Leadership

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	2,7	4,7	4,7
	2	7	2,7	4,7	9,3
	3	20	7,7	13,3	22,7
	4	9	3,5	6,0	28,7
	5	11	4,2	7,3	36,0
	6	52	20,1	34,7	70,7
	7	44	17,0	29,3	100,0
	Total	150	57,9	100,0	
Missing	System	109	42,1		
Total		259	100,0		

JoiningGroup

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	,8	,9	,9
	2	15	5,8	6,8	7,7
	3	29	11,2	13,1	20,7
	4	35	13,5	15,8	36,5
	5	47	18,1	21,2	57,7
	6	55	21,2	24,8	82,4
	7	39	15,1	17,6	100,0
	Total	222	85,7	100,0	
Missing	System	37	14,3		
Total		259	100,0		

GroupProb

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	2,7	3,8	3,8
	2	8	3,1	4,3	8,1
	3	19	7,3	10,3	18,4
	4	28	10,8	15,1	33,5
	5	40	15,4	21,6	55,1
	6	47	18,1	25,4	80,5
	7	36	13,9	19,5	100,0
	Total	185	71,4	100,0	
Missing	System	74	28,6		
Total		259	100,0		

Power

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	1,2	1,6	1,6
	2	10	3,9	5,4	7,0
	3	7	2,7	3,8	10,8
	4	13	5,0	7,0	17,8
	5	21	8,1	11,4	29,2
	6	44	17,0	23,8	53,0
	7	87	33,6	47,0	100,0
	Total	185	71,4	100,0	
Missing	System	74	28,6		
Total		259	100,0		

Influence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	,9	,9
	2	3	1,2	2,7	3,6
	3	7	2,7	6,3	9,9
	4	13	5,0	11,7	21,6
	5	17	6,6	15,3	36,9
	6	32	12,4	28,8	65,8
	7	38	14,7	34,2	100,0
	Total	111	42,9	100,0	
Missing	System	148	57,1		
Total		259	100,0		

Leaderboards

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	2,7	4,7	4,7
	2	3	1,2	2,0	6,8
	3	14	5,4	9,5	16,2
	4	7	2,7	4,7	20,9
	5	17	6,6	11,5	32,4
	6	47	18,1	31,8	64,2
	7	53	20,5	35,8	100,0
	Total	148	57,1	100,0	
Missing	System	111	42,9		
Total		259	100,0		

Dominating

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	5,4	6,3	6,3

	2	10	3,9	4,5	10,8
	3	10	3,9	4,5	15,3
	4	19	7,3	8,6	23,9
	5	30	11,6	13,5	37,4
	6	66	25,5	29,7	67,1
	7	73	28,2	32,9	100,0
	Total	222	85,7	100,0	
Missing	System	37	14,3		
Total		259	100,0		

Immersion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	,5	,5
	2	3	1,2	1,6	2,2
	3	3	1,2	1,6	3,8
	4	11	4,2	5,9	9,7
	5	38	14,7	20,5	30,3
	6	54	20,8	29,2	59,5
	7	75	29,0	40,5	100,0
	Total	185	71,4	100,0	
Missing	System	74	28,6		
Total		259	100,0		

Achievement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	4	1,5	2,7	2,7
	3	3	1,2	2,0	4,7
	4	8	3,1	5,4	10,1
	5	16	6,2	10,8	20,9

	6	68	26,3	45,9	66,9
	7	49	18,9	33,1	100,0
	Total	148	57,1	100,0	
Missing	System	111	42,9		
Total		259	100,0		

Cooperation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	,7	,7
	2	9	3,5	6,0	6,7
	3	12	4,6	8,0	14,7
	4	18	6,9	12,0	26,7
	5	16	6,2	10,7	37,3
	6	44	17,0	29,3	66,7
	7	50	19,3	33,3	100,0
	Total	150	57,9	100,0	
Missing	System	109	42,1		
Total		259	100,0		

Competition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	,8	1,8	1,8
	2	1	,4	,9	2,7
	3	6	2,3	5,4	8,1
	4	9	3,5	8,1	16,2
	5	24	9,3	21,6	37,8
	6	22	8,5	19,8	57,7
	7	47	18,1	42,3	100,0
	Total	111	42,9	100,0	

Missing	System	148	57,1		
Total		259	100,0		

AttitudeImmersion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	,4	1,4	1,4
	3	5	1,9	6,8	8,1
	4	8	3,1	10,8	18,9
	5	20	7,7	27,0	45,9
	6	20	7,7	27,0	73,0
	7	20	7,7	27,0	100,0
	Total	74	28,6	100,0	
Missing	System	185	71,4		
Total		259	100,0		

AttitudeAcheivement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	,4	1,4	1,4
	3	3	1,2	4,1	5,4
	4	3	1,2	4,1	9,5
	5	9	3,5	12,2	21,6
	6	32	12,4	43,2	64,9
	7	26	10,0	35,1	100,0
	Total	74	28,6	100,0	
Missing	System	185	71,4		
Total		259	100,0		

AttitudeCoorperation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	1,4	1,4
	2	1	,4	1,4	2,7
	3	11	4,2	14,9	17,6
	4	22	8,5	29,7	47,3
	5	19	7,3	25,7	73,0
	6	14	5,4	18,9	91,9
	7	6	2,3	8,1	100,0
	Total	74	28,6	100,0	
Missing	System	185	71,4		
Total		259	100,0		

AttitudeCompetition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	,4	1,4	1,4
	5	11	4,2	14,9	16,2
	6	26	10,0	35,1	51,4
	7	36	13,9	48,6	100,0
	Total	74	28,6	100,0	
Missing	System	185	71,4		
Total		259	100,0		

BrandImmersion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	2	,8	2,7	2,7
	4	13	5,0	17,6	20,3
	5	26	10,0	35,1	55,4
	6	17	6,6	23,0	78,4

	7	16	6,2	21,6	100,0
	Total	74	28,6	100,0	
Missing	System	185	71,4		
Total		259	100,0		

BrandAchievement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	3	1,2	4,1	4,1
	4	5	1,9	6,8	10,8
	5	9	3,5	12,2	23,0
	6	30	11,6	40,5	63,5
	7	27	10,4	36,5	100,0
	Total	74	28,6	100,0	
Missing	System	185	71,4		
Total		259	100,0		

BrandCooperation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	1,5	5,4	5,4
	2	6	2,3	8,1	13,5
	3	11	4,2	14,9	28,4
	4	18	6,9	24,3	52,7
	5	17	6,6	23,0	75,7
	6	11	4,2	14,9	90,5
	7	7	2,7	9,5	100,0
	Total	74	28,6	100,0	
Missing	System	185	71,4		
Total		259	100,0		

BrandCompetition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	2	,8	2,7	2,7
	4	4	1,5	5,4	8,1
	5	19	7,3	25,7	33,8
	6	19	7,3	25,7	59,5
	7	30	11,6	40,5	100,0
	Total	74	28,6	100,0	
Missing	System	185	71,4		
Total		259	100,0		