# Gaming Nation?

## Piloting the International Study of Games Cultures in Finland

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# Summary

This is a study looking into how digital games are played in Finland. The present report is based on a survey of 805 Finnish respondents, and it serves to provide a first quantitative overview of how different forms of play (traditional as well as digital ones) are organised in contemporary Finnish society on a more general level. This work is based on various previous qualitative studies of games and players, and it will also be followed by qualitative and in-depth studies of various player groups. The need for such research is related on societal and media changes: digital media, particularly the Internet and games are often claimed to be among the key arenas of information society. At the same time, in popular discussion and in media, digital games and game players are often depicted in simplistic terms, and most often they remain just framed within the debates of harmful media effects and game violence.

According to the findings of this study, the most commonly played digital game in Finland is computer version of classic card game, *Solitaire*. No single commercial video game or computer game series was close in popularity to *Solitaire*, which was the overall favourite of both men and women. Playing of other digital games appeared more unequally distributed between genders. Women's second most favourite game was *The Sims* game series, which is a simulation game focused on different aspects of human life. On the contrary, men were more drawn towards strategy, action and sports games. But digital games were actually not the most popular type of games currently played in Finland.

After a principal component analysis of data which looked into playing habits of 17 different common types of games in Finland, a more high-level categorisation into four main game classes was produced. The category of *traditional games* contains board, card, problem-solving and outdoor games. *Money games* include lottery, betting and slot machine games. The third category of *digital games* consists of mobile phone games, computer games, online money games, console games and handheld console games. And finally, *engrossment games* include traditional, live action and online role playing games, miniature war games and collectible card games. During the last month 66 % of the respondents reported playing traditional games, 59 % money games, 31 % digital games and 4 % engrossment games. According to this, Finland can be described predominantly as an outdoors playing and betting country with love of classic types of card and board games, and where also digital game play is particularly focused on classic games such as Solitaire. The dominant media attention

on digital gamers as fans of violent shooter games appears therefore rather one-sided.

This study also highlights the complexities involved in defining "gamers", and points how problematic are claims that make sweeping statements concerning all gamers in general. Digital play appears in multiple forms and in varying levels of intensity. Many people appear to play occasionally various digital games without thinking themselves as "gamers". It is possible to ask people about their relation to digital games and get different answers, depending on how the question is framed. On the basis of our analysis, it is possible to report the proportion of digital gamers in Finnish population to be as low as 29 %, or as high as 75 % (if everyone who ever has played any digital game is taken into account). Our suggestion is that a rather reliable estimate might be that currently c. 53 % of Finns can be described as digital gamers, in one way or another. More interesting than such general estimate, however, are the more specific forms that digital play takes among various groups of people.

The amount of play also differs greatly. An average figure reported by all our respondents is 1.8 hours of digital play time per week. But the most typical (median) figure is zero, since the largest group of Finnish respondents reported no weekly digital play at all. On the other hand, among those 53 % of respondents who could be categorised as gamers, the most typical playing time was two hours per week. In comparison, those who are self-acknowledged "game hobbyists" play on average 8.8 hours per week, and the most typical (median) response among them was five hours per week. These very active gamers of digital games were predominantly men (75 %) and almost four out of five of them were between 15 to 34 years of age. The intense playing of contemporary commercial digital games appears currently to be unevenly concentrated on young males. But, to challenge the stereotypes, there are also some female and older people who are fans of action games, and also the most casual, puzzle style games are sometimes played many hours per week.

This study includes detailed analyses of such background factors as education, occupational and family situation and living area, as well of those people who play digital games and those who do not play. No significant differences were found; in these terms, digital game player can be "anyone". On the other hand, there were significant differences in age and gender, and digital game genres were gendered, meaning that men and women appear to play different kinds of games, with the exception of digital Solitaire, which is the most often played digital game among both men and women. Particularly younger men and women both appear to be often engaged in some form of digital play, but the intensive involvement typical of a "game fan" is mostly focused among young men. The

popularity of digital play decreases in close relation to age, and differences between younger "digital gamer generations" and older, non-digital generations are clear. Nevertheless, there are many individual exceptions to this rule.

The final conclusions from this study are particularly focused on the concerns this kind of "digital games divide" evokes. Finland currently appears as a divided nation in terms of digital play: half of people play, half do not. The intense involvement in virtual game worlds appears even more unevenly focused on only young, predominantly younger people, while older people appear left out or uninterested in contemporary offerings from digital games industry. If such a cultural and social fracture continues to exist within the digital games cultures, it is not for the benefit of the future developments of digital gaming, nor is it for the benefit for the society and cultural life in general.

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# 1. Introduction

This is the first report from our ongoing study, titled *International Study of Games Cultures* (InGa). In this work we focus on our first survey that aimed to build a comprehensive picture about the role of digital games in the culture and society of a contemporary nation. By 'games cultures' we mean those practices, thoughts and values that particularly surround digital games in the lives of people who are engaged in them in various ways (discussed in more detail in Mäyrä 2008). We used Finland as the site for conducting the pilot phase and for building our first case study, used for testing and developing our methodology, as well as already producing some hopefully interesting results. The future goal of the InGa project is to expand and link into wider international collaboration; please refer to the website *www.gamescultures.org* for the most up-to-date information and for opportunities to participate in this open initiative.

The starting points of this kind of a project are two-fold. Firstly, it is obvious even to a superficial observer that digital games have gained quite a notable position in the late modern media and information landscape which is saturated by technology. There are industry organisations such as the Entertainment Software Association (ESA) in the US, which regularly publish data on this role, making claims such as "Sixty-nine percent of American heads of households play computer and video games" or "The average game *player* is 33 years old and has been playing games for 12 years" (ESA 2007; italics in the original). However, the methods for deriving such data and analysis criteria behind such basic facts are not made available and not subjected to academic debate and critique. Thus, even while digital game play is obviously an important phenomenon for modern, technological societies, we are lacking reliable fundamental information on how popular games actually are, who is playing them, and whether game playing is increasing, decreasing or staying on the same level in our societies.

Such basic facts are needed to back up any serious discussion on the social role of interactive media. For example, the talk about "gamer generations" (Beck & Wade 2004; Prensky 2001), numerous studies about the increasing need for games in education (Aldrich 2005; Gee 2003; Gee 2005; Prensky 2006; Wolfe 2003) or the negative or positive effect that games might have on people who play them (Anderson 2007; Durkin 1995; Egenfeldt-Nielsen & al. 2004; Freedman 2002; Goldstein 1998; Griffiths 1999; Kirsh 2006), all need to take into account how games are actually used in the contemporary society, what kind of people game players are and what games mean to them. Public media debates about games regularly fail to contextualise games in this way. Thus, the danger of miscon-

ceptions is great. Our hope is that studies such as InGa will contribute to these discussions by offering better opportunities for saying something more precise and qualified about games and game players: rather than talking loosely about 'gamers' or about all game players as a unified whole, the results of this study should help us to better perceive the diversity that characterises digital games and their socio-cultural roles. It is also important to take the 'non-digital contexts' of digital games into consideration, i.e. board and card games, sports and outdoors games, when constructing this kind of a broader picture. In a more fundamental level, our aim is to point out how 'gamers' can be constructed in multiple ways: there is not a single reality our research can uncover, but rather multiple "stories" we can construct about the role of digital play in the lives of individuals, and in a societal level.

Our aim has been to approach the cultures of games as the complex wholes of meaning making systems, practices, norms and discourses that contribute to the cultural roles of games. In this context we have perceived how important it is to talk about the cultures of games and game players in the plural: even if it is relatively easy to identify a particular game culture among first-person-shooter (FPS) enthusiasts, for example, they only represent a fraction of all relevant practices that take place around digital games. A more 'invisible game culture' might be that of teenage girls with their mobile phones, or one of middle-aged women playing browser-based games on the Internet, to mention two examples. (Cf. Mäyrä 2008.) Making a visit to an FPS clan meeting or some major games tournament provides an opportunity to observe some of the visible characteristics of these groups of people engaged in their hobby: young, predominantly male players focused on games that require skill and speed. The invisible game cultures, in comparison, are dispersed rather than tightly focused, casual or non-committed rather than dedicated in their approach to gaming. Or this may be the initial impression. A typical player of 'casual games' might actually be almost obsessively dedicated to his or her favourite game, but we just would not know it. (Cf. Kuittinen & al 2007.)

There are several ways of measuring the value and significance a digital game might have to its players: measuring how much time they invest in playing it, measuring the amount of money they invest in games and gaming equipment, or finding out to what extent their conversations and media consumption focus on games and gaming. One quick way to make distinctions between visible and invisible game player groups is to ask these people whether they regard themselves as 'gamers' or whether they consider games to be their 'hobby'. This kind of an approach, particularly when combined with other questions about their game playing practices, uses of media and leisure time, and their basic demographic data, presents rich

opportunities for analysis, comparison and interpretation. Thus, after conducting qualitative research among various smaller groups in previous research for numerous years, we decided to initiate a comprehensive survey to get a more inclusive picture of different people's relation to games.

The methodology of the survey and the related analysis methods are explained in more detail in the following chapters. To put it briefly, our target population was Finnish citizens between 15 and 75 years of age; we gained a representative random sample (taking age, gender and geographical distribution into consideration) from the Population Register Centre of Finland. A total of 4 000 survey questionnaires were distributed among the target demographic, but the final response rate remained at a 20 % level (n=805). We were not able to derive data that would be statistically fully representative, but the results from this pilot survey should provide a view of Finland as a "gaming nation" which is reliable at a "symptomatic" level: it provides an overview of who plays and what, and who does not. Interesting new perspectives opened up during the study, and some common conceptions about digital game playing were confirmed, whereas others were discredited.

We have learned about multiple studies while preparing this work, but no exactly similar prior enterprise exists to our knowledge. Interesting results were published by the BBC, the British Broadcasting Company, which commissioned a study titled "Gamers in the UK – Digital Play, Digital Lifestyles" (BBC 2005). The aim of this study was to provide a somewhat similar, comprehensive view about the position of digital play in the lives of people living in the United Kingdom. This study, conducted by two different market research agencies under the supervision of BBC's Audience Research department, drew from a survey of 3 442 people between 6 and 65 years of age living in the UK. Parts of the study were based on qualitative focus group interviews, conducted among fourteen groups of gamers from Leeds and London. The emphasis of this study was on the context of media, and BBC's interests were on positioning digital game play among media related activities: watching TV, DVD, cinema, or reading books, comics, using the Internet etc. This study defined a "gamer" as someone who had played a game on a mobile, handheld, console, PC, Internet or interactive TV at least once in the last six months (BBC 2005, 2). Based on this, it was argued that 59 % of people between the ages of 6 and 65 in the UK are gamers. They also reported that the average age of a UK gamer is 28, and the gender distribution is fairly even, 45 % female and 55 % male. Compared to other media, games figured as the "most valuable media" for the youngest two age groups, the 6-10 year-olds and the 11-15 year-olds. (BBC 2005, 2-11.) The main difference compared to the study commissioned by the BBC is that, in our study, we did not position game playing solely as a

'media' phenomenon, but rather viewed it on its own terms. We also sought to question simple definitions of concepts such as 'gamer' and wanted to build a more nuanced view on the various perspectives that can all create valid but mutually differing views on what game playing is and means.

Many other studies which have focused on smaller demographics have been published. One representative of these is the study commissioned by the Pew Internet and the American Life project, and conducted by Steve Jones and his team (Pew 2003). Titled "Let the Games Begin: Gaming Technology and Entertainment among College Students", it surveyed 1 162 college students in 27 colleges and universities in the United States in the spring, summer and fall 2002. In this study, all informants reported having played digital games at some time, and seventy percent said they played at least once in a while (a certain kind of a loose definition of 'gamer' in the context of this study). A slightly higher percentage of women (c. 60 % women compared to 40 % men) reported playing computer and online games, while about the same number of men and women reported playing video games. The particular focus of this study was on the potentially antisocial or otherwise harmful effects games might have on the lives of college students, e.g. by taking time away from their studies. According to this study, gaming appears well integrated into the students' social life and routines; gaming was perceived as a way of spending time with friends, or even as a way of gaining new friendships. While 65 % of the respondents said gaming had little or no influence when it comes to decreasing the amount of time they might have spent with their family and friends, almost a half (48 %) agreed that gaming kept them from studying "some" or "a lot". But when the student gamers' reported hours of study were compared to those of students in general, no significant differences were found. (Pew 2003.) The main difference between studies like these and our current work is the scope of population: we are not only interested in young people, but in the overall picture of how digital games figure or do not figure in the lives of people of all ages. However, the emphasis on the social context of playing and on approaching gaming as one part of contemporary everyday lifestyles is something we have also found valuable for our own study.

This research report is divided into six main chapters. Following the introduction, Chapter 2 introduces the research philosophy, the starting points and the background of the study while constructing our research instrument. It also discusses basic decisions made during the analysis of the data. Background variables such as the age and gender distribution of our respondents, as well as their distribution into different game player groups which we identified are discussed in Chapter 2. In Chapter 3 the aim is to create an overall picture of the different types of games Finns play by analysing their actual playing habits in reference to their other everyday activi-

ties. Chapter 4 focuses on digital gamers and the games played in Finland. Here aspects of the level of casualness and commitment in gaming are discussed in more detail. In Chapter 5, the main focus is on the social aspects of gaming and the various meanings attached to digital games. We finish by discussing some interesting questions that have come up during the research process and offer fruitful starting points for qualitative research. Chapter 6 concludes the analysis by summing up the major findings of the study.

In this study, both our approach and our research team have been multi- and interdisciplinary. The basic outline and motivation for the study was identified by Frans Mäyrä from a cultural game studies perspective: how 'game culture' is conceptualised here is based on his work. Anu Jäppinen and Jaakko Stenros, with their backgrounds in social psychology, sociology and media studies, made significant contributions to this study at an early stage by providing a thorough review on previous relevant studies and by creating the first outline of the survey instrument. Special thanks to professor Dmitri Williams for commenting on the research plan at this point. Kirsi Pauliina Kallio brought in strong competencies from the social sciences, regional studies and childhood politics and she was the main author of the pilot survey and provided guidelines for its statistical analysis and the interpretation of its results. Lena Schlichting did most of the hard work of entering the data from the returned questionnaires into the SPSS database. Kirsikka Kaipainen, with her background in biotechnology and computer science studies, continued this work and did most of the final SPSS analyses of the data. Suvi Mäkelä has made the language corrections of this manuscript. The final study, however, while co-authored by Kallio, Kaipainen and Mäyrä, is a collective outcome of discussions, debates, critiques and thought processes that have originated either inside the games research group at the University of Tampere, or at international seminars and conferences we have participated in. At this point, we would like to express our sincere thanks to everyone who has provided us with valuable feedback and comments. Very special thanks to the Finnish Cultural Foundation for the grant that made this study possible.

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# 2.  Research Process and Methods

## 2.1. The research philosophy

The International Study of Games Cultures *(InGa)* research project is divided into three sections: a quantitative pilot study including a prestudy phase and a nation-wide survey; a qualitative study consisting of in-depth interviews of a selected sample of digital gamers; and an international comparison study which involves both collaboration with international partners and a community effort via social media (see *www.gamescultures.org*). This report introduces the preliminary results of the project which have been obtained from the pilot study. Furthermore, the report also discusses the potentials, principles and orientations of the following research phases. The multidirectional approach can be illustrated by the figure below (Figure 1).
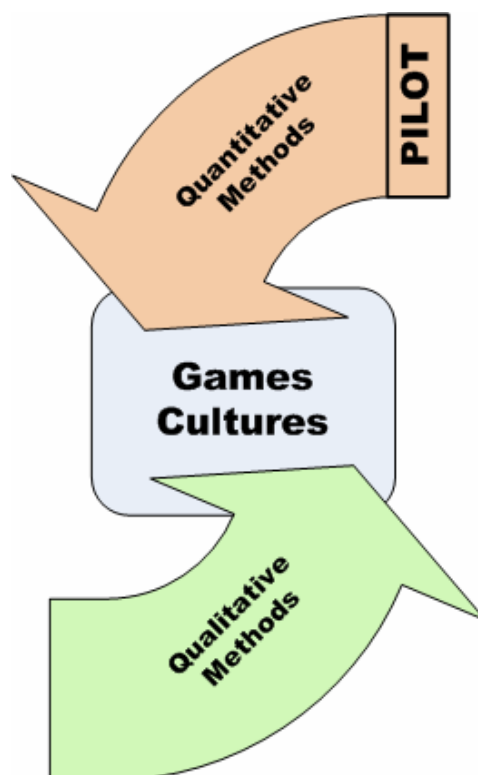


**Figure 1. The multidirectional approach of study and the position of the current pilot study in the overall research plan.**

The basic approach adopted in this research project was based on the view of cultures and social realities as multidimensional and constructed (a position shared by social constructivist thought as well as by sociologists of knowledge, and by much thinking published under cultural studies and postmodernist

headings). Taking the relative lack of game cultural studies as a starting point, we set out to test what kind of realities, 'facts' or interpretations we could construct out of the social and cultural roles that digital games play in contemporary societies. Thus, even if we are genuinely interested in such key pieces of information as how many people play digital games, or what kind of games they play, we also recognised early on that our choice of methodology and way of asking questions would determine what kind of answers we would receive. (See e.g. Latour & Woolgar 1986; Latour 1999; 2004 on social constructionist approaches to scientific practice.) The basic plan to approach lived realities of games cultures from multiple perspectives with both quantitative and qualitative research methods was adopted to increase the overall reliability of the study, but also to learn about the consequences of methodological choices to the study of games and players. The results of this pilot study are thus partly focused on the preliminary data derived from a quantitative survey, but they also provide a description of a certain process, hopefully informative and useful for other students of digital play in culture and society.

The research was initiated in 2006 with a prestudy which was conducted by researchers Jaakko Stenros and Anu Jäppinen. This preliminary phase was followed by the collection of survey data for the actual pilot study in the beginning of 2007. The statistical analysis of this data, results of which are presented here for the first time, was undertaken during the summer and fall 2007. Doctor Kirsi Pauliina Kallio was responsible for the elaboration and implementation of the survey. In practical terms the work was carried out together with Professor Mäyrä and research assistants Lena Schlichting and Kirsikka Kaipainen. Furthermore, the whole research team participated in the planning of the next two stages of the project.

From now on, the *InGa* project will be continued by introducing the results of the survey in national and international publications and conferences. Besides, the next stages (qualitative interviews and international comparisons) will be planned and prepared in detail by the end of 2007. A selected group of survey respondents will be interviewed, and the interviews will be transcribed and analysed. The second report of this study will come out in summer 2008. Furthermore, the experiences and results of these first quantitative and qualitative studies in Finland will be used as starting points for taking the research into an international comparison phase. Simultaneously a broad communal effort will be launched online (*www.gamescultures.org*). The final results of the first round of this project will be presented both in national reports and international publications and conferences in 2009–2010, hopefully inspiring further research in the area.

## 2.2. Getting started: the prestudy for a games cultures study

The early phase of InGa research involved comparing and benchmarking research work that had been published earlier and that we felt to be relevant for a culturally and socially oriented study of digital game playing. Additionally, it involved research instrument design as a survey questionnaire was chosen to be our tool in the first pilot phase of research. The prestudy phase concluded with a 'beta' version of the survey instrument and discussions around the need to focus the survey on a narrower set of research questions to make it more feasible in practical terms.

What does it mean to have culture created around digital games, or that digital play is being embedded within particular kinds of cultures? In research terms, what kind of meaningful distinctions or measures can we come up with that would convey to us a better sense of the role that digital games have in contemporary societies?

Our team had several years of history in working with digital games research, so luckily we were not beginning with an entirely empty slate. In 2003-2005 we studied 10-12 year old children and their parents, and how they experienced digital games. The resulting studies (e.g. Ermi & Mäyrä 2003; Ermi & al. 2004; Ermi & Mäyrä 2005ab; Ermi et al. 2005ab) provided us with a view on games' key holding power factors, which were used to construct a model of gameplay immersion. But we also observed that there were significant differences in how these children and their Finnish parents related to digital games; in the study we reported how out of the 284 families who participated in the study, 75 % of the children played digital games at least once a week, but, in contrast, 73 % of the parents said that they do not like to play digital games at all, or almost not at all (Ermi & al. 2004, 50). As we proceeded to interview and work with game players of all ages, we also became more aware that a powerfully immersed, dedicated style of play is only a certain kind of a response to games, and that, for example, casual games and casual game players are an important group whose practices and values in games do not necessarily coincide with those of more dedicated gamers (Mäyrä 2007). Yet, the most eager or 'hardcore' gamers obviously also need to be taken into account in a games cultural survey as well as more casual ways of approaching or using games.

These earlier studies had an effect on our approach particularly in the parts of the study that were focused on player experience and the motivations of play that were intrinsic to the game–player interaction. Within the field of digital game studies, the 'fun' of gaming or the emotional and affective quality of engagement with games has gained relatively much attention (see e.g. Blythe & Hassenzahl 2003; Koster 2005; Lazzaro 2004;

Klastrup 2003). Other intensive experiences like virtual sense of presence in game reality and optimal experience or sense of 'flow' during  gameplay have also been the subjects of game researchers' attention (e.g. Bryce & Higgins 2000; Laarni & al. 2005: Schiefele & Roussakis 2006; Perron 2005; Ermi & Mäyrä 2005b). More specific studies of player experiences have already dealt with a wide range of subjects, including discussions of the appeal of game violence to adolescent males (Jansz 2005) to comparative studies of digital game playing and its non-digital counterparts (Antonietti & Mellone 2003 – the main result in this study being that if the game is exactly the same, it appears to be insignificant whether a computer or a traditional gaming board is used). On the basis of such studies we were rather well equipped to design the part of the survey which was aimed to distinguish the quality of the players' experiences while engaged in digital play.

When discussing our basic approach, certain key dimensions emerged as the most promising; first of all, we were interested to see how different people invested time in digital game playing. Another, secondary aspect was that of money – the use of money can indirectly tell us about the value of game related experiences in people's lives. On a general level, the values and attitudes attached to digital games are also an important element in the formation of games cultures. Therefore it was also one of the areas we wanted to study. Finally, the actual practices surrounding games and ways of speaking about games would be the concrete level on which the daily life of game players would come to view. However, as we had decided to start with a survey and a bird's-eye-view that it would likely provide us with, more detailed discussions with informants about their game related practices had to be postponed until the later phase of qualitative research. In the first phase, the primary aim was to provide an 'overall map' or general view of the major outlines surrounding the more concrete and polymorphic level of individuals and smaller groups of game players.

Broadening the scope of research, we also included more general studies of time usage in the prestudy. Lacking reliable games cultures specific models for the methodology meant that we had to look into how time and money consumption as well as lifestyle related issues had been approached in social sciences in general. In particular, we looked at the *American Time Use Survey* (Bureau of Labour Statistics 2005), the *General Social Survey 2005* by the Canadian Social and Aboriginal Statistic Division (Statistics Canada 1985-2005), as well as the *Pocketbook European Statistics* (Office for Official Publications of the European Communities 2004) for similar studies on a European level. As our pilot study was focused on the population of Finland, we could rely on a wealth of research published by Statistics Finland Centre (Tilastokeskus). Finland and the Finnish

citizens have been subjects of extensive surveys and other statistical activities since the mid-eighteenth century, and occasional data exists even from the sixteenth century (see *www.stat.fi*). We also had access to data from a study titled *Suomi 1999* (Erola, Räsänen & Wilska 2000) which contained analysis of consumer habits and lifestyles in Finland, derived from 2417 survey questionnaire responses. In the social life and lifestyle areas we were again able to draw from a group of earlier studies that were focused on online gaming, in which communication and social interaction issues have attracted researchers' attention. These included the *Online Gaming Habits* study published by Game-Research.com (2002), *Let the Games Begin, Gaming Technology and Entertainment among College Students* (commissioned by Pew Internet & American Life Project and conducted by Steve Jones and associates, 2003), a study by Stephen Kline and Avery Arlidge (2003) titled *Online Gaming as Emergent Social Media*, as well as the *Daedalus* project data gathered by Nick Yee (2003-2007) and a number of studies concerning the social life of gamers by Dmitri Williams (2004; 2006a; 2006b; Williams & al. 2006).

The prestudy aimed at creating a foundation for a research tool that could be used not just in Finland but internationally. After all, the long term aim of the InGa project is to produce comparable data from around the world. With this aim in mind, even the basic questions regarding demographics had to be subjected to close scrutiny; de facto standards related to, for example, how questions on ethnicity and the level of education are formulated vary from country to country, not to mention between different continents. To ensure the applicability and universality of the questionnaire on an international level, it was subjected to a preliminary review round by scholars from the United States and South Korea.

At the end of the prestudy phase, the tentative survey instrument included nine distinctive groups of questions or statements that were designed to measure or probe:

1. The time usage i.e. the temporal context of leisure during which gaming might happen. These questions also look into the media environment and the habits of media use, that might form a part of the cultural and socio-economic context for gaming, and the consuming habits of people and the lifestyles of the respondents that might explain the role of games in their lives as cultural products; we particularly looked into how digital games are situated in the context of other leisure pursuits (also in relation to more traditional, non-digital games). These questions are partly based on common statistical surveys on time use, partly on other common statistical surveys, like the European Social Survey.

2. Questions looking at the collective factors and properties of social environments that represent the contexts and values in people's lives and that may explain the influences of communities to individuals which no individual factors can describe. These questions were also included as they might clarify the time use and the temporal contexts of the respondents. The questions are partly based on the World Values Survey, partly on other common statistical surveys conducted in some European countries.

3. At this point a filter question was included in the survey design to separate people who do not play digital games at all from those who play at least a couple of minutes every now and then (this is necessary to spare non-players from being asked questions pointless to them).

4. A further group of questions to describe the temporal and historical contexts, the recurrence of gaming and the social contexts of gaming. These questions were partly based on common statistical time use surveys or other previous studies and questionnaires related to gaming (mentioned above), partly on our researchers' own views and experiences on gaming habits and the observed shortcomings of standard time use surveys and other questionnaires in constructing a reliable and complete picture on gaming.

5. The next question group was designed to define the economic and practical factors related to game markets and the material context of gaming. The questions were partly based on common statistical surveys and previous studies and questionnaires related to gaming (also mentioned above), and again partly on the researchers' own views and hypotheses.

6. The following group of questions asked informants to name certain games which they were then supposed to make reference to while answering more detailed questions about their gaming experiences and preferences. These questions were again based on analysis and synthesis of earlier research as well as the formation of new hypothesis.

7. The next group of questions was designed to make the respondents reflect on the amount of time they used for gaming, particularly from the viewpoint of social factors. These questions were designed to determine possible problems created by gaming in the social contexts of a person. For the most part these questions were adapted from South Oak's Gambling Scale (SOGS) and other well-known game addiction questionnaires.

8. The following group of statements was designed to provide estimates about the sentiments and emotions that digital gaming evokes, including the pleasures of digital gameplay. These statements were mostly derived from our earlier gameplay experience research (e.g. Ermi & Mäyrä 2005b), but also from media and communication studies (particularly from McQuail et al. 1972, 155-161 and McQuail 1984, 320).

9. The final questions in this version of the questionnaire instrument were used for collecting the basic demographic facts about the respondents that would serve as background information for data analysis, help in verifying the demographic representativeness of our sample, and to enable further comparisons and groupings among the respondents.

At this stage the survey instrument included a total of 82 different questions or statement items, some of them consisting of sets of several statements. To summarize, there were four main areas of inquiry: I) Game play in the context of escape and enjoyment, II) Game play in the context of personal relationships, III) Game play as a way of producing identity, and IV) Games as a medium or a source of information. In our evaluation of the results coming from the prestudy phase, we agreed that this basic framework was a useful and valuable way of conceptualising the socio-cultural signification surrounding games, but in practical terms it was clear that we needed to scale down the ambition a little to make the survey instrument somewhat more manageable. Certain prioritisation and cutting down of interesting, but secondary, areas from our study was required. Unfortunately Anu Jäppinen and Jaakko Stenros, the researchers responsible for conducting the prestudy had to concentrate on other work and could not continue working in InGa. The setup of our team was changed, and we were happy to welcome Kirsi Pauliina Kallio who started as the new principal researcher in InGa.

## 2.3. In case of Finland: piloting the survey

In order to start the actual piloting of the games cultures survey, some thought was first required to revisit the original goals and the main aims of *InGa*. When the InGa project was started, the key idea was to gain knowledge about games cultures on various levels. Thinking about (digital) games as an international, as well as a national and sub-cultural phenomenon was considered to be essential. It was also acknowledged that all the cultural layers could not be approached and captured by the same research methods. Therefore it was decided that the study would make use of both quantitative and

qualitative methods; the former with the aim of getting information on a large scale; the latter to discover the experiences and meanings of digital gaming in more detail.

Thus, the first part of the study that took place in Finland was designed to be a nation-wide survey which would be completed and deepened by selected interviews. The international comparison research was then to be adapted and enforced on the basis of this pilot study.

The survey was conducted on the basis of a prestudy. Yet the number of potential themes, concerns and interests drawn out in the preparation phase was reduced to better meet the objectives of a nation-wide survey. It was determined that the survey should try to reach both the "casual gamers" or "non-gamers", whose relationship with digital games is minor or non-existent, and the "hard-core gamers" or "committed gamers", who are dedicated to digital gaming to a greater extent.

Since these groups of people would probably have a very different level of interest in answering the questionnaire, it seemed sensible to create two forms – one for all respondents, and another for those who are interested in gaming. These two parts of our questionnaire were respectively titled *"Common games – the everyday life of gaming"* (Form A) and *"Digital games – the everyday life of gaming"* (Form B) – the final Finnish questionnaires are attached as appendices 1 and 2, and the English translations of the questions and statements as Appendix 3. Thus, it was finally decided that the working title of the Finnish pilot study is *"The Everyday Life of Gaming"*.

The title of this report, *"Gaming Nation?"*, is true to the original idea of the survey in two senses. It clearly identifies the scale of the survey: Finland as a nation state. In addition to this, it also posits a question: to what degree could Finland be interpreted as a gaming nation? The results of this study and the discussions below will qualify different kinds of answers to this question, depending on what is meant by gaming, or how the role of game playing is interpreted on the basis of our findings. This study does not support a single and straightforward answer that would capture all cultural aspects related to gaming in Finland. Rather, the reality of game playing appears divided, fragmented and layered in a complex manner; we could answer the (ironic) question of our title by both 'yes' and 'no'. Finland both is, and is not, a gaming nation, as is revealed by this pilot study. Some more detailed and contextualised characterisations of Finnish digital play are given below, but it is also clear that more research is needed.

The problematics related to the results we have derived from our study have led us to ponder where, and on which geographical scales, gaming is actually practiced and reproduced as a cultural phenomenon (on the concept of scale see e.g. Smith 1993; Cox 1998). The process of study has also forced us to reconsider the methods and approaches that are

useful and productive in cultural game research, as well as the essence and presence of games cultures by definition. In consequence of this ongoing conceptual reformulation and reconstruction of our hypotheses, the questions of reliability are considered carefully and from various perspectives in this report. This methodological self-critique and re-evaluation process will hopefully help us create a better basis for the international comparative research phase, which will hopefully follow this pilot study soon.

The survey was directed to a random sample of 4 000 Finnish inhabitants between 15 and 75 years of age. The distributions of age, gender and geographical location were considered in the sampling by the Population Register Centre of Finland. The final response rate remained at a 20 % level (n=805), which is to say that the data cannot be interpreted as an accurate representation of the Finnish population (approx. 5.2 million). Nevertheless, this pilot survey provides a suggestive view of Finland as a "gaming nation", meaning that we remain confident about the major outlines it draws about the role of digital game playing in Finland. However, the relatively small sample also means that several interesting statistics cannot be specified on a more detailed level on the basis of this data. The pilot survey is at its most useful when it provides us with better starting points and tools for undertaking the next steps of an international study of games cultures. In addition, a thorough analysis of this detailed and rich data has opened up plenty of interesting potential for the up-coming phase of qualitative research.

The final survey questionnaire used in the Finnish pilot was comprised of fifty questions altogether, mostly consisting of structured close-ended questions, but also including some open-ended ones. The fifty questions of the questionnaire add up to 377 variables which are derived from both of the two forms. However, the questions presented in Form A were designed to be quick and easy to answer, whereas Form B requires more complementation and deliberation.

Form A uses plenty of simple categorical questions to sort out, for example, the respondent's age, sex, marital and residential status, etc. After that, several multiple choice and Likert scale questions were used to gather data about the respondents' time usage, opinions and attitudes, leisure time activities, working habits and methods, and so on.

In Form B we applied different kinds of multiple choice questions to find out which digital games the "gamers" (individuals playing digital games more or less actively) were interested in and what qualities of these games were attractive to them. We also set up a couple of open-ended questions for the respondents to tell us about their cultural habits related to gaming. It was in our interests to get information about different kinds of game players both for the statistical analysis and to lay the foundations of the qualitative research.

In classifying and thematising the distinct groups of gamers by various analyses, it was, in the end, possible to select a characteristic sample of the respondents as potential interviewees for the qualitative research phase. To gather an interesting and representative sample of individuals to cover even the major groupings emerging from the great range of different attitudes towards digital play was not an easy task. The large number of variables captured by our data meant that several possible ways of analysing, clustering, categorising and grouping the respondents were open to us. It seemed that the most challenging aspect of the survey analysis was to undertake and conclude the statistical analysis in a statistically reliable quantitative manner, at the same time keeping in mind that the qualitative part of the study would be built on the basis of this work. This dilemma is familiar to all social scientists pursuing to combine these two fairly different approaches, and it has been confronted in various ways.

Referring to Umberto Eco's (1990) theorisation, Anne Tuhkunen (2007, 35) talks about a *"chain of representations"* to reveal the intertwined relationships of the researcher, the respondents and the survey questionnaire itself. Following Tuhkunen's thought the survey questionnaire can be understood both as a tool created for the purposes of the research at hand, and as an outcome of the interpretations that the respondents make as they participate in the survey. Again, it should be noted that the data produced in transcription and analysis is once more reproduced in those very processes by the researcher(s). Thus, the results of a quantitative survey should not be presented as mere facts, but rather approached critically as the products of the research project itself.

In this study, self-criticism is understood to be a part of data collection processes, the analysis, and the reporting in both the quantitative and the qualitative parts of the research. The chain of representations, which is made up of the practices of the prestudy, the survey, the interviews and the comparative study, should also be considered by the readers of this research report. As Tuhkunen aptly puts it:

> "the whole representation chain consists of different levels within different phases of the survey; all the way from the beginning of the research process – setting the research question, defining research population and designing the questionnaire – to the moment when you, the reader, have read the last page" (ibid., 36).

## 2.4. Methods of analysis

The statistical analyses introduced in this research report follow the idea of applied statistics methodology, combining descriptive and inferential statistics. The analysis has been implemented with the help of the *SPSS 14.0. for Windows* pro-

gram. The statistics that were created in various ways were interpreted during the analysis process in reference to our preliminary understanding of games cultures and digital gaming (see discussion of earlier research above in chapters 2.1 & 2.2). This process is commonly known as a 'hermeneutic circle' and it involves both pre-understanding to drive the creation of the analysis framework, and finally a return to the original pre-understanding to correct or modify the original view (see e.g. Jasper 2004). Since the survey was conducted as a pilot study we wanted to keep the analysis as simple as possible, in order to create clear starting points for the future phases of the InGa study.

In our questionnaire most of the individual questions could be transformed into a single variable in the statistical analysis. Nevertheless, in the multiple-choice questions each answer option comprised its own variable. For each of the variables analysed we produced univariate descriptive statistics to gain an overall understanding of the data. Frequency counts and percentages were displayed for the categorical variables. Means, medians, selected percentiles and histograms provided us with summaries of continuous variables.

Some of the original variables were recoded into new variables so that they were easier to handle, and also for summarising the data. With categorical variables the recoding was done by combining different categories. With continuous variables we chose the appropriate value ranges from the variable scales and created new categories accordingly.

The theoretical margin of error in the analyses concerning the total sample was approximately 3.5 %, assuming a 95 % confidence level. This means that there is a 5 % chance that the "true" percentages would be farther than ±3.5 percentage points from the percentages reported in this study. When analysing certain subgroups of the sample, the margin of error increased; for example, when analysing the results concerning only the group of Form B respondents (n=232), the margin of error was about 6.5 %. The level of confidence used in our analyses was 95 %.

Most of the questions in our questionnaire were placed on a nominal or ordinal scale, which made *cross-tabulation* a natural choice for the analyses with two categorical variables. The *Chi-Square* value was used to determine the statistical significance of the differences between the groups in cross-tabulations. *Comparison of group means*, t *tests* and *analysis of variance* were also utilised when the dependent variables were continuous or ordinal, and the independent variables were categorical. Corresponding test values were used to determine the significance or insignificance of the findings.

Since most of the variables were not normally distributed, the *Spearman correlation* was usually used instead of *Pearson* for calculating correlations between continuous or ordinal variables. There are no strict rules for interpreting correlation

coefficients, since the interpretation depends on the context, but as a general rule of thumb a correlation of 0.5 or more can be considered to be very strong (see e.g. Urdan 2005, 76). A correlation of less than 0.1 would instead be deemed irrelevant, regardless of the corresponding test value.

We made a few attempts to utilise *principal component analysis* in grouping and dividing the respondents into subgroups. This method is a data reduction technique used to discover simpler patterns among a large set of variables. The results from these analyses were statistically reliable when they included the entire sample of the respondents. The number of Form B respondents was, however, too small for the results to be entirely trustworthy.

The results from the principal component analyses were used in the groupings of the common play genres, and as an additional guideline and support in determining the groupings of the variables which measure similar characteristics of the respondents.

*Sum variables* were created out of the Likert scale questions in various stages of the analysis to reduce the information into more compact variables. The sum variables were formed by adding together the values of individual variables for each respondent. The sum variables helped us measure the respondents' standpoints in regard to the aspects to which the original statements were connected. *Cronbach's alpha* values were calculated to measure the reliability of these instruments. Since the Likert scale that we originally used was five-pointed, we had to consider how to treat the middle option of "I cannot say". This option can be understood and used in various ways.

In most cases we assumed that by choosing option "3" the respondents wanted to say that they neither agreed nor disagreed with the statement. However, this option could also stand for a protest or disinterestedness; some of the respondents might not have wanted to commit themselves on ethical or societal matters, for instance. In keeping with these aspects, we also included the middle option in the sum variables.

There are some problematics related to the statistical analysis methods that we used, which need to be addressed in more detail. Even though the response rate of our survey was quite low, at a 20 % level, the sample size (n=805) was still relatively large. This should be kept in mind when interpreting the statistical findings. Many researchers and statisticians have noted that within large samples even the very small and practically insignificant differences or correlations can often be found to be statistically significant (see e.g. Urdan 2005, 63-66).

The correlation between certain variables may turn out to be extremely significant statistically even though the correlation coefficient were quite low. In reality this correlation would not explain more than a fraction of the variances between the variables. Thus, in addition to the statistical analysis, each result and its significance were also critically examined.

We also paid attention to the treatment of the missing values in our data. In general, there were a few missing answers for each question, but sometimes there were more. In some cases certain respondents neglected to answer the question altogether, and in other cases the answers were invalid. This, of course, is characteristic of large surveys. Our strategy in regard to the missing values was to report them alongside other data in order to give a clear picture of the various distributions to the reader.

We decided to code the missing values as "missing" or "no response" in every case, even though they were slightly problematic with some analysis methods. The distortions were explained and taken into account if necessary alongside the analysis, and sometimes the distortions themselves were used to answer the research questions. In some cases it seemed relevant to note that the respondents who did not answer certain questions differ from the ones who did *per se*.

Most analysis methods do not include missing values in the calculations or in the results. Thus, to achieve better readability, "no response" answers are not usually included in our tables and figures if there were only a few of them, although we try to make it a point to mention them in the text. The impact of a few missing values in a large set of data is usually insignificant. One observation that we made about the missing values of data was that older people tended to leave more questions unanswered than younger people in general, although the difference was not big. This could mean that digital games and digital technology are more familiar, interesting and important to younger generations, thus motivating them to fill in the forms more dutifully.

As a general rule, *listwise deletion* was used when methods that are based on analysing the correlation matrix between the variables were applied. Listwise deletion omits all of the cases in which some of the variables included in the analysis are missing. The basic percentages reported in the study were, by default, calculated from the entire sample. However, if they were derived from a subgroup or the calculations did not include missing values, the composition of the subgroup or the amount of the missing values in question are explained.

Finally, it should be kept in mind that the questionnaire was produced and filled in by the informants using the Finnish language. Because of the international orientation of the study the analysis is written up only in English, which raises the risk of misinterpretation and misreading. In this report we have therefore paid extra attention to making clear what was asked, what options the respondents had for answering, and how these categories were modified in the analysis.

## 2.5. Descriptives, variables, and representativeness of the data

Out of the 4 000 questionnaires originally sent out, a total number of 824 were returned. A handful of them were either left completely unanswered or otherwise insufficiently filled. After rejecting those, and cleaning up the data otherwise to get rid of inappropriate responses, a number of 805 respondents remained in the main InGa pilot database.

The questionnaire included several questions about our respondents' backgrounds. In this analysis we mostly paid attention to age and gender. The playing and gaming practices of the respondents were examined against the background variables, which were used for highlighting the different groups of respondents and comparing their playing and gaming habits. The answers were partially recoded, but the original patterns were used in some parts of the analysis as well.

In our questionnaire, age was inquired with an open question. For the in-depth analysis of playing preferences and other habits we divided our respondents into six age groups, each spanning ten years (except for the eldest group with a span of eleven years). This grouping was used in the analyses concerning the total sample. For the analysis of Form B respondents, a considerably smaller number of people, a grouping of three segments was created. The information about the age of the respondents is presented below in Table 1. The mean age of the respondents was 45.4 years, the median being a bit higher at 47 years of age. One of the respondents chose not to reveal his age.

Table 1. The age of the respondents.

| | | | |
|---|---|---|---|
| Mean age | 45,4 | | |
| Median age | 47 | | |
| Age groups for Form A respondents | | *n* | % |
| Group 1 | 15-24 | 110 | 14 |
| Group 2 | 25-34 | 134 | 17 |
| Group 3 | 35-44 | 114 | 14 |
| Group 4 | 45-54 | 168 | 21 |
| Group 5 | 55-64 | 170 | 21 |
| Group 6 | 65-75 | 108 | 13 |
| | Total | 804 | 100 |
| | | | |
| Age groups for Form B respondents | | *n* | % |
| Group 1 | 15-24 | 76 | 33 |
| Group 2 | 25-39 | 86 | 37 |
| Group 3 | 40-71 | 70 | 30 |
| | Total | 232 | 100 |

The respondents are not equally distributed into the age groups we created for the purposes of analysis. On the whole,

the age distribution was fairly close to that of the entire Finnish population. The fourth and the fifth groups (of A form respondents), which together constitute the largest generational age groups in Finland, are also the largest ones among our respondents. Considering the focus of this study, we found this distribution somewhat surprising. Our presumption was that young people would have more interest in participating in our study. On the other hand, older people were not as interested in answering Form B, which backs up our preliminary expectations to some extent.
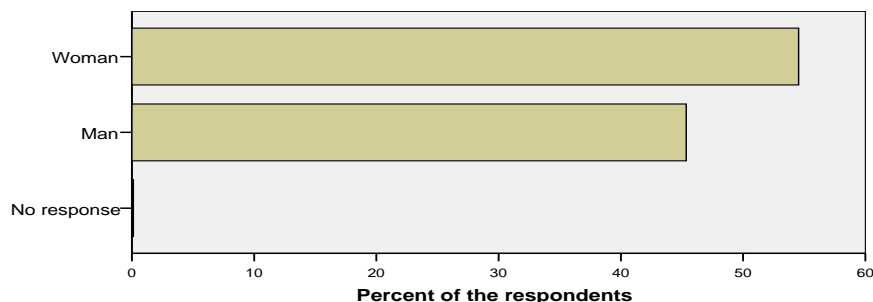


Figure 2. The gender distribution of the respondents.

Gender was reported dichotomically in our form, so there was no need to change its coding. 54.5 % of the respondents were women and 45.3 % were men (Figure 2). One person declined to report his or her gender. These parameters also match those of the Finnish population, in which the percentages are accordingly 51 % and 49 % with a slight distortion to the women's side, quite well (Statistics Finland 2006). This close match was also somewhat unexpected since men are generally assumed to be more interested in digital games.

Table 2. Age and gender distributions.

|  |  | Woman | Man | Total |
|---|---|---|---|---|
| Age | 15-24 | 61 | 49 | 110 |
|  |  | 14% | 13% | 14% |
|  | 25-34 | 68 | 66 | 134 |
|  |  | 15% | 18% | 17% |
|  | 35-44 | 68 | 46 | 114 |
|  |  | 15% | 13% | 14% |
|  | 45-54 | 100 | 67 | 168 |
|  |  | 23% | 18% | 21% |
|  | 55-64 | 83 | 87 | 170 |
|  |  | 19% | 24% | 21% |
|  | 65-75 | 59 | 49 | 108 |
|  |  | 13% | 13% | 13% |
| Total |  | 439 | 364 | 804 |
|  |  | 100% | 100% | 100% |

Gender distribution was fairly even in every age group (Table 2), although the share of women was slightly larger in the 45 to 54 group and the share of men in the 55 to 64 group. However, even these differences were not statistically significant. Thus, in regard to age and gender we found that the respondents formed a well-distributed group for this study.

A great majority of the respondents spoke Finnish as their native language (see Table 3 below). However, there were also 31 Swedish-speakers and 10 people with some other native language participating in our survey. The proportion of Finnish-speakers was a little larger than in the entire population. This, understandably, is due to the fact that the questionnaire was written in Finnish.

**Table 3. The native languages of our respondents.**

| Native language | *n* | % |
|---|---|---|
| Finnish | 764 | 95 |
| Swedish | 31 | 4 |
| Other | 10 | 1 |
| Total | 805 | 100 |

In addition to age and gender, the respondents' educational level, living area, position on the labour market and household conditions were used as independent explanatory variables in our analysis. These answers were also rescaled in the statistical dissection.

**Table 4. The levels of education.**

| Educational level | *n* | % |
|---|---|---|
| Elementary school | 169 | 21 |
| High school | 73 | 9 |
| Vocational school | 152 | 19 |
| College-level training | 182 | 23 |
| Higher vocational school | 82 | 10 |
| University | 146 | 18 |
| No response | 1 | 0.1 |
| Total | 805 | 100 |
| | | |
| Educational level (recoded) | *n* | % |
| Elementary school | 169 | 21 |
| Secondary level | 225 | 28 |
| College-level training | 182 | 23 |
| Higher education | 228 | 28 |
| No response | 1 | 0.1 |
| Total | 805 | 100 |

A large portion of the respondents had college-level training or elementary school educational background, both groups including more than one fifth of the respondents (Table 4). Most

of those who had only had elementary schooling were either older than 50 years of age or under 20 years of age. Vocational schooling was also quite common, with 19 % of the respondents. In contrast, only 9 % of the respondents had "high school" as their highest level of education, and a half of these people were 25 years old or younger. The rest of the respondents had higher level education; 18 % of them held university degrees and 10 % of them had higher vocational training.

Elementary school education was somewhat more common among men, and high school education among women, but otherwise the educational levels were more or less evenly distributed between the genders. For the purposes of the statistical analysis, the educational levels were recoded from the original six to four categories: elementary school, secondary level, college-level training and higher education.

Approximately three out of four respondents lived in an urban area (see Table 5); they lived in the capital region, in other cities or in municipal areas. The rest lived in rural regions, either in population centres or outside of them in the countryside. There were also 8 people who left this question blank. The respondents from municipal areas were a little younger than average, and those living in the countryside were slightly older. The proportion of men was also somewhat larger among the respondents who lived in the countryside. However, the differences were not statistically significant. For the analysis, the place of residence was redefined into two categories, urban and rural neighbourhoods.

Table 5. The living areas of our respondents.

| Living area | *n* | % |
|---|---|---|
| Capital region | 178 | 22 |
| Other city region | 366 | 46 |
| Municipal area | 61 | 8 |
| Population centre | 77 | 10 |
| Countryside | 115 | 14 |
| No response | 8 | 1 |
| Total | 805 | 100 |
| | | |
| Living area (recoded) | *n* | % |
| Urban | 605 | 75 |
| Rural | 192 | 24 |
| No response | 8 | 1 |
| Total | 805 | 100 |

More than half of the respondents had a full-time job (Table 6). In contrast, slightly more than one fourth of them were outside the working life: unemployed, in training, or retired. One seventh of the respondents were students; two-thirds of them studied full-time and the rest worked part-time alongside their

studies. The rest of those who answered the question were still in the workforce, but they worked part-time or were in part-time retirement. Position on the labour market was recoded from seven choices into three categories: full-time job, student or part-time job, and retired or unemployed.

Table 6. The positions on the labour market.

| Position on the labour market | n | % |
|---|---|---|
| Full-time job | 425 | 53 |
| Student | 69 | 9 |
| Retired | 162 | 20 |
| Part-time job | 30 | 4 |
| Part-time retirement | 14 | 2 |
| Student and part-time job | 36 | 5 |
| Unemployed / in training | 59 | 7 |
| No response | 10 | 1 |
| Total | 805 | 100 |
|  |  |  |
| Position on the labour market (recoded) | n | % |
| Full-time job | 425 | 53 |
| Student / part-time job | 149 | 19 |
| Retired / unemployed | 221 | 28 |
| No response | 10 | 1 |
| Total | 805 | 100 |

The respondents were also asked to describe their position at the work place in more detail. We ended up not using this variable in the final analysis, although it provided us with some interesting knowledge about the respondents' distribution in the labour market, which will be taken into account in the next phase of our research project. The job descriptions the respondents reported are presented in Table 7.

Table 7. The job descriptions of the respondents.

| Job description | n | % |
|---|---|---|
| Employee | 221 | 28 |
| Superior | 67 | 8 |
| Functionary | 137 | 17 |
| Specialist | 78 | 10 |
| Entrepreneur | 78 | 10 |
| Student | 101 | 13 |
| Unemployed | 47 | 6 |
| No response | 76 | 9 |
| Total | 805 | 100 |

The respondents' household conditions were originally inquired with seven alternatives, which have been modified into five categories in the analysis: living alone, living with a partner, living with parents, living with children, and other (Table

8). The most common household status among the respondents was to live with a partner. In addition, one out of four said that they lived with their partner and children. Almost one out of five respondents said they were living alone. Nearly 8 % were still staying with their parents; interestingly, their age range varied from 15 years to 53 years, although most of them were under twenty years old. Other forms of cohabitation were rare. There were only a few of those who reported being single parents (2 %), but this number is probably too small. In reference, 17 % of Finnish families live in single parent households. A separate option for single parent families was not clearly presented in the questionnaire, which made it necessary for them to write down their status themselves.

Overall, we were able to conclude that about one third of our respondents were living in families with children, which seems to be a fair indicator compared to the national figures. According to the Statistics Finland 42 % of Finns live in families with children, the average child count being approximately two (in our survey children under 15 years of age are not represented and should thus be counted separate). Respectively, two thirds of the respondents were living alone or with a partner.

Table 8. The household conditions of the respondents.

| Household conditions | n | % |
|---|---|---|
| Lives alone | 151 | 19 |
| Lives with a partner | 339 | 42 |
| Lives with a partner and children | 208 | 26 |
| Lives with parents | 61 | 8 |
| Lives with other relatives | 9 | 1 |
| Lives with a cohabitant | 20 | 3 |
| Lives with children | 15 | 2 |
| No response | 2 | 0.2 |
| Total | 805 | 100 |
| Household conditions (recoded) | n | % |
| Lives alone | 151 | 19 |
| Lives with a partner | 339 | 42 |
| Has children in the household | 223 | 28 |
| Lives with parents | 61 | 8 |
| Other | 29 | 4 |
| No response | 2 | 0.2 |
| Total | 805 | 100 |

Gross household income was inquired by a close-ended question with five categories (see Table 9). The respondents were grouped into low-income (less than 2000 euros), medium-income (2000 to 6000 euros) and high-income (more than 6000 euros) households according to their monthly income. It should be noted that the question concerns household income,

not personal income; thus, at this stage we cannot draw conclusions about the respondents' individual financial status (interviews following this survey will provide us with more detailed information about the informants also in reference to these questions). Therefore, the influence of income was always examined in relation to other variables, such as household conditions or position on the labour market.

Table 9. Gross household income per month.

| Monthly household income | *n* | % |
|---|---|---|
| Less than 2000 euros | 200 | 25 |
| 2000 to 4000 euros | 308 | 38 |
| 4000 to 6000 euros | 186 | 23 |
| 6000 to 8000 euros | 63 | 8 |
| More than 8000 euros | 30 | 4 |
| No response | 18 | 2 |
| Total | 805 | 100 |
| | | |
| Monthly household income (recoded) | *n* | % |
| Low income | 200 | 25 |
| Medium income | 494 | 61 |
| High income | 93 | 12 |
| No response | 18 | 2 |
| Total | 805 | 100 |

We also inquired the respondents' primary sources of income, even though we did not end up using this information in the statistical analysis. The distributions of this variable are presented in Table 10.

Table 10. The primary source of income for the respondents.

| Primary source of income | *n* | % |
|---|---|---|
| Salary | 486 | 60 |
| Pension | 168 | 21 |
| Student grant | 45 | 6 |
| Unemployment benefit | 42 | 5 |
| Family takes care of expenses | 48 | 6 |
| Other | 12 | 2 |
| No response | 4 | 0.5 |
| Total | 805 | 100 |

To summarise, the original and recoded background variables that we used in the statistical analysis are summed up in the following table (Table 11). In addition to the basic background variables we had a large number of questions concerning the respondents' everyday routines, attitudes and consumption habits (see Appendix 1, Questions 11-18). These questions are not introduced in this report in detail because they are con-

siderably extensive and were used in the statistical analysis only partly. Those of the variables that were recoded for the purposes of this analysis are presented next.

Table 11. **The background variables used in the analysis.**

| Age |
|---|
| Gender |
| Educational level |
| Living area |
| Position on the labour market |
| Household conditions |
| Monthly household income |

The five-step scale used in Questions 11, 18 and 19 on Form A is presented in Table 12, below. The scale was recoded into dichotomic variables by combining the first two answer options, which indicate that the respondent had recently participated in the activity or played the game in question, and then the last three options which indicate that the respondent was not actively pursuing the activity.

Table 12. **The alternatives given in questions regarding the usage of time for various activities.**

| During the last couple of days |
|---|
| Within the last month |
| During the last six months |
| Sometime earlier |
| Never |

Both Question 13 and 14 on Form A had three answer options, out of which two were positive and one was negative. The two positive "yes" options were combined in the analysis, thus making the variables dichotomic.

The five-step scale in Question 17 on Form A was also transformed into a three-step scale. The original answer options ranged from "1 – disagree completely" to "5 – agree completely". We combined the two "disagree" options and the two "agree" options to form a three-point scale, the points being "disagree – cannot say – agree". Similar recoding was applied to Questions 2, 6 and 12 on Form B, where the original scale was "1 – not very important" to "5 – very important". The first two and the last two answer options were combined to form the new scale: "not important – cannot say – important".

The original scaling of the variables was used when creating the sum variables which measured the respondent's placement on the various scales related to the different aspects of digital games and gaming. The formation of these sum variables was partly based on a principal component analysis. The individual

variables which formed the sum variables used in this study are listed in appendices 4 and 5 in detail.

The majority of the respondents (71 %) only answered the first part of our questionnaire (Form A), whereas the rest (29 %) also filled in the second half, concerning their digital gaming (Form B), as presented in Table 13 below. A higher proportion of men than of women answered Form B. The total number of Form B respondents was quite low considering the size of our sample.

Table 13. Gender distribution and Form B response rate in our sample.

| | | Woman | Man | No response | Total |
|---|---|---|---|---|---|
| Answered Form B | No | 337 | 235 | 1 | 573 |
| | | 77% | 64% | 100% | 71% |
| | Yes | 102 | 130 | 0 | 232 |
| | | 23% | 36% | 0% | 29% |
| Total | | 439 | 365 | 1 | 805 |
| | | 100% | 100% | 100% | 100% |

It was essential to find out how representative our sample was in regard to the Finnish population, since the eventual goal of this study is to create a picture of games cultures on a national level. Comparing our survey data to the basic demographics of the Finnish population (between 15 and 75 years of age)[1] revealed that our data was slightly misrepresentative. The Finnish subpopulation of 15 to 75 year-olds consists of 50.1 % of women and 49.9 % of men (Statistics Finland 2006). The average age of this group is 43.9 years, which is 1.5 years lower than among our respondents. The relative proportion of those who were over 50 years old was also six percentage units larger in our sample than in the whole population. Thus, our respondents turned out to be slightly older and the proportion of women somewhat larger than in the whole Finnish population.

The data is slightly skewed and does not fully represent the Finnish people. The low response rate also gives a reason to be cautious in generalising the results of this study. As a matter of fact, it can be assumed that the "non-respondents" of our survey differ from our respondents in some ways. The pilot questionnaire was quite long, which may have discouraged some of the people from filling it in. In addition, the subject matter of the study, as it is related to hobbies and vocational activities, may have put off some people who only answer surveys with "serious" topics. The low rate may also mean that a number of Finns simply do not care much about playing and digital games.

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[1] The information about the population age, gender and language distributions is courtesy of the Central Statistical Office of Finland and represents the situation on December 31st, 2006.

Considering all of the above, it is fortunate that the data distributions are not remarkably skewed, the data seems to be moderately representative, and the original sample was randomly selected. This rather large survey study nevertheless yields plenty of valuable information about digital games and gamers in Finland. The results of this pilot study can be taken as suggestive, with a grain of salt, even though we cannot generalise our findings directly to the Finnish population with a 20 % response rate. The further steps of InGa research will benefit from these results both substantially and methodologically.

## 2.6. Gamer classification trouble

In this chapter we will go over the details of the rationales behind our digital gamer classifications. During data analysis it became apparent to us that recognising digital gamers from all respondents was not quite as straightforward as one could first have thought. The concept of a "digital game" is fairly simple to comprehend: it includes all computer games, console video games, handheld electronic games, digital mobile phone games and even interactive digital television games. But how to distinguish the people who can really be called "digital gamers" from those who cannot? The definitional criteria clearly needed careful thought.

In our analysis the definition of a "gamer" derives initially from the games people reported playing. To start with, we created four groups of different game types titled traditional games, money games, digital games and engrossment games (the genres are discussed in more detail in Chapter 3.3.) The category of *traditional games* contains board, card, problem-solving and outdoor games. *Money games* include betting and slot machine games. The third category of *digital games* consists of mobile phone games, computer games, online money games, console games and handheld console games. And finally, *engrossment games* include traditional, live action and online role playing games, miniature war games and collectible card games.
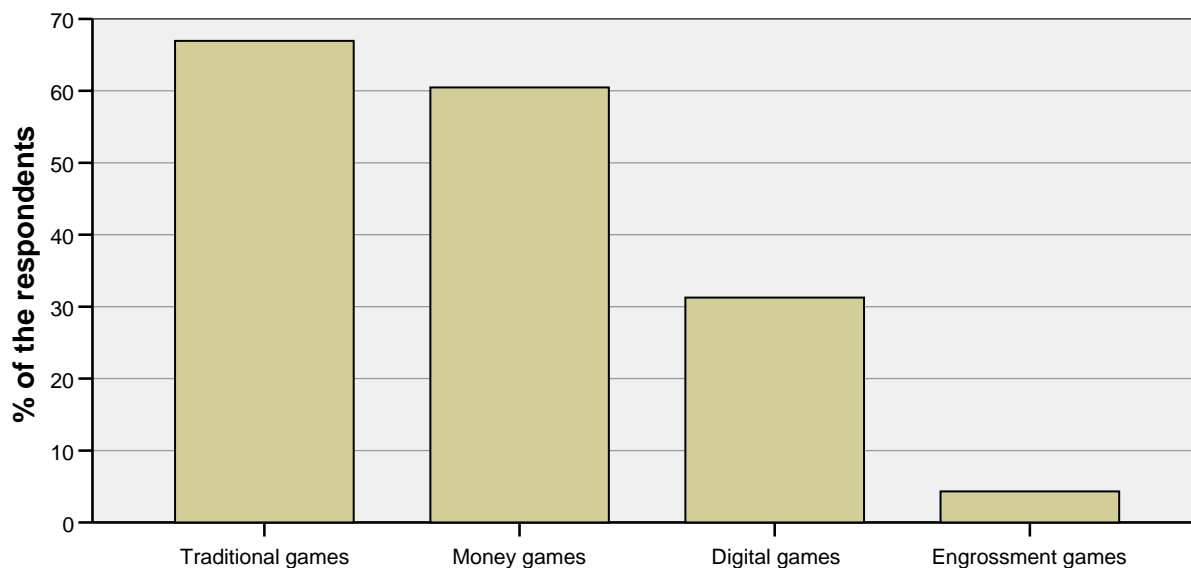
**Figure 3. The players of the four "master" game genres used in this study, during the last month.**

The proportions of the players of each genre are shown in Figure 3. The respondents were defined to be players of this particular "master genre" if they reported playing at least one of the games belonging to the genre within the last month (traditional games 66 %, money games 59 %, digital games 31 % and engrossment games 4 % reported playing during the last month). This grouping of games was, however, not sufficient for distinguishing digital gamers from non-gamers. Since the group of "digital games" does not include online role-playing games, and more occasional playing was also left aside, other means to recognise digital gamers were needed.

We confronted several problems in separating the gamers from the non-gamers. The most "serious" or "committed" gamers were easy to distinguish, as they appeared to have a tendency to report their playing diligently and answer every question. The trouble emerged with "casual" or "light" gamers, who apparently did not think of themselves as gamers and reported playing only occasionally or in short bursts during the working hours. The answers they provided were often more open to interpretation.

In the general question form (Form A; cf. Appendix 1, see also Table 14) we had five indicators which helped us pin down the gamers. The first one was provided in Question 12, in which we asked about the amount of time spent on playing computer or video games; the second one, Question 20, inquired directly if the respondent or someone in their household played digital games; third, Question 26, urged the respondents to describe their way of playing; and last, it was evident that the respondents played digital games if they gave an affirmative answer to Question 30 ("*Do you consider yourself to be a digital game hobbyist?*") or told us about their digital gaming in more detail in Form B.

Table 14. The questions which were used to distinguish the gamers in Form A.

| Number | Question |
| --- | --- |
| 12 | How much time do you usually spend on playing computer or video games? (hours per week) |
| 20 | Are digital games played in your household? |
| 26 | Which of the following best describes your playing? |
| 30 | Do you consider yourself to be a digital game hobbyist? |

On the basis of these variables, we identified the respondents as gamers if they answered any of the aforementioned four questions accordingly or filled in Form B properly. Even a single confirmative answer was considered to be enough, although we noted that in some cases the respondents gave contradictory answers to other gaming-related questions.

There were surprisingly many cases in which the respondents, for example, said that they do not play digital games at all, even though they had earlier reported using a couple of hours per week for playing computer or video games. This is an interesting matter to contemplate in itself. Some of these answers could be explained with the fact that some people simply did not fully comprehend the meaning of the word "digital" in this context. Or, the only digital games they play might be browser games or solitaire, which they might not count as digital games. Those who reported their gaming hours but later said they do not play, were mostly full-time workers or retired. The students were more consistent in their answers.

To start with, we asked about the time spent weekly on playing computer or video games with an open question. On the whole, the mean time that our respondents told us they spent on digital gaming was approximately 1.8 hours per week, although the median[2] was zero, meaning that more than a half of all our respondents reported their playing time to be zero hours per week. The actual percentage of self-reported non-players was 55 % according to this question, and on top of this almost 10 % of the respondents left the question blank, leaving 35 % of the respondents to most certainly be gamers. Overall, the weekly time spent on digital gaming decreased significantly, although not very strongly, as the age of the respondents increased (correlation coefficient -0.29; p<0.001). The negative correlation means that in terms of

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[2] Median is the statistic which divides the sample into two halves: at most half the population have values less than the median and at most half have values greater than the median. The median is usually better than mean for describing the average respondent, because it is the value in the middle.

playing time most of the committed gamers could be found in the first age groups.

The youngest men were clearly the most avid gamers, at least if we measure avidity with the mean hours spent on an activity (Figure 4). Their mean computer and video game playing time amounted to 8.7 hours per week, while the women of the same age only played 2.5 hours per week. The men among the 25–34 age group were also quite active with 3.9 hours, whereas the gaming of the women dropped significantly, to 0.3 hours. The median hours were much lower than the means, though: 3 hours for the men and 1 hour for the women of 15 to 24 years of age, 2 hours for the men of 25 to 34 years of age and zero hours for every other group.
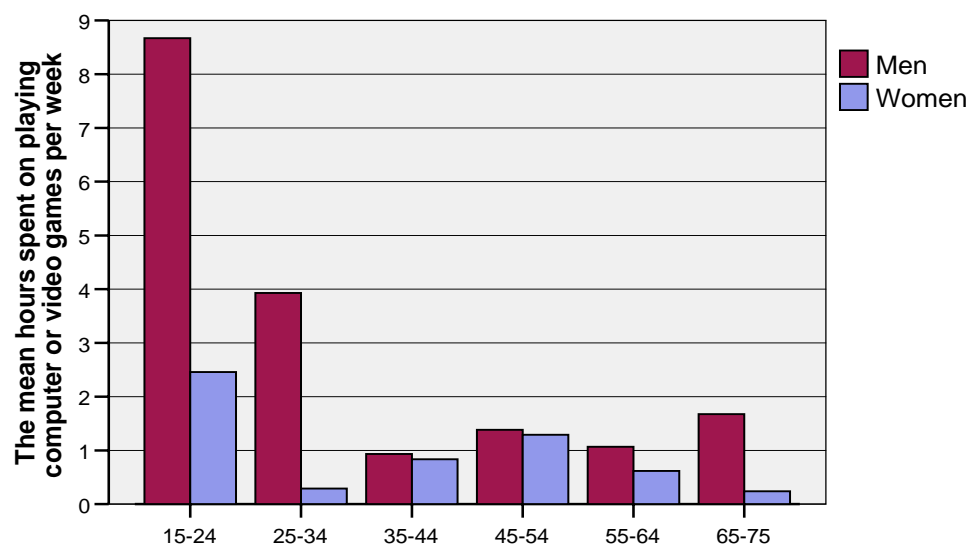


**Figure 4. The average time the respondents told us they spent on playing computer or video games each week.**

In most of the groups more than a half of those who responded to this question said that their weekly digital gaming time was zero hours. In total, there were 78 answers missing for this question which have been excluded from the mean and median calculations for obvious reasons. It could be speculated that the respondents meant "zero hours" when they left a blank answer, but it could just as well mean that they were unable or unwilling to specify and write down their exact playing hours. Still, the missing answers were quite evenly spread between the respondent groups, so the relative differences in playing times would not change much even if we substituted the missing values with zeroes.

We found statistically significant differences in regard to digital gaming time between both the gender and the age groups. Perhaps surprisingly, the mean playing time of the women of 25 to 34 years of age was almost as low as in the oldest age group: 0.3 and 0.2 hours, respectively. The sub-

stantial drop from the 15–24 age group to the 25–34 age group is quite interesting, especially because there was a slight increase when moving to the next age group. Of course, the life of a typical 25 to 34 year-old is quite different from a typical 15 to 24 year-old.

Considering gender, we did not find statistically significant differences in the life situations between the men and the women of 25 to 34 years of age, except in activities. On average, women went to the theatre and the movies more often, whereas men visited game arcades and fast food restaurants more frequently; women spent more time on household chores, outdoor activities and jogging, men on watching videos and DVDs. It is possible that the women of this age simply do not have much time to spend on playing or gaming if they are starting families and careers, investing in their social lives and trying to stay in shape. Anyhow, the bars in the preceding figure represent the mean hours of computer or video gaming, which were greatly affected by some large individual numbers in the data – gaming time medians did not differ as much. It is possible that our survey just did not happen to reach any women of this age who played much.

The significant differences between gaming times according to gender within age groups were among the 15–24 year olds (p=0.001), the 25–34 year olds (p<0.001) and the 65–75 year olds (p=0.028); among all of them, the men's mean play time was remarkably higher than that of the women. However, the hours were quite even among middle-aged people. One could presume that the gaming styles of the middle-aged were quite similar regardless of gender, perhaps quite casual, whereas in the other age groups men were more committed; we shall go into more detail about the 'casualness' of gaming in Chapter 4.

The second digital gamer question was more straightforward: "*Are digital games played in your household?*". The percentage of the respondents who answered "*Yes, I play myself*" was 28 % of the entire sample. As can be seen in Figure 5, the proportion of those who reported playing digital games decreased with age once again. In the younger generations the men were more eager to say they played, but the difference evened out in the older generations. Out of all those who we defined as gamers according to the questions listed in the beginning of this chapter, the people who answered "*yes*" to this question were the most consistent in their other answers. Only a tiny percentage of them later said they do not play at all and four out of five of them had also reported their playing hours in the earlier question.
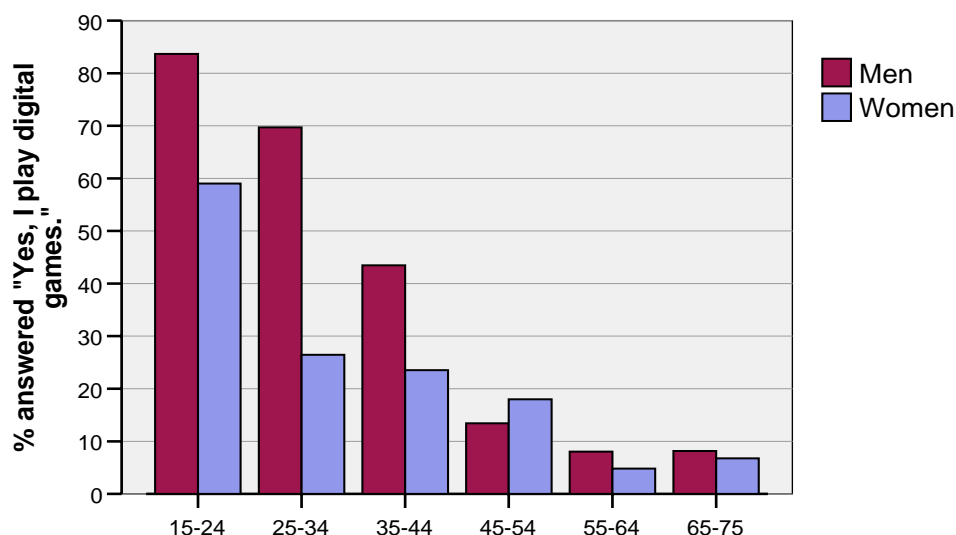
**Figure 5. The percentages of the respondents who said they play digital games.**

Another informative question for separating gamers from non-gamers was the question in which we asked the respondents to describe their way of playing. In total, there were six answer choices in the question; the first five described the different frequencies and amounts of playing and the last one was "*I do not play at all*" (Table 15). Almost one third of the respondents left the question unanswered; some of them had, however, earlier given information about their weekly playing hours.

**Table 15. The response distributions to the question "Which of the following best describes your way of playing?"**

|  | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| I play a few minutes a day | 30 | 4 | 4 |
| I play a few hours a week | 92 | 11 | 15 |
| I spend a couple of days a month on playing | 21 | 3 | 18 |
| I play a few weeks per year | 4 | 0.5 | 18 |
| I play only occasionally | 190 | 24 | 42 |
| I don't play at all | 222 | 28 | 69 |
| No response | 246 | 31 | 100 |
| Total | 805 | 100 |  |

We concluded that at least those who ticked any of the first five choices could be broadly classified as "gamers"; their share was 42 % of the whole sample. The next figure (Figure 6) contains the age-and-gender percentages of gamers according to this question, and a similar trend can be found there as in the previous figure. One interesting observation was that the percentages were a bit higher all around, which was most likely due to the relative popularity of the choice "*I play only occasionally*". Several people chose this response although they did

not indicate in other ways that they played or had been playing digital games in the recent past. There probably was plenty of variance within this group, since it may as well have included people who truly play very seldom and even then only a couple of minutes at a time, as well as people whose playing times are quite random but who might play as much as many days at a time. Therefore, this question may not be very useful when we attempt to classify gamers into casual and committed later on. There is also a minor possibility that some of the respondents were not thinking about digital games *per se* when answering this question, but rather all kinds of games.
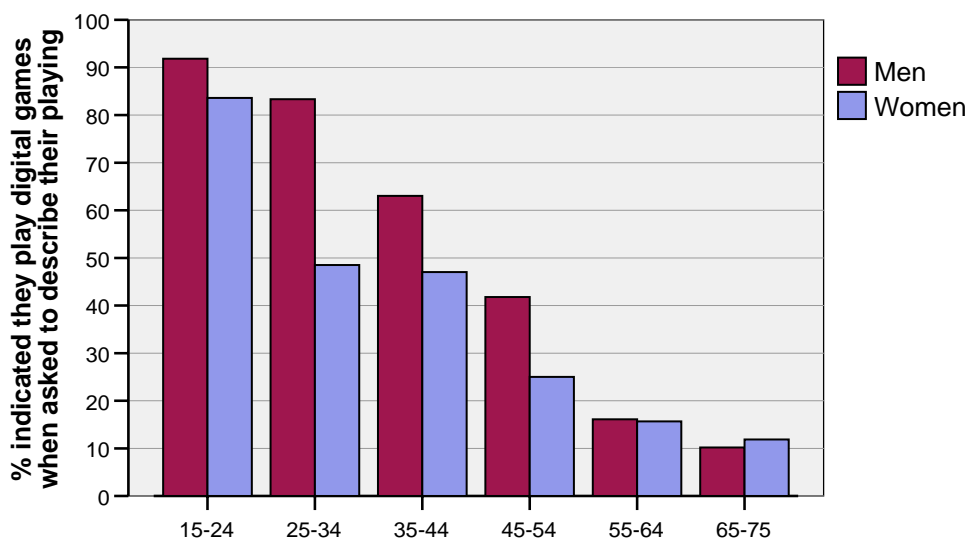
Figure 6. The percentages of the respondents who reported that they play digital games when asked to describe their playing.

The fourth question which was used to recognise the gamers was: "*Do you consider yourself to be a digital game hobbyist?*" (in Finnish: 'peliharrastaja', which has a slightly different tone). There were only 63 affirmative answers (8 %) to this question amongst our 805 respondents. Perhaps the wording of the question was odd, or perhaps there just are not that many people who think of digital gaming as their hobby. Still, there is a semantic difference between asking "*is this and this your hobby*" and "*do you think of yourself as a hobbyist*". Some people tend to avoid attaching labels such as "hobbyist" or "fan" to their identity, even though they can easily admit having such interests (cf. Nikunen 2007, 2005, 37). The range of digital games is also quite wide; if someone only plays simulation games on a computer, s/he might refrain from making statements about his or her relationship to all digital games. In any case, 75 % of these hobbyists were men and almost four out of five of them were between 15 to 34 years of age. The oldest hobbyist was 54 years old. As one would expect, they played a lot: the mean of their weekly playing time was 8.8

hours and the median was 5 hours. Only three out of all 63 hobbyists left the digital gaming form unfilled.

Finally, we had one very reliable indicator to separate the gamers from non-gamers: those who answered the form about digital gaming had most certainly played digital games during the last year. As mentioned earlier, the overall response rate in Form B was 29 %. There were no surprises in the respondent distributions within the age groups and genders from this viewpoint either, and the following figure (Figure 7) tells us the same story as the earlier ones. If we dare to extrapolate the results of our survey into the whole population, we can say that digital gaming is still primarily the territory of the younger generations, and men are more enthusiastic about it than women. Among the older generations, however, the en-thusiasm towards digital games is quite similar among both men and women, which we found interesting.
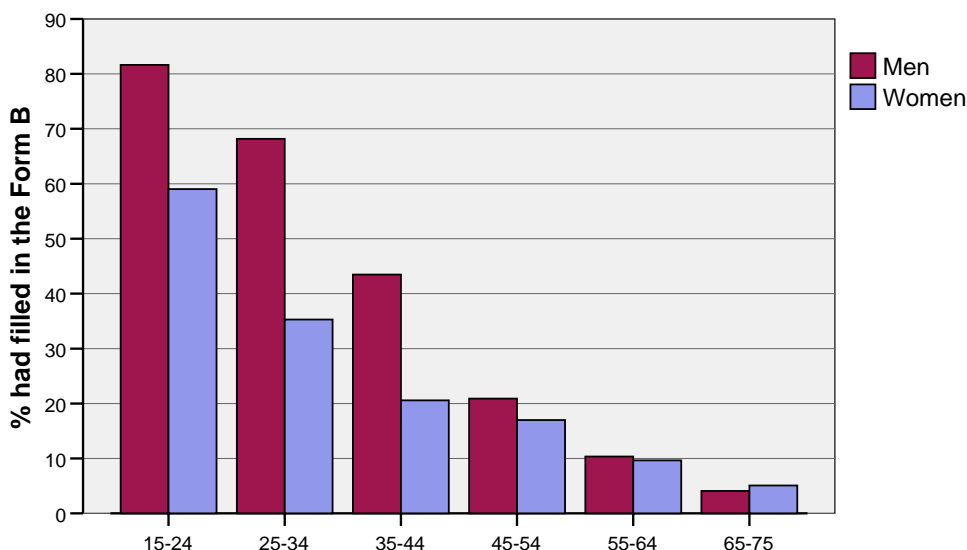


Figure 7. The percentages of the respondents who also answered Form B.

The purpose of all of the figures presented in this chapter is to point out that we can measure digital gaming in many ways, and that the respondents are not always as consistent in their answers as we would like them to be. A general trend is nev-ertheless quite evident in all the statistics and figures. This encouraged us to combine these five factors measuring digital gaming to form a single new variable, which would tell us who is a gamer and who is not.

On the basis of the above considerations, according to a broad definition adopted here, a 'gamer' is someone who spends some time each week on playing computer or video games, tells you s/he plays digital games when asked di-rectly, describes her/his way of gaming in some way, thinks of her/himself as a digital game hobbyist, or reveals de-

tailed information about the digital games s/he has played during the last year. According to these terms, **53 % of our respondents were digital gamers**. Comparing this finding to the above fact that the single largest group among those who reported their weekly digital play time was that in which people reported playing zero hours, we can build a picture of Finland as a "divided nation" in regard to digital game playing; taking the pilot study error margin into account, in 2007, roughly half of the Finnish population can be categorised as gamers, and half are non-gamers.

In comparison, using the gamer definition that was made in the BBC (2005, 2) study "Gamers in the UK – Digital Play, Digital Lifestyles", in which a "gamer" was specified as "*someone who had played a game on a mobile, handheld, console, PC, Internet or interactive TV at least once in the last 6 months*", the percentage would have been 49 %. And, combining these two definitions, we would have reached a percentage as high as 59 %. This is a good example of how hard it is to make these kinds of definitions and classifications. The percentages are not very far from each other, though, and it is quite safe to assume that approximately half of our respondents practiced digital gaming in one way or another. In any case, the following figure (Figure 8 below) shows the percentages of gamers among the age groups and according to gender.
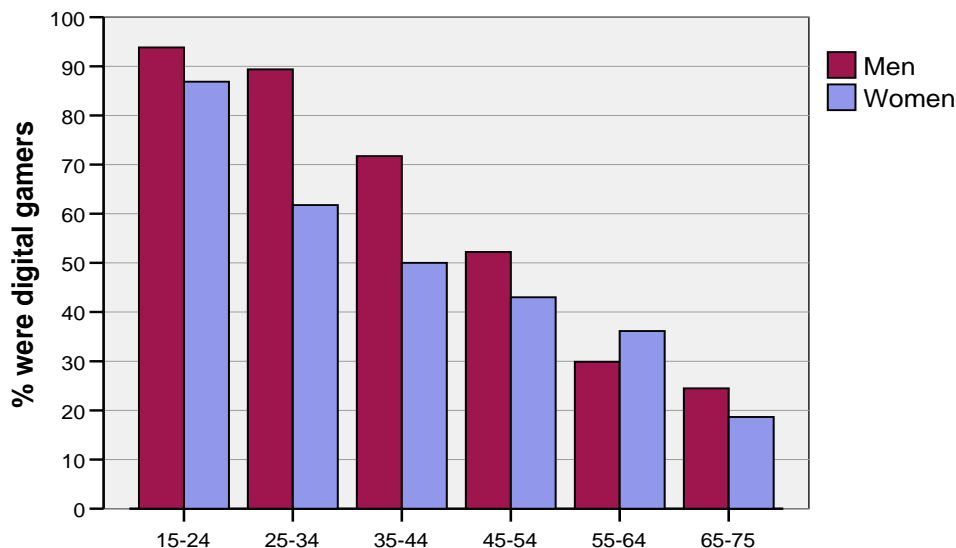


**Figure 8. The percentages of digital gamers among our respondents recognised by their answers to the related questions.**

The proportion of gamers decreased in a linear fashion with age, both overall and within the genders. The median age of the gamers was relatively high, 37 years, whereas the median age of the non-gamers was 56 years. The respective mean ages were 38 and 53 years. The share of female gamers was statistically significantly smaller than that of the male gamers

in the age groups of 25–34 and 35–44 years of age (p<0.001 and p=0.016, respectively). Overall, 48 % of the women and 58 % of the men were gamers. This difference is also statistically significant (p=0.007). Still, it should be noted that the portions of the gender groups were quite even in other age groups, and the gender gap was not large overall.

Categorisations, such as the ones made here, should always be considered to be estimations. Thus, we cannot be sure that our division into gamers and non-gamers has managed to capture all of the gamers and leave out all of the non-gamers. Still, we can say that none of our "non-gamers" did report playing digital games at the time of our survey or in the near past. This division, accurate enough for our research interests, enables us to make comparisons between those who play at least a little and those who do not play at all, and also to examine the gamers' gaming habits in more detail.

All in all, there were 424 (53 %) respondents out of our total sample who played digital games and/or thought of themselves as gamers. Among these gamers there was also a smaller group of 232 respondents (29 %) who answered the more detailed questions concerning their digital gaming in Form B. Thus, it was deemed necessary to differentiate these two groups for the analysis. The group which consists of all the digital gamers among our respondents is referred to as "All Gamers". The smaller group of the gamers, who provided us with more detailed information, is titled "Active Gamers".

# 3.  Practices of Play

## 3.1. Introducing 'Players' and 'Gamers'

The statistical analysis of the survey is divided into three sections. The following chapters deal with the general practices of playing, digital gaming, and the social issues and meanings related to the latter. We start by discussing the respondents' everyday life habits and attitudes which do not directly concern playing or games, but are found to be important in the contexts of playing and gaming.

The main purpose of the pilot survey was to produce a general picture of Finnish games cultures. In addition to the games, playing, and gaming itself, we also wanted to gain information about the respondents' everyday lives to contextualise the role of game playing. We approached playing and gaming as parts of everyday life to find out what kinds of meanings and practices are attached to playing in general, and digital gaming in particular. The information concerning time usage, attitudes and everyday activities helped us to better understand the position and the importance (or, unimportance) of playing and games in people's lives. Thus, we also paid attention to the routines related to work and leisure time as well as to game playing activities in the survey.

Before introducing the analysis it is important to make a conceptual separation between digital games and other games. In this study "playing" refers to all kinds of ludic activities with any kinds of games, and physical outdoors games as well as games of lottery or video games are all included. Therefore the terms "players" and "non-players" are also to be understood in a broad sense. Instead, in this study, "gaming" is reserved for digital game playing only (online money gaming is also included here, as it involves the use of computers). In this context the actors are named as "gamers" and "non-gamers" and, where necessary, more precisely divided into two groups of "All Gamers" and "Active Gamers" (for a detailed gamer classification, see Chapter 2.6).

## 3.2. Daily life in Finland: routines and attitudes

Playing games seems to be something that almost everyone in Finland spends time on, more or less frequently. No less than 97 % of our respondents said that they had played at least one of the games mentioned in the survey questionnaire, or that they spend some time on playing computer or video games each week (cf. Appendix 1, Questions 12 & 19). The 3 % of the respondents who apparently had never played any kind of a

game were all older than 52 years of age, and two thirds of them were women. On the basis of our questionnaire we cannot securely draw the conclusion that they have never played any games at all, but it is still fair to say that there are some people who are not interested in playing or gaming. Nevertheless, this number of people is very small. In general, it can be stated that playing games is an everyday life practice.

On the basis of our survey it seems fairly safe to assume that younger people are more familiar with different sorts of games than older people. There was a fairly strong negative correlation with the respondent's age and the amount of different kinds of games that the respondent said to have played recently (correlation coefficient -0.34; $p$<0.001). This means that the younger the respondent, the more games he or she has played in the near past.

When it comes to digital gaming, three out of four respondents reported having played digital games at least once in their life. The youngest person who reported to never have played digital games was 27 years of age, which means that all respondents from 15 to 26 years of age had at least tried out digital gaming. This suggests that digital gaming is also becoming quite a common practice among young people in Finland.

In this chapter we will not concentrate on digital games, but on games in general. Playing is here understood as a practice of everyday life which can be compared to sports, watching television or movies, hobbies and other leisure activities. These games can be played outdoors or indoors, alone or accompanied, by children or adults, seriously or playfully, with an aspect of winning or not. They may involve certain equipment, such as a pencil, a ball or a computer, but just as well not. This broad understanding of playing reveals a whole field of different kinds of activities.

The respondents within the different age groups (see Table 2, p. 24) were examined more closely. When doing this we took into account that all categorisations based on chronological age are somewhat arbitrary (see e.g. Kallio 2005). Nevertheless, these "age segments" do capture some of the important factors of the respondents' life situations in relation to playing and gaming. Since digital games are in many respects a product of the last couple of decades, the age groups relate to them in different ways. Moreover, age is not the only critical point of view in our analyses. We are also interested in playing and gaming habits in regard to, e.g., the respondents' sociability, gender, family relations and their position in the working life.

Two-thirds of our respondents in the first age group were students (Table 16). A little more than a half of them still lived with their parents, and one out of four also worked part-time. This group's playing and gaming preferences turned out to be more diverse than those of the other groups. They had more free time than the other age groups, and they also spent

more time with computers and consoles than the older people. On the other hand, quite a few of them felt that they lacked the money to follow their overall interests.

The majority of the second youngest age group, the respondents between 25 and 34 years of age, had already moved from studies to working life. Two-thirds of them had a full-time job, which seemed to indicate that they had less time but more money to use on gaming. The percentage of people living in an urban region was a bit higher in the two youngest age groups than in the older ones, except in the oldest group, in which the percentage was the highest. Respectively, countryside-dwellers were fewer in numbers among these groups. In the groups of 35 to 44 and 45 to 54 years of age more than 80 % of the respondents were working full time. This percentage declined to about a half in the group of 55 to 64 years of age and down to 1 % in the oldest group, in which nearly all respondents were retired.

Table 16. The positions on the labour market within different age groups.

|  | Full-time job | Student / part-time job | Retired / unemployed | No response | Total |
|---|---|---|---|---|---|
| 15–24 | 12 | 79 | 18 | 1 | 110 |
|  | 11 % | 72 % | 16 % | 1 % | 100 % |
| 25–34 | 90 | 30 | 14 | 0 | 134 |
|  | 67 % | 22 % | 10 % | 0 % | 100 % |
| 35–44 | 96 | 9 | 7 | 2 | 114 |
|  | 84 % | 8 % | 6 % | 2 % | 100 % |
| 45–54 | 139 | 15 | 11 | 3 | 168 |
|  | 83 % | 9 % | 7 % | 2 % | 100 % |
| 55–64 | 87 | 15 | 66 | 2 | 170 |
|  | 51 % | 9 % | 39 % | 1 % | 100 % |
| 65–75 | 1 | 1 | 104 | 2 | 108 |
|  | 1 % | 1 % | 96 % | 2 % | 100 % |
| Total | 425 | 149 | 220 | 10 | 804 |
|  | 53 % | 19 % | 27 % | 1 % | 100 % |

In the first age group only one of the respondents reported having children of her own. We found this number surprisingly low, albeit the age of having children has constantly risen in Finland. In the second age group one third of the respondents were living with children, in the third group two-thirds had formed a family, and a half of the fourth age group had children in their household. In the oldest two age groups most of the respondents lived with a partner. The proportion of lone-dwellers was quite similar across the age groups, around twenty percent. The playing of digital games within the families is one of the aspects of social gaming which we will examine in the later phases of the research project, as described in Chapter 5.3.

Internet usage was prevalent among our respondents. Three out of four of them reported they used the Internet at least a couple of times per week, and almost two-thirds used it every day. Moreover, 80 % of the respondents used email at least occasionally. Still, Internet usage has not reached the entire population yet, as the proportion of those who said they never use the Internet was 15 %. Not every home has acquired digital technology either; only 78 % of the respondents reported having a personal computer in their household, and two-thirds had a digital TV, a set-top box and/or a DVD player. These three devices were the most common ones out of the choices we gave in the questionnaire, but there were still 7 % of those who had none of these common digital devices, and almost 2 % of the respondents left the digital device questions totally unanswered. However, 98 % of the whole sample had a mobile phone, which backs up the general impression of Finland as a "nation of mobile technology".

The number of digital and gaming devices the respondents had in their households was calculated from multiple-choice questions (see Appendix 1, Questions 21 and 22). There was a strong correlation between the two (correlation coefficient 0.633; p<0.001). On average, the respondents told us that they owned four digital devices, out of which one was a gaming device (the maximum number of device choices we gave in the form was ten and twenty, respectively). This is to say that in the households in which digital equipment is commonly used digital gaming is also available. The most commonly reported gaming device was a personal computer (54 %), the second was PlayStation 2 (17 %), and the third PlayStation (13 %). Note that this question did not imply that the devices should actually be used for playing games, merely that the respondent had them in their household.

The frequency of Internet usage seems to decline with age, with the exception of a slightly larger proportion in the age group of 25–34 year old respondents. They used the Internet daily more often than the respondents of the youngest age group (see Figure 9). Still, practically all respondents under the age of 35 used the Internet, and 80 % of them used it daily (the corresponding percentage is 63 % in the whole sample). Middle-aged respondents still seemed to be quite active surfers, but after that usage decreased. One out of four in the group of 55 to 64 years of age told us that they did not use the Internet, and more than half of the eldest said they had never had any contact with the Web. Overall, men used the Internet more frequently than women.
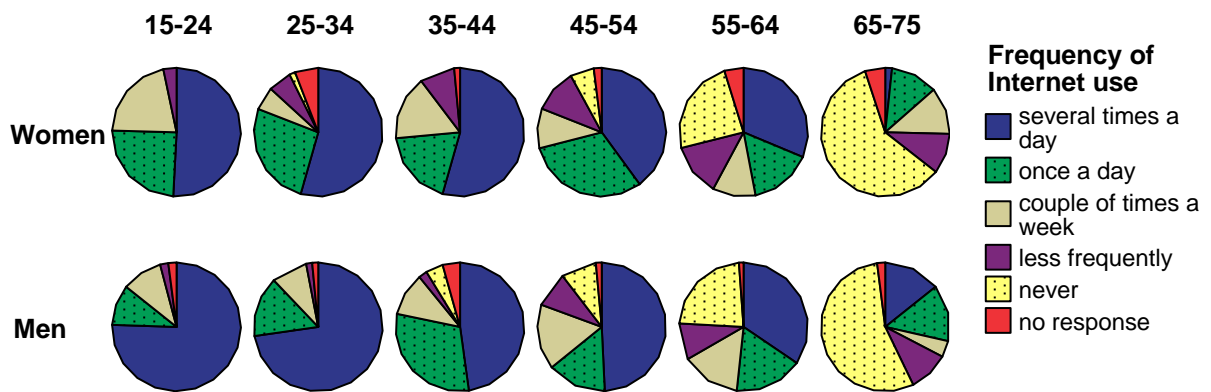
Figure 9. The distribution of Internet use frequencies within the age groups and genders.

The steady decline of Internet usage along with age goes hand in hand with the declining usage of other digital technology. Even though almost every respondent had a cell phone, the older the respondents, the more seldom they had computers, DVD players, home theatre systems and consoles. Therefore, it is not hard to presume that they also played less digital games. However, we were interested in finding out how many, if any, digital gamers there were among the older generations and what kinds of games appealed to them in comparison with the younger respondents. This question gets partly answered in the survey analysis, but will also benefit from the qualitative part of the study.

The amount of money spent on digital devices in the respondents' households during the last couple of years was requested in an open question. 16 % of the respondents did not answer the question at all, which indicated that they found it difficult to estimate the amounts used. Those who answered the question reported spending 1 050 euros on average on digital devices. The maximum amount of money reported to have been spent was 20 000 euros, the minimum 0 euros, and the median of the answers was 600 euros. Thus, it can be said that the amounts vary greatly. The oldest age group had been the most sparing in this regard, whereas the amounts did not otherwise differ much in relation to age. Nevertheless, the numbers reported by the men were somewhat higher than those of the women. The relationship between the gross household income and the amount of money spent on digital devices was quite linear, with the lowest-income households having spent the least and the highest-income households having spent the most.

Moving on to the other background information that we collected, we asked various questions concerning everyday life and general playing (see Table 12, p. 30 for answer options). In addition, open-ended numerical questions were applied to gain more detailed information. The numbers of the respondents who chose the answer options "During the past couple of days" or "Within the last month" are summarised in the following ta-

ble (Table 17). According to the responses, a couple of everyday activities seem to be quite popular among the Finns.

**Table 17. The popularity of various activities among our respondents (pursued within the last month).**

|  | Number of the respondents | Percentage of the respondents |
|---|---|---|
| Walks or jogging | 637 | 79 % |
| Leisure time hobbies | 585 | 73 % |
| Dining at a restaurant | 508 | 63 % |
| Visiting a fast food restaurant | 386 | 48 % |
| Association meeting | 226 | 28 % |
| Entertainment/dance restaurant/club | 219 | 27 % |
| Nature trip | 214 | 27 % |
| Country home/cottage life | 207 | 26 % |
| Movies | 167 | 21 % |
| Theatre | 122 | 15 % |
| Church | 122 | 15 % |
| Concert | 101 | 13 % |
| Museum | 96 | 12 % |
| Game arcade | 51 | 6 % |

Walking or jogging was commonly reported to be a part of the respondents' everyday life: 57 % of them told us that they had gone for a walk or jogging during the last couple of days, and if we look at the exercise that took place within a month the number is as high as 80 %. The question did not consider other sports, so the number of those exercising this regularly is presumably even higher. The question concerning outdoors activities also supports this assumption: 90 % of those who had not jogged within a month still reported having spent at least some time outdoors each week. Thus, it can be said that in general Finns are outdoors people, to a greater or lesser extent. Figure 10 shows that most of the women were quite frequent walkers or joggers, whereas the proportion of jogging men was somewhat smaller.
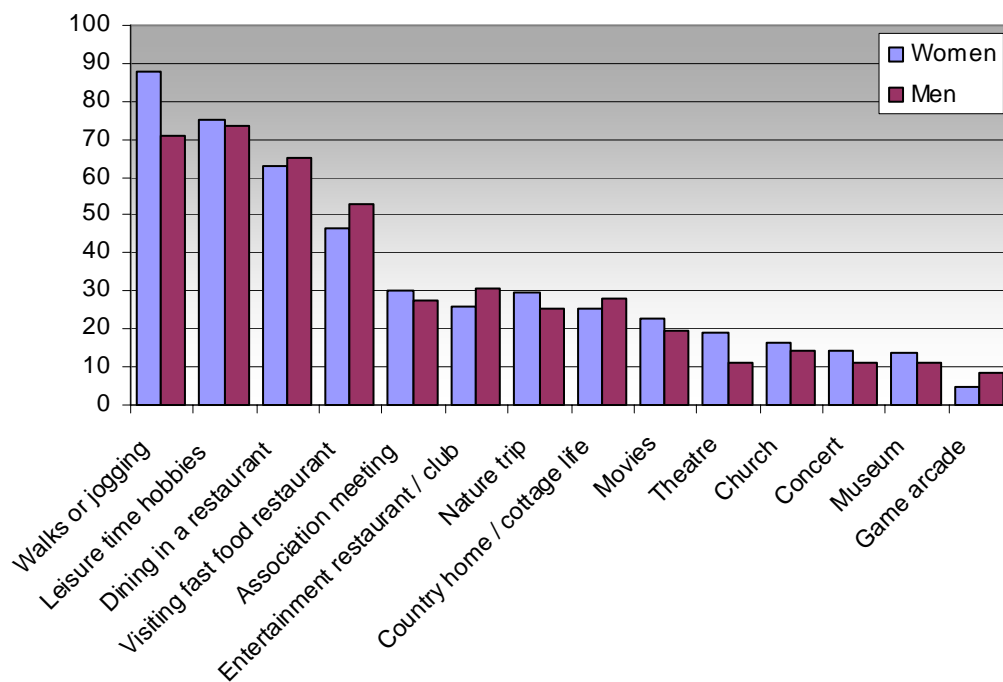
**Figure 10. The percentages of the respondents who were engaged in various activities within the last month.**

Various kinds of leisure time hobbies were also popular among the respondents. Three out of four had engaged in some hobby quite recently. A majority of the respondents also seem to have gotten accustomed to dining out, since nearly two-thirds of them reported having dined at some kind of a restaurant during the last month. The popularity of some of the activities varied according to age. In general, it can be said that the younger the respondent, the more often they had gone to the movies and restaurants. On the contrary, the eldest respondents would more often go for walks and to association meetings than the others. Leisure time activities seem to be important to most of our respondents.

Going to restaurants or engaging in hobbies are usually viewed as social activities, although it is of course also possible to do them alone. Thus, when examining the social aspects of playing games and the sociability of players, in this report we have considered both factors as indicators which, for one part, determine how outgoing a respondent is.

We utilised open-ended questions to gain information about the time the respondents spent on a range of activities each week (see Table 18). The median hours spent on working per week, 38 hours, reflect the fact that more than a half of our respondents had a full-time job. Household chores and shopping also took a large part out of their time. Of the free time activities we had supplied in the question, watching television was the most popular. The time spent on the less popular pastimes, hobbies, outdoor activities and reading, was quite similar for each. Videos or DVDs and computer or video games consumed the least amount of time. The maximum

hours reported by the respondents are included in Table 18 to show that the self-reported time usage might sometimes be inclined towards unusually large numbers. The minimum time reported by the respondents was zero hours for every activity expect for household chores, on which everyone spent at least one hour every week.

**Table 18. Weekly hours spent on various activities reported by our respondents.**

|  | Mean | Median | Maximum |
|---|---|---|---|
| Working | 31.2 | 38 | 85 |
| Household chores and shopping | 10.9 | 9 | 61 |
| Hobbies | 5.0 | 4 | 60 |
| Outdoor activities | 5.4 | 4 | 50 |
| Reading books or newspapers | 5.9 | 5 | 40 |
| Watching television | 11.0 | 10 | 70 |
| Watching videos or DVDs | 1.6 | 1 | 21 |
| Playing computer or video games | 1.8 | 0 | 50 |

Respondents from different age groups distributed their time somewhat differently. Naturally, the youngest and the oldest worked considerably less than the others, since the former were mostly students and the latter were mostly retired. The youngest also spent the least time on household chores, presumably since most of them were still living with their parents. The middle-aged spent less time on hobbies than the young or the old; this was not related to their position on the labour market or to their familial status. The oldest used more hours on outdoor activities than the younger age groups. Time spent on reading and watching television increased with age, whereas time spent on watching videos and DVDs and playing computer and video games decreased with age.

Overall, women used more time on household chores than men (13 versus 8 hours; medians 10 versus 6 hours) and less time on hobbies, watching television, watching videos or DVDs and playing computer or video games (see Figure 11). The difference in average reported hours on free time activities was approximately an hour on each activity. This suggests that either men were more biased to report larger amounts of time regarding free time activities and women regarding household chores, or that there indeed was a difference between genders; women had less free time. Lesser free time seems to correlate with smaller amount of digital game playing.
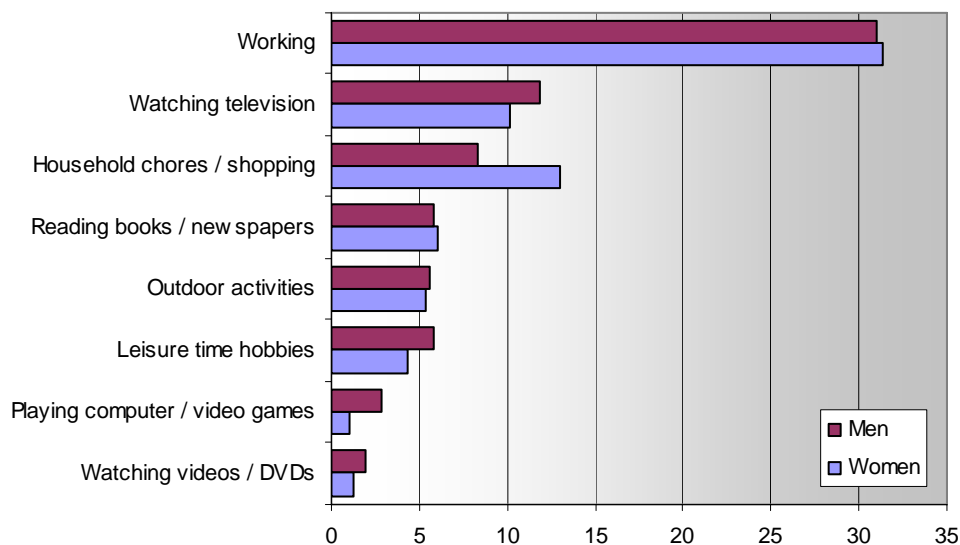
**Figure 11. The mean hours that men and women spent on various activities on a weekly basis.**

In our survey we also included a section regarding the respondents' general attitudes towards life and habits, in which the choices again ranged from "disagree completely" to "agree fully". The following figure (Figure 12) sums up the opinions of the respondents about various statements about their consumption behaviour and attitudes towards life.

There were a few statements which the majority of our respondents agreed or disagreed with. Almost four out of five of them were of the opinion that the purpose of technology is to make life easier. Thus, most of the respondents were apparently well acquainted with technology. Those few who disagreed did not stand out in any way regarding their background or habits, and it is possible that they simply had had a bad day with computers when answering the questionnaire. The answers to these kinds of questions are always more or less influenced by the current mood of the respondent.

Other statements which were commonly agreed on were *"I prefer to do shopping in familiar places"* (70 %) and *"I am mostly satisfied with the Finnish society"* (68 %). Those who did not prefer to shop in familiar places were also more likely to try out new restaurants and they were less frustrated with the injustice in the world than average. A lower number of these respondents had secondary level education, as well.

The respondents who were dissatisfied with the Finnish society were less proud of their work and traditions were less important to them. On average, their income level was also lower than that of the rest of the respondents, and they did not dine out as much. They also watched more television. Still, their background did not otherwise differ significantly from the other respondents.
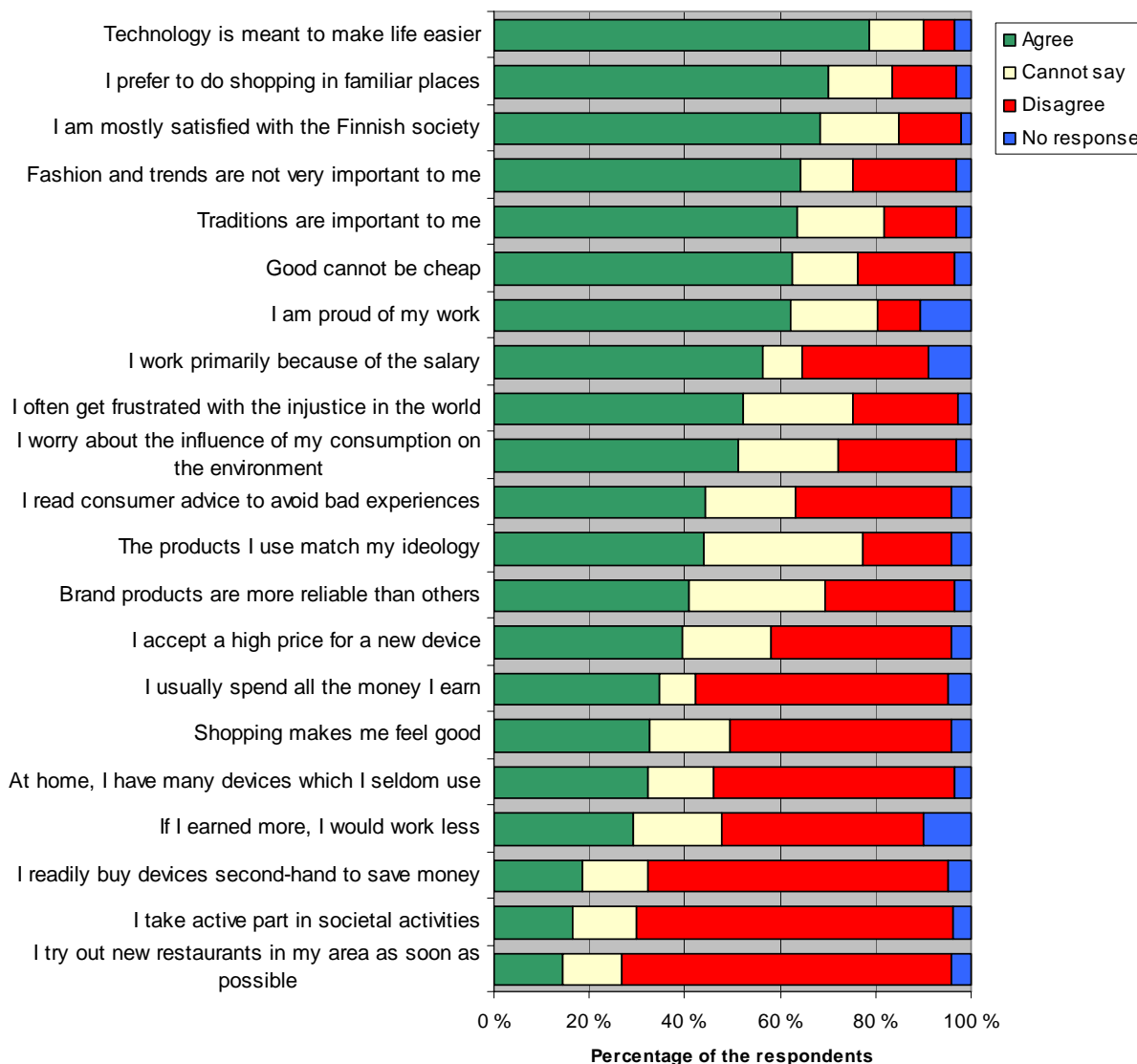
**Figure 12. The informants' responses to the provided attitude statements.**

The work-related statements were correlated; four out of five respondents who would work less if they earned more money also said that they worked primarily because of the salary. However, only 29 % of all respondents would work less if they earned more, whereas more than a half agreed that they worked primarily because of the salary. Also, 62 % of the respondents were proud of their work, and only one out of ten was not. Thus, the majority of our respondents seemingly appreciated their work, although for many the salary was the primary reason for working.

The statement with which more than two-thirds of the respondents disagreed with was *"I try out new restaurants in my neighbourhood as soon as possible"*. Although dining out was quite common, not many were such enthusiastic restaurant-goers. On average, those who agreed with the statement spent less time on household chores and shopping and more

time on watching videos and DVDs than the rest of the respondents. The proportion of young adults of 25 to 34 years of age was larger among these avid restaurant-goers and the proportion of the elderly was respectively smaller. These respondents also liked shopping and spending money and they showed trust in brand products.

Almost two-thirds of our respondents did not take active part in societal activities. They were less likely to have university degrees than the respondents who were societally active. A larger portion of the active people belonged to the oldest two age groups than of the non-active. Not surprisingly, two thirds of the active respondents had recently been to an association meeting, whereas the percentage was only 20 % for the others. The active people were more worried about their consumption and more frustrated with the injustice in the world.

Another statement which was commonly disagreed with was *"I readily buy second-hand devices to save money"*. The respondents who agreed with the statement tended to say that they spent all the money they earned more often than average. Otherwise, their background or habits did not differ significantly from the rest of the respondents.

This general examination of our respondents' attitudes and preferences was produced to chart their everyday life and habits, and to create a context within which their playing and gaming habits could be reflected upon. The majority of the respondents were quite active physically and socially, which could have an influence on the time they spend on various games. Usage of digital technology and the Internet was quite prevalent overall, although the youngest generations were obviously more familiar with them. The digital age may have brought digital games within the reach of nearly everyone, but it does not mean that people would have lost their interest in more traditional, non-digital games. The next chapter will draw a picture of the various playing practices of the respondents and explore games in relation to other activities.

## 3.3. The everyday life of games: genres and playing practices

To find out what kinds of games people play we created a scale of seventeen different types of games (Figure 13; also see Appendix 1, Question 19). In addition, we added one more item to this scale from another question concerning console games in the analysis. This could of course skew the results concerning console games a bit, because the respondents might have answered different sections somewhat differently, but it does not seem to be a major concern since the choice of answers was exactly the same. The possible choices for each question were similar to the questions listed in Table 12 (p. 30).

First of all, we hoped to find out the overall permeation of various games into our respondents' lives. Figure 13 presents the percentages of the respondents who chose any of the first four choices and had thus played the game in question at least once, even if this had happened a long time ago. Board and parlour games and traditional card games were familiar to almost everyone, and nearly all of those who had not played them belonged to the oldest two age groups. Betting games were also well-known and actually slightly more widely spread than problem-solving games, meaning crosswords puzzles, quizzes and other puzzle games. Live action role-playing games (LARPs) were the least familiar of these game types: merely 2 % of all respondents had ever been to a LARP. Other engrossment games were not much more popular, although 9 % of our respondents had tried out traditional tabletop role-playing games.
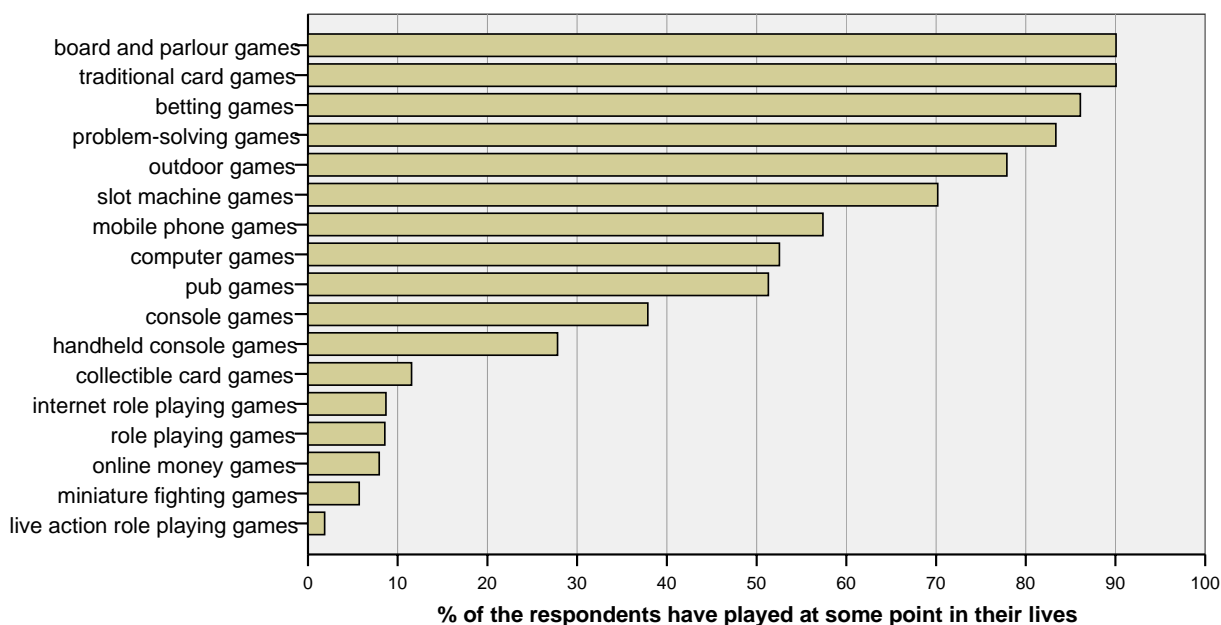


Figure 13. Percentages of the respondents who reported having played the game in question at least at some point in their lives.

In the further analyses we chose to pay attention to the first two levels ("*during the last couple of days*" and "*within the last month*"), which indicated that the game was played fairly often or at least recently. Of all the game types presented in the survey, the betting (lottery) type of games proved to be the most popular category. More than half of the respondents (54 %) had played them lately. Different kinds of problem-solving games were a close second with 48 % of players. In contrast, live action role-playing games were by far the rarest game type played also from this viewpoint; only one person had been to a LARP recently. Other kinds of engrossment games were also only marginally represented. Outdoor games had been played recently by only a small portion of our re-

spondents, which in comparison with the high percentage in the previous figure suggests that many people played them in their childhood but not so much afterwards. The percentages of the game types are presented below (Figure 14).
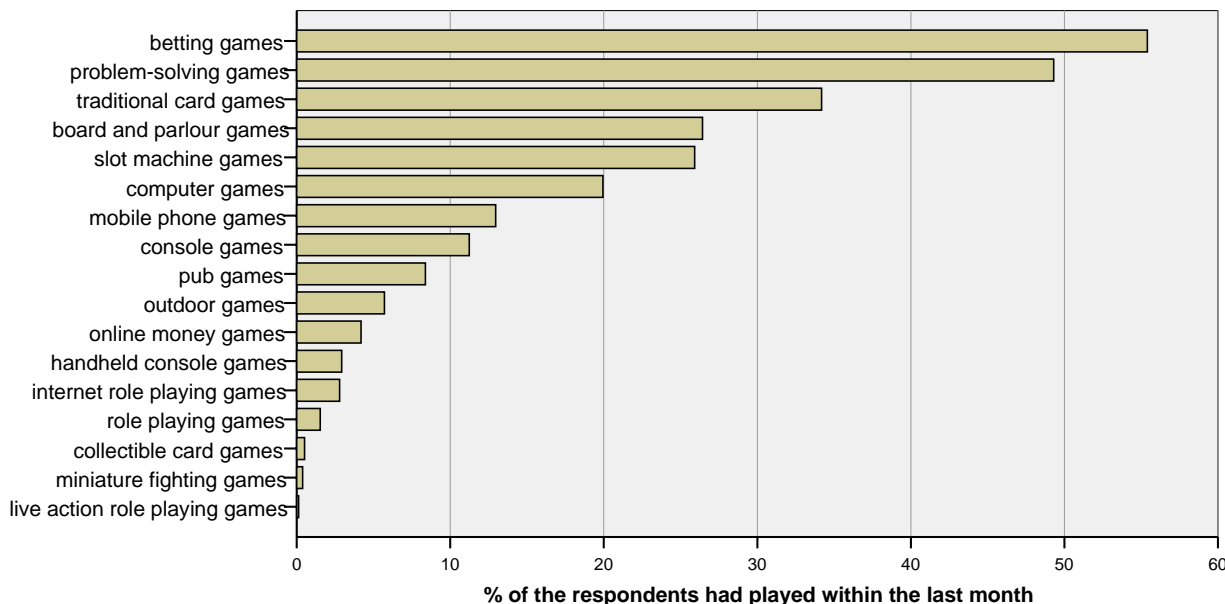


Figure 14. Percentages of the respondents who reported having played the game in question within the last month.

We found that betting games remained almost universally popular across all age groups. They were the top games played within the last month among men over 35 years and in the top two among both men and women over 25 years of age. Thus, if this was the whole truth about gaming, according to the findings Finland could well be called "a betting nation". This notion is supported by a recent nationwide survey, conducted by the Ministry of Social Affairs and Health (Aho & Turja 2007). On the other hand, since this category includes many "casual money games" (e.g. basic lottery and scratch-card games) which can be played anywhere with rather small time and money investments, they cannot be compared as such to e.g. role-playing games, which have a totally different nature and require much more commitment when they are played in terms of both effort and time.

Of the other game types, computer games were the ones played most frequently among young men, but their popularity on the game ladder declined with middle-aged and older people. As for all women, problem-solving games were the most or the second most frequently played games across all age groups. In general, a smaller proportion of the women played games than of the men. Thus, it seems that, broadly speaking, men and women have slightly different gaming preferences.

We made a principal component analysis to find out if we could discern different genres of games out of the game types based on

the responses. Indeed, games were quite clearly divided into four components, which were given the following titles: engrossment games, digital games, traditional games and money games. Cronbach's alphas were .78, .77, .64 and .89 respectively.

*Engrossment games* include traditional, live action and online role playing games, miniature war games and collectible card games. *Digital games* consist of mobile phone games, computer games, online money games, console games and handheld console games. The third category of *traditional games* contains board, card, problem-solving and outdoor games. And finally, *money games* include betting and slot machine games. The following figure (Figure 15) shows the percentages of the men and the women in different age groups playing these sorts of games. It should be noted that this figure does not tell us how many separate games within each game type the respondents had played.

There was also one game type which did not fit into these four categories: pub games. They were grouped in the same category with digital games according to the principal component analysis, but we decided to omit them from further analyses. Obviously, pub games are not digital games, but apparently those who play pub games also tend to play more digital games; and vice versa, those who do not play digital games do not tend to play pub games either. Thus, for the most part, the observations in the following paragraphs about digital game players also hold true for pub game players. Nevertheless, in order to clearly focus on digital games, pub games have been excluded from the following player category analyses.

The reduction of all game playing behaviours of the Finnish people into four groups is of course a rough reduction; nevertheless, the aim of this pilot study was to provide an overall picture of playing behaviours and preferences among the Finnish people. It is in itself interesting to consider, whether the four 'meta-categories' we found in the principal component analysis could be discussed in terms of 'games cultures' that Finnish people participate in. There is probably not much in common among the people who share similar game playing preferences at this level, but these kind of "portraits" of the four player groups are provided below in any case. Hopefully future study, and particularly qualitative studies among the informants, will provide a more detailed look into the real nature of these kinds of statistically created socio-cultural player groupings.
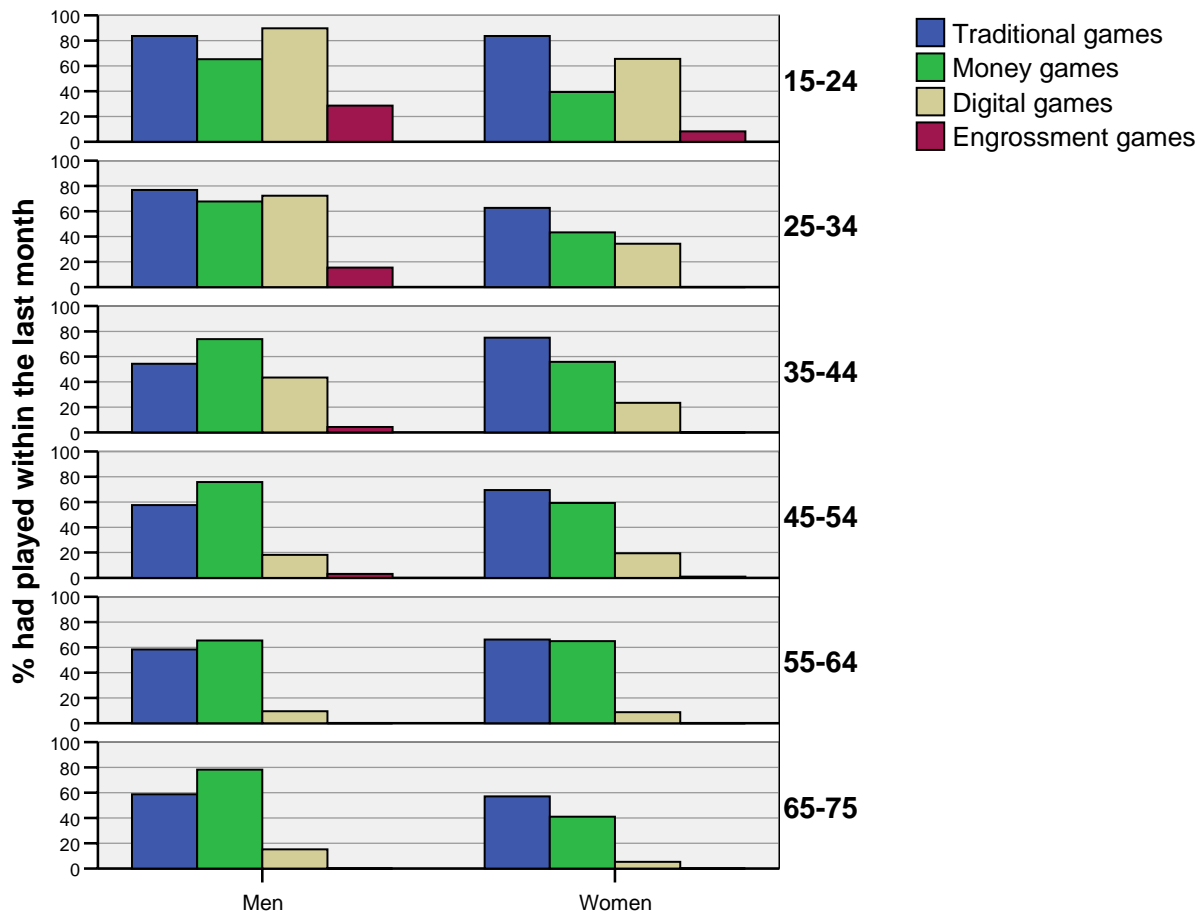
**Figure 15. The four game genres played within the last month.**

To clarify, a *player* of a game type is here defined as someone who reported having played at least one of the games belonging to the game type within the last month. This definition is arguably slightly misleading, but the term *player* is used in this report for simplification and it is suitable for the purpose of gaining a broad perspective of the playing habits of our respondents.

In general, traditional games were played as frequently by men as by women, but women did not play other game types as much. Traditional games also held the first place in women's preferences, whereas middle-aged and older men preferred money games above all. Money games were quite popular among all groups, although less among young women.

It does not come as a surprise that various types of digital games were the most popular among men from 15 to 24 years of age, 90 % having played them recently. This group of respondents consisted of active players in other scales too. Engrossment games were only played by a few, mainly young men. Overall, traditional games had been played within the last month by 66 % of all respondents; money games by 59 %, digital games by 31 % and engrossment games by 4 %, as mentioned above. Traditional and money games remained popular

across the age groups, whereas the popularity of digital and especially engrossment games decreased when moving from the youngest respondents towards the oldest.

There was a weak but significant correlation between the playing of traditional games and digital games, and between engrossment games and digital games. The latter is easily explained by the reasoning that those few who play engrossment games also tend to play digital games, since they were mostly young men. The first correlation suggests that, broadly speaking, those who play digital games are also slightly more inclined to play traditional games than those who do not. This might also be largely due to age; young people were the most versatile game players overall. The correlation between traditional and digital games was particularly strong (0.518; $p<0.001$) among women of 15 to 24 years of age, which could mean that the playing of digital games and traditional games go hand in hand for young women.

It was in our interest to find out if the players of certain games behave differently in their everyday lives from those who do not play such games as frequently. Consistent differences between players and non-players would suggest that the playing of certain kinds of games has a connection to habits and attitudes. These kinds of findings would provide an interesting basis for further studies. Thus, the players and the non-players from the four genres were compared in various aspects.

IN PORTRAIT: PLAYERS OF TRADITIONAL GAMES
The attached table provides an overview on the player category 'players of traditional games'. Note that the percentages are related only to this group of players, not to their proportion among all respondents.

| Gender | | Educational level | |
|---|---|---|---|
| Female | 56 % | Elementary school | 20 % |
| Male | 44 % | Secondary level | 30 % |
| Age | | College level | 21 % |
| 15-24 | 18 % | Higher education | 29 % |
| 25-34 | 18 % | Position on the labour market | |
| 35-44 | 14 % | Full-time job | 52 % |
| 45-54 | 20 % | Student/part-time job | 22 % |
| 55-64 | 19 % | Retired/unemployed | 26 % |
| 65-75 | 11 % | Living arrangements | |
| Mean age | 43 | Lives alone | 18 % |
| Median age | 45 | With a partner | 40 % |
| Living area | | With children | 27 % |
| Urban | 78 % | With parents | 10 % |
| Countryside | 21 % | Other | 4 % |

The average age of those who played traditional games was 43 years, and 49 years for the non-players. 68 % of the women and 63 % of the men belonged to the traditional player group. Traditional games were clearly more popular among our middle-aged women than the middle-aged men; otherwise, the player base was similar concerning gender. The educational level of the respondents did not seem to have an effect on the playing of traditional games; neither did the living area or position on the labour market. However, in the youngest two age groups those who lived alone played less traditional games than those who lived with other people. Although our definition of traditional games also included problem-solving games, which can often be played alone, it could be possible that since the nature of board games and card games is social and they are usually played with family or friends, those who live alone may not have as regular chances to participate in such activities as those who live with others. Still, on average the parents whose children lived at home did not play any more traditional games than the respondents who did not have children in their households.

There did not appear to be any significant differences in relation to the time the players of traditional games reported spending on different sorts of activities, except that in the oldest age group, those who played traditional games watched more videos and DVDs and spent more hours on reading books and newspapers than those who did not play. Another finding was that the players of traditional games also visited food restaurants and fast food restaurants a bit more often than non-players, and a larger number of the elderly who played had been engaged in some hobby recently. On the other hand, the non-player women of 25 to 34 years of age had been to theatres and concerts more often than the players. The middle-aged players of 45 to 54 years of age were more avid joggers than the non-players; however, the relationship between jogging and playing was opposite for the 65 to 75 year-olds.

Traditional players seemed to have slightly different values and attitudes from the non-players. In the youngest age group those who played traditional games often were more eager to participate in societal activities and were slightly more worried about the influence of their consumption on the environment; thus, the youngest players seemed to be somewhat more societally aware than the non-players. On the other hand, the young men and women of 25 to 34 years of age who played traditional games were more satisfied with the Finnish society and less frustrated with the injustice in the world than the non-players. Furthermore, the traditional player respondents of 35 to 44 years of age were more likely to disagree with the statement that they had plenty of devices which they used only rarely. This group was actually slightly more frustrated with the world's injustice, unlike the traditional players in the younger group.

In comparison with the players of traditional games in the second oldest age group, the non-players did not like to buy their devices second-hand even to save money and they also felt that brand products were more reliable. In the oldest age group, those who played traditional games were more inclined towards the opinion that traditions were important than those who did not play them. These differences in attitude do not seem to be very consistent and it is quite possible that they are unrelated to the playing of traditional games. However, since the traditional players in older generations mainly played problem-solving games whereas the younger ones also played a great deal OF board games and card games, the social aspects of these games might in some ways be related to their ways of thinking.

Money players were the second largest group out of the four player types. About half of the women (51 %) and two-thirds of the men (69 %) in our sample had played money games recently. The average age of the money players was 46 years and the non-players 44 years. There was a weak correlation between the respondents' educational level and their tendency to play money games; those who had a university degree were slightly less inclined to be money players, and those whose highest level of education was vocational school were more inclined. Middle-aged men who had children also played less money games than those with no children. Otherwise, the background of the respondents had no significant relationship to their money-player status when the effects of age and gender were taken into account.

Those who played money games visited museums overall slightly less frequently than those who did not play. A smaller proportion of the middle-aged and older women who were money-players had visited a church recently than of the non-players. The youngest money-player women and the middle-aged players frequented fast food restaurants more often than non-players. The players also tended to go to game arcades and entertainment restaurants a bit more often. On average, money players spent less time on reading books or newspapers and more time on watching television than non-players. The young female players also spent more time on watching videos and DVDs. These differences in everyday habits were partly related to differences in educational levels.

IN PORTRAIT: PLAYERS OF MONEY GAMES
The attached table provides an overview on the player category 'players of money games'. Note also here that the percentages are related only to this group of players, not to their proportion among all respondents.

| Gender | | | Educational level | |
|---|---|---|---|---|
| Female | 47 % | | Elementary school | 22 % |
| Male | 53 % | | Secondary level | 30 % |
| **Age** | | | College level | 23 % |
| 15-24 | 12 % | | Higher education | 25 % |
| 25-34 | 15 % | | **Position on the labour market** | |
| 35-44 | 15 % | | Full-time job | 56 % |
| 45-54 | 23 % | | Student/part-time job | 16 % |
| 55-64 | 23 % | | Retired/unemployed | 27 % |
| 65-75 | 12 % | | **Living arrangements** | |
| Mean age | 46 | | Lives alone | 19 % |
| Median age | 49 | | With a partner | 44 % |
| **Living area** | | | With children | 27 % |
| Urban | 75 % | | With parents | 6 % |
| Countryside | 24 % | | Other | 3 % |

The attitudes of our money players were also slightly different from the non-players. On average, they agreed more often with the statements that they worked primarily because of the salary and that they usually spent all the money they earned. They were more inclined towards the opinions that good cannot be cheap and that technology is meant to make life easier. A larger portion of them said they read consumer advice to avoid bad experiences. In addition, young women who played money games said that shopping made them feel good much more often than the non-players did. Finally, the players were less worried about the influence of their consumption on the environment. Overall, it seems that the money players in our sample were also more eager to spend money on other things besides games.

A recently published study on the money players in Finland, commissioned by the Ministry of Social Affairs and Health (STM), provided us with some relevant comparison material (Aho & Turja, 2007). The survey was directed to the same age group as our survey, but the sample was much larger with 20 000 recipients and 48 % actual respondents. It was a pleasant surprise to notice how close our findings about money players came to their results.

For example, whereas in our study money- or gambling games appeared to be played by 89 % of the respondents (men 93 %, women 86 %), the STM survey reported that 87 % of Finns (men 91 %, women 83 %) play these games. Furthermore, in both studies the most active players were found to belong to similar age groups with corresponding activity levels. The re-

sults proved to be comparable also in reference to Internet money games. Thus, these comparisons strengthen the reliability of this study. It shows clearly that even if our sample is not statistically representative, it seems to give a good overall picture the Finns as players and gamers at an outline level. Moreover, it backs up our presumption that our sample weighs in favour of the gamers.

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**IN PORTRAIT: PLAYERS OF DIGITAL GAMES**
The attached table provides an overview on the player category 'players of digital games'. The same note as above about the percentages also applies here.

| Gender | | | Educational level | |
|---|---|---|---|---|
| Female | 44 % | | Elementary school | 19 % |
| Male | 56 % | | Secondary level | 34 % |
| **Age** | | | College level | 14 % |
| 15-24 | 34 % | | Higher education | 33 % |
| 25-34 | 29 % | | **Position on the labour market** | |
| 35-44 | 15 % | | Full-time job | 48 % |
| 45-54 | 13 % | | Student/part-time job | 33 % |
| 55-64 | 6 % | | Retired/unemployed | 18 % |
| 65-75 | 4 % | | **Living arrangements** | |
| Mean age | 33 | | Lives alone | 18 % |
| Median age | 30 | | With a partner | 29 % |
| **Living area** | | | With children | 27 % |
| Urban | 81 % | | With parents | 19 % |
| Countryside | 18 % | | Other | 6 % |

Nearly one third of our respondents were digital game players. 39 % of the men and 25 % of the women reported they had played some digital game within the last month. The average age of the digital game players who were recognised by this criterion was 33 years and the non-players 51 years. Since there was such a big difference between the average ages, general comparisons between digital game players and non-players could not be made, since the age of the respondents had an influence on their answers. Therefore we examined the habits and attitudes of the digital players mainly within the age groups. Naturally, on average digital game players reported that they spent more time on playing computer and video games per week than the non-players.

Young men who played digital games spent more time on watching videos or DVDs than the non-players of digital games, but digital player (i.e. gamer) status was not related to the frequency of jogging or going for walks in any age group. Thus, the generalisation that those who play digital games exercise less does not seem to apply on the basis of our survey. Another observation concerning the everyday habits of

digital game players was that the middle-aged women who played digital games visited entertainment restaurants more often than those who did not play.

In general, digital game players went to the movies more often than non-players, but this was due to the age difference; movies are more popular among young people in general. Other differences in everyday habits could also be mostly explained by age. Older people went for walks or jogged somewhat more often than the younger, and they also participated in association meetings more frequently, whereas younger people favoured various restaurants and went to the movies more often than the older. In general digital game players also spent less time on household chores and reading books or magazines and more time on watching videos or DVDs, but these differences were mostly caused by the general age difference between the players and the non-players.

Young digital game players felt that technology was meant to make life easier more often than the non-players. Young female players were also more in agreement with the statement that they worked primarily because of the salary. Among the elderly, women who played digital games were less inclined to agree with the statement that technology was meant to make life easier than the non-player women. Elderly playing men agreed more often than the non-players that the products they bought matched their ideology. Otherwise, the attitudes of digital game players were quite similar to those of the non-players of digital games.

Only about 1 % of the women and 8 % of the men belonged to the engrossment game player group. However, in examining this group it should be noted that role-playing games and the like are usually more time-consuming than other game types and they may very well be played less frequently than every month. Thus, the true percentages of engrossment game players may be slightly higher. In any case, the average age in this group was 25 years, whereas the non-players' average age was around 46 years. The player group was predominantly male.

Since there were only six women who had played engrossment games recently, statistical comparisons between the player and the non-player women were quite impossible to make. However, only one of the women was older than 24 years; she was 53 years old. The engrossment player women had no obvious common characteristics or habits, except that none of them had been to a church or a game arcade recently but everyone had been engaged in some hobby within the last month. All of them used the Internet every day. They also played traditional and digital games, but did not play money games.

**IN PORTRAIT: PLAYERS OF ENGROSSMENT GAMES**

The attached table provides an overview on the player category 'players of engrossment games'. The same note as above about the percentages also applies here.

| Gender | | Educational level | |
|---|---|---|---|
| Female | 18 % | Elementary school | 27 % |
| Male | 82 % | Secondary level | 35 % |
| **Age** | | College level | 9 % |
| 15-24 | 56 % | Higher education | 29 % |
| 25-34 | 29 % | **Position on the labour market** | |
| 35-44 | 6 % | Full-time job | 38 % |
| 45-54 | 9 % | Student/part-time job | 50 % |
| | | Retired/unemployed | 12 % |
| Mean age | 25 | **Living arrangements** | |
| Median age | 23 | Lives alone | 24 % |
| | | With a partner | 18 % |
| **Living area** | | With children | 9 % |
| Urban | 82 % | With parents | 32 % |
| Countryside | 18 % | Other | 18 % |

The young men who played engrossment games tended to disagree with the statement that brand products are more reliable, whereas the non-players tended to agree. These young engrossment game players also spent more time on reading books or newspapers and playing computer or video games than the young non-players. In addition, the engrossment game playing men in the youngest age group gave more time to outdoor activities and watching videos or DVDs. Both of the two engrossment player men of 35 to 44 years of age agreed that they took active part in societal activities, whereas the non-players in this group tended to disagree.

The percentage of the respondents who had not played any of these four game types or pub games within the last month was 16 %. Their mean age was 51 years and 63 % of them were women. On average, they spent more time on hobbies and less time on watching videos or DVDs and playing computer or video games than those who had played some game recently. The only significant difference in their attitudes was that these non-players were slightly less likely to disagree with the statement that they worked primarily because of the salary than the players. Generally speaking, there were no large differences between the players of any game type and the non-players besides the age and gender distributions. Other background factors of the respondents did not seem to have a notable influence on their general playing practices.

When inquired about the free time and the money at their disposal, more than a half of the respondents said that they

had enough of both for hobbies and recreation. Only 9 % of the respondents reported that they lacked both the time and the money. In addition, 16 % of the respondents told us that their time was spent mostly for working and household chores, and another 16 % felt that they did not have enough money for their hobbies and interests.

It could be expected that the perceived amount of free time has a connection with the reported playing habits, but that does not seem to be the case. Those who belonged to any of the four player types had similar opinions concerning free time as the non-players. The reported weekly time spent on computer or video gaming was also slightly shorter among those who considered themselves too busy than among those who thought they had enough free time, but the difference was not significant. Neither did we find any significant difference in the number of all games that the respondents reported to have played recently in regards to the perceived amount of money. However, 29 % of the money players felt they did not have enough money for hobbies and interests, whereas only 20 % of those who did not play money games felt likewise (p=0.020). The difference was not huge, but it fits our earlier observations about the money players' willingness to spend more money. Among the other player types, there were no significant differences in regard to the perceived amount of money.

Besides age, gender and other background variables, we hoped to find out if the people who had interest in certain activities would have divergent gaming habits from those who did not stand out in these ways. In order to do this we distinguished five groups of people out of the data: those who spent a fair amount of time outdoors; those who were socially active; those who actively participated in societal matters; those who frequented restaurants; and those who were active and diverse Internet users. The selection was based on the indicators that represent different lifestyles. In respect to the general, stereotypical understanding of digital games and gamers we wanted to find out if those who lead active lifestyles do not have as much time or interest to play games as those who do not go out, participate in activities, exercise and socialise as much.

Percentages of the respondents belonging to each group are presented in Table 19. In the interpretation, the fact that the methods for separating these groups were somewhat arbitrary and did not necessarily bring out all the people who, in practice, belong to the group in question, was taken into account. Equally, these groups may also have included people who do not primarily match the description. We will be gathering more information on the informants' everyday life practices in the interviews to complement these groupings. This, we hope, will enable us to analyse in more detail gaming as one of these practices.

Table 19. The percentages of respondents with certain characteristics of interest.

| | |
|---|---|
| Outdoors people | 62 % |
| Socially active people | 80 % |
| Societal actors | 23 % |
| Restaurant-goers | 32 % |
| Versatile Internet users | 21 % |

The first group, "outdoors people", was formed from the respondents who had either gone for a walk or jogged within the last couple of days or reported having spent more than seven hours on outdoor activities each week. Thus, this definition probably left out many people who e.g. went to the gym or practised team sports in sports halls, but the questionnaire did not equip us to separate all kinds of physically active people from the data. Still, this group most likely included at least some of the respondents who liked fresh air and exercise.

When compared with the types of games the "outdoors people" had played recently, some interesting results appeared. Only 26 % of those who spent plenty of time outdoors had played digital games within the last month, whereas for those who had not spent as much time outdoors the number was 38 % (p=0.001). This difference, however, disappeared when it was controlled with age. This means that in general those who played digital games were less outdoors-oriented, but the difference is mainly due to the age difference of the players and the non-players. Based on this finding, the common idea according to which physical exercise and digital games are opposites was certainly partly true, but only because the young people in our sample played games more and spent less time outdoors in general. Yet, this said, it must also be considered that young people might not report the rutines of biking or walking as a form of outdoors exercise, whereas older people are more willing to do so.

In addition, when we compared the amount of weekly digital play reported by the respondents, in the age group of 25 to 34 years of age those who had jogged recently or spent plenty of time outdoors reported lower weekly playing hours than those who had not been so physically active recently. However, no such difference existed in other age groups. Another observation regarding time use was that in the groups of 35 to 44 and 65 to 75 years of age, those who spent lots of time outdoors also worked fewer hours. Sporty elders also spent less time on digital gaming. In the age groups of 45 to 54 and 55 to 64 years of age, the only difference was that the physically active respondents spent more time on hobbies. There were no significant differences in the proportion of "outdoors people" amidst the players and the non-players of other game types than digital games.

The group of "socially active people" was compiled of the respondents who had been to an association meeting or en-

gaged in a hobby or met their friends within the last couple of days, or spent more than seven hours per week on hobbies. This group ended up to be quite large, with four out of five respondents belonging to it. Interestingly, a larger proportion of those who did fit our broad terms of sociability were digital game players than of those who did not (33 % versus 20 %, p=0.001). This finding contradicts the stereotypical picture of digital game players, who are often considered to be asocial. However, the difference did not remain significant when controlled with age. Thus, it can also be explained by the reasoning that young people take part in social activities more actively than the older and they also play digital games more.

In regard to other game types there were no notable differences in sociability between the players and the non-players. Considering the general influence of sociability, reported time usage in a couple of activities varied slightly between the social and the less social youth: the social 15-24 year-olds spent less time on watching TV and videos than their not-so-social counterparts. On the other hand, the social 25-34 year-olds spent less time on household chores. Yet this kind of a division into social people and others, which is based on secondary variables, must be understood to be only indicative.

Moving on, the respondents who had been to an association meeting within the last couple of days or agreed with the statement "*I participate actively in societal activities*" were categorised as "societal actors". 23 % of the respondents fulfilled this criterion. Overall, there was no difference between the preferred game types in regard to this characteristic. Yet traditional games were more popular among the 15 to 24 year-olds who participated in societal or associational activities. We found no correlation with the other three game types in any of the age groups. Those 15 to 34 and 65 to 75 year-olds who participated in societal activities also watched less TV, but in contrast active 45 to 54 year-olds watched more videos and DVDs.

The group of "restaurant-goers" was created from the respondents who had been to a food or entertainment restaurant within the last couple of days, or who said that they liked to visit new restaurants frequently. Again, there was an overall positive correlation between recent digital gaming and active restaurant visits, which however vanished with age control. Thus, young people went to restaurants more often and they also played more often, which explains the correlation, but one activity does not seem to affect the other. The time the restaurant-goers spent on chores and activities did not differ much from the non-goers, except that the 25 to 34 year-olds who frequented restaurants actually watched more videos and DVDs than their counterparts. Interestingly, 65 to 75 years old restaurant-frequenters spent more time on playing digital games; perhaps they were more active overall.

Finally, the last group of interest for us was those who use the Internet not only actively but also diversely, the "versatile Internet users". Here we sorted out the respondents who reported that they had done at least five different things on the Internet within the last month (see Appendix 1, Question 18; not including writing email, because that is a commonplace nowadays). This was again a difficult selection process, but it left us with 21 % of the respondents. The percentage of these diverse surfers was highest among the age groups of 25 to 34 (46 %) and 15 to 24 years of age (30 %), and lowest among 65 to 75 years of age (5 %). Overall, these versatile Internet users played all kinds of game types, except for money games, more often than the less diverse surfers. Not surprisingly, most of the differences disappeared again when controlled with age, but the frequency of recent digital playing stayed higher for active surfers among respondents of 15 to 34 and 45 to 54 years of age.

Engrossment games were also slightly more popular among young respondents who were active Internet surfers, but the subgroup of role-players and the like was so small that making reliable comparisons was hard. Active surfers of 15 to 54 years of age spent more time on playing digital games than those who were less versatile Internet users. 35 to 44 year-old diverse surfers actually also spent significantly more time on reading books and newspapers than the less Internet-oriented respondents. Active Internet users in the eldest age group spent more time than average on working.

To sum up, traditional games and money games were relatively popular among our respondents regardless of their age or gender. We also found digital game players among every age group, although they were quite rare among the oldest respondents. Engrossment games were almost exclusively played by young men. Money players seemed to have a tendency towards spending more money also in general, when compared with the non-players. Overall, the everyday habits and attitudes of the players of other game types were not very much different from those of the non-players; however, in some of the age groups players did exhibit certain differences from non-players.

# 4.  Digital Games and Gamers

## 4.1. Introducing digital gaming

Thus far we have mostly talked about playing and digital gaming as a part of games cultures in general. In this chapter the main focus is directed to digital gaming, the gamers and the games themselves. The second part of our survey questionnaire was designed to offer us detailed information about the digital games that the respondents play, their reasons for gaming, and their attitudes towards various elements in games and gaming.

The grounds for the division we made between digital gamers and non-gamers among our respondents were explained in detail in Chapter 2.6. All in all, there were 424 (53 %) respondents out of our total sample who were in some way recognisable as digital gamers. This group of people is referred to as "All Gamers". Out of this group, a group of 232 respondents also answered the detailed questions concerning digital gaming *per se*. These respondents are defined as "Active Gamers". In the following analysis of digital gaming we consider both of these gamer groups as informants. Further in the analysis we also make a distinction between casual gamers and committed gamers. At this stage, the respondents are divided into subgroups of "Hardcore Gamers", "Regular Gamers", "Occasional Gamers" and "Light Gamers". These categorisations are used to analyse both the "All Gamers" and the "Active Gamers" groups.

In this chapter we will first describe the "All Gamers" group in more detail, both in itself and in comparison with non-gamers. After this we move on to more detailed information about actual digital games and their meanings to "Active Gamers". To finish with we discuss the aspects of casualness and the level of commitment in regard to both gamer groups.

## 4.2. Does gaming make a difference? Descriptions and comparisons of gamers and non-gamers

The percentage of "All Gamers" among our respondents decreased in quite a linear fashion with age, both overall and within gender (Figure 8, p. 40). The median age of these gamers was relatively high, 37 years, whereas the median age of the non-gamers was 56 years. The respective mean ages were 38 and 53 years. The share of female gamers was significantly smaller than that of male gamers in the age groups of 25 to 34 and 35 to 44 years of age. Overall, 48 % of the women and 58 % of the men were classified as "All Gamers". Thus, men were into digital gaming slightly more than women. Still, it should be noted that the portions of the male and the female gamers

were close to even in other than the aforementioned age groups, and the gender gap was not large overall.

We used our original division into six age groups when examining the group of "All Gamers" (see Table 20). There were only a few gamers in the eldest age group, but otherwise the age groups had more than enough people in them for statistical purposes. Note that the percentages presented in the table are calculated from the "All Gamers" group, not from all the respondents.

Table 20. The age and gender distributions of "All Gamers".

|  |  | Men | Women | Total |
|---|---|---|---|---|
| Age | 15-24 | 46 | 53 | 99 |
|  |  | 22 % | 25 % | 23 % |
|  | 25-34 | 59 | 42 | 101 |
|  |  | 28 % | 20 % | 24 % |
|  | 35-44 | 33 | 34 | 67 |
|  |  | 16 % | 16 % | 16 % |
|  | 45-54 | 35 | 43 | 78 |
|  |  | 17 % | 20 % | 18 % |
|  | 55-64 | 26 | 30 | 56 |
|  |  | 12 % | 14 % | 13 % |
|  | 65-75 | 12 | 10 | 22 |
|  |  | 6 % | 5 % | 5 % |
| Total |  | 211 | 212 | 423 |
|  |  | 100 % | 100 % | 100 % |

One noteworthy observation is that we found no significant differences between these gamers and the non-gamers in regard to other background variables than age and gender. In other words, digital gaming seems to be as common in urban neighbourhoods as in the rural areas, regardless of household income or educational level.

The differences in the use of time on activities on a weekly basis between "All Gamers" and non-gamers were focused mainly on household chores and watching videos or DVDs (see Table 21). There were no consistent general differences which would not have been caused by the age difference between the gamers and the non-gamers. Overall, the playing of digital games does not seem to add to or take significantly away from the time used on other activities.

On average, the few non-gamer men in the second age group spent much more time per week on household chores and outdoor activities than the gaming men. In contrast, the gamer men in the second oldest age group spent more time on household chores than the non-gamers. The medians also differed considerably. As for videos and DVDs, the gamer men of 35 to 44 years of age actually watched *less* videos or DVDs than the non-gamers in this group, but the opposite was true of the men in the 45 to 54 age group. The gamer women of 45

to 54 years of age also watched more videos or DVDs than the non-gamer women. Finally, the gamer men in the oldest age group watched more videos or DVDs than the non-gamers. Apparently watching videos or DVDs is slightly related to digital gaming among the older generations.

Table 21. The significant differences in the mean hours spent on everyday activities among our respondents.

|  |  | All Gamers | Non-gamers | *p* value |
|---|---|---|---|---|
| Household chores | 25-34 men | 6.7 | 16.1 | <0.001 |
|  | 55-64 men | 11.1 | 7.3 | 0.007 |
| Watching videos/DVDs | 35-44 men | 1.0 | 2.4 | 0.019 |
|  | 45-54 men | 1.7 | 0.9 | 0.015 |
|  | 45-54 women | 1.9 | 0.6 | <0.001 |
|  | 65-75 men | 3.3 | 1.0 | 0.024 |
| Outdoor activities | 25-34 men | 3.1 | 6.1 | 0.005 |

A significantly larger part of the elderly non-gamers than of the elderly gamers left the questions concerning general attitudes unanswered (see also Figure 12, p. 51). Otherwise, when setting the influence of age aside, general attitudes, opinions and values were not much different between "All Gamers" and non-gamers. The only notable difference that appeared was that the middle-aged gamer men read more consumer advice to avoid bad experiences than the non-gamers, which could mean that they have a greater interest e.g. in digital technology and they also wish to read up on things before buying them.

One of the first questions concerning gaming inquired how old the respondents were when they played digital games for the first time. 46 % of the respondents answered the question and, according to our definition, 84 % of them could be classified as digital gamers. Thus, there were also people who had played digital games in the past and remembered how old they were when they played for the first time, although they did not currently play.

Only slightly more than two-thirds of the "All Gamers" answered the question, but this is probably partly due to the fact that not everyone can recall their exact age of gaming for the first time. Some of the respondents may also have grown tired with the questionnaire at this point and decided to skip the last paragraphs, including this question. We also finally excluded one answer in which the time that had passed since the first occasion of digital gaming would have been 55 years – an unlikely figure, since digital games practically did not exist in the fifties. (Finland got its first mainframe computer only in 1958; Paju 2005.)

The mean age for starting to play digital games was 20 years, and the median was 14 years. On average the respondents had first played a digital game 15 years ago, and a half of them had begun to play between 10 to 21 years ago. The

whole range of answers was from zero to 39 years ago. As expected, there was a very strong positive correlation between the respondent's age and the age they began playing (correlation coefficient 0.856; p<0.001): the older the respondents, the older they had been when playing a digital game for the first time. On the basis of these responses one could surmise that, on average, digital gaming as a more popular cultural phenomenon began to emerge in Finland in the early nineties, about 15 years ago (cf. Eskelinen 2005). There was no difference between gamers and non-gamers in regard to the average time that had passed since they began to play.

Since the great majority (90 %) of the youngest age group respondents were classified as "All Gamers" it is a somewhat moot point to make thorough comparisons among this age group between those who play digital games and those who do not. That being said, there did not seem to be any notable differences in this age group in this regard, other than that a larger portion of gamers than non-gamers used the Internet daily (84 % versus 46 %; p=0.008). This association between gaming and more frequent Internet usage was also evident in the other age groups.

However, the respondents' educational level, living area, household conditions or household income did not seem to have any kind of a connection with their gamer status when examined within age groups. Neither did the position on the labour market have a significant influence on whether or not the respondent was a gamer. Of course, their level of commitment in gaming is a different matter altogether and will be explored later on in this chapter.

The respondents were inquired about their opinions towards digital games and gaming with a set of statements (see Appendix 1, Question 24). It should also be noted that the structured question did not offer the respondents a chance to write down their opinions about gaming. Therefore, the question might not have captured all the attitudes that the respondents had towards playing digital games. We also have a slight suspicion that not every respondent thought about *digital gaming* when ticking the statements. Yet even if there were a couple of money-players or traditional players among those who answered this section, the effect on the results would be quite minor.

Overall, the "All Gamers" committed to these statements more often than the non-gamers, which was an expected outcome (84 % versus 45 % chose at least one statement to hold true for them). Most likely, gamers had more opinions on gaming than the others. For those who responded to these statements the most popular choices were "*playing develops many skills*" and "*playing is a nice way to spend time together*" (30 % and 29 % of all respondents, respectively). A similar proportion of both gamers and non-gamers agreed with the first statement, while gamers agreed more often with the second one.

Apparently also some of those who do not play digital games thought that games are useful in developing certain skills.

The statement "*I have advised someone to reduce their playing*" was also found to be familiar: 29 % of the gamers and 19 % of the non-gamers agreed with it. However, only a handful of gamers (5 %) felt guilty about their playing and even fewer (1 %) thought that the money they spent on games was a problem. Of course, it must be considered that even though the survey was anonymous some people might not have wanted to admit that they have problems with their gaming, or perhaps the problem-gamers declined to respond to this question altogether.

All in all, according to our survey, it seems that the most common problem associated with digital gaming was the time spent on it; some might end up neglecting their other duties due to gaming, and some found it necessary to advise others to reduce their gaming. The mean gaming time that our respondents reported altogether was approximately 1.8 hours per week, with a median of zero hours (more detailed information about gaming time distributions across age groups and among genders can be found in Figure 4, p. 35).

However, since nearly half of the respondents were non-gamers (in reference to both gamer groups), the mean gaming time does not represent the time the gamers spent on digital games. For the "All Gamers" group the mean weekly gaming time was 3.3 hours and the median was one hour. For the "Active Gamers" the mean time was 4.6 hours and the median was two hours. Thus, those who made the effort to answer the detailed questions about their gaming were also the ones who played more.

Among the non-gamers, opinions about digital gaming were quite similar regardless of gender. However, among the "All Gamers" group men's and women's opinions differed on a couple of points which were mostly related to the time spent on digital gaming. The women were less inclined than the men to say that they would play more if they had the time (9 % versus 26 %), and a larger proportion of the men than of the women said that someone had asked them to reduce their gaming (12 % versus 1 %).

In addition, more men than women tried to restrict their gaming (18 % versus 8 %) and more men also felt that someone restricted their gaming (11 % versus 2 %). Thus, it seems that at least most of the gamer women did not experience outside pressure to keep an eye on their gaming time. Of course, their reported weekly gaming hours were in general much lower than those of the men, and they most likely did not feel the need to control their gaming. Men also agreed more often than women that digital gaming was quite a cheap hobby (41 % versus 23 %), and that the dangers related to gaming were discussed too much (11 % versus 3 %). These differences were all statistically significant.

In the previous chapter we established five distinguishable groups of people among our respondents with relation to their ways of living (see Table 19, p. 65). In the analysis of digital

gaming we wanted to find out whether the proportions of these groups would differ from the whole sample, and whether the "All Gamers" or the non-gamers would stand out in some way (Table 22).

The relative numbers of "socially active people" and "societal actors" were quite similar among both of the groups. However, there was a considerably smaller number of "outdoors people" within the group of gamers than within the group of non-gamers. In contrast, a slightly greater number of gamers frequented restaurants, and remarkably many of them were diverse Internet users. Nevertheless, these differences mainly reflect the age difference between the two groups, since the older respondents spent more time outdoors and less time on the Internet in general, and went to restaurants more seldom. When the proportions of the five kinds of people were examined within the age groups, the only significant difference was that the gamers of 25 to 54 years of age were more diverse Internet users than the non-gamers of the same age range.

**Table 22. The five kinds of people amidst the "All Gamers" and the non-gamers.**

|                         | All Gamers | Non-gamers |
| ----------------------- | ---------- | ---------- |
| Outdoors people         | 54 %       | 71 %       |
| Socially active         | 82 %       | 77 %       |
| Societal actors         | 23 %       | 23 %       |
| Restaurant-goers        | 36 %       | 28 %       |
| Versatile Internet users| 33 %       | 7 %        |

Gamer men of 25 to 34 years of age spent less time on outdoor activities than non-gamer men, and there were also on the whole less "outdoors people" among the gamers than the non-gamers. The youngest age group among our respondents also went for walks or jogged less frequently than the older ones and played digital games the most, and used the Internet the most frequently. Still, this being so, our study does not confirm or disprove the stereotype of the young men who sit in their rooms in front of their computers or consoles and never go for a jog or exercise (cf. Ermi & al. 2004).

It is true that all of the young people who were non-gamers had jogged within the last month, whereas only 66 % of the young gamers had reported to have done so, but this difference was not statistically significant because the number of non-gamers in the first age group was very small. Thus, it would be hasty to say that young people exercise less because they spend their time on staring at computer monitors or in front of consoles. If anything, it is more likely that these changes in lifestyles are brought on by some third factor; namely, digital technology has become more common during the past 15 years, and youngsters are always the quickest to catch on to new things. And, we would like to point out again

that other forms of exercising besides walks or jogs and outdoor activities were not inquired in our questionnaire. For sure some of the young people exercise in gyms and sports halls, instead of on jogging paths.

As was expected, the respondents belonging to the group of "All Gamers" had more digital devices and gaming devices than non-gamers. Almost everyone owned a mobile phone, regardless of their gamer status, and digital TVs or set-top boxes were also equally common (around 67 %), whereas Macintosh computers were equally rare (around 4 %). Otherwise gamers owned more digital technology than non-gamers. The mean amount of money that the gamers had spent on digital devices during the past couple of years was 1 160 euros, compared to 890 euros for non-gamers (p=0.018).

Although according to our classification 53 % of the respondents were gamers, only about 41 % of the respondents answered the questions concerning the time, place and company of their gaming. These questions were directed to those who had already reported of gaming at least every now and then, and for reliability reasons it was good to note that there were no non-gamers among those who answered these questions. However, more than 20 % of the "All Gamers" did not answer the questions. This could either mean that they were such occasional gamers that they did not feel that the questions were relevant to them, or that our classification of gamers also included some of those who do not play digital games in practice. The most probable answer is that there were both occasional gamers and non-gamers among the 20 %. Still, their relative proportions remain unknown.

Evening hours from 6 p.m. to midnight were by far the most common gaming time, with 58 % of the gamers (30 % of all respondents) ticking this choice. Daytime from noon to 6 p.m. was second in popularity, with 16 % of the gamers (8 % of all respondents) reporting this time. There were no big differences in the preferred gaming times across age groups, although a slightly larger portion of the eldest people played during the daytime and, surprisingly, at night. However, the number of gamers in the older generations was smaller, and their more frequent nighttime gaming could be understood as random variation.

Almost everyone played digital games at home (39 % of all respondents, 74 % of "All Gamers"), and other places were rarely used for playing, except "at friend's" (7 % of all respondents, 14 % of "All Gamers"). 34 % of the respondents (meaning 65 % of "All Gamers"), usually played alone, but in addition there were quite a few social players, as can be seen from the table below (Table 23). Only two respondents played with their parents; these were sixteen and seventeen year old young people. The youngest people in our target sample were 15 years old; thus, teenagers over that age apparently do not tend to play with their parents anymore. Then again, quite many respondents reported playing with

their children; 38 % of gamers who had children in their household played digital games with them.

Table 23. The proportions of answers to the question "Who do you usually play with?"

| | Number of the respondents | Percentage of the respondents | Percentage of the All Gamers |
|---|---|---|---|
| Alone | 277 | 34 % | 65 % |
| With a friend or friends | 109 | 14 % | 26 % |
| With children | 65 | 8 % | 15 % |
| With a partner | 54 | 7 % | 13 % |
| With strangers on the Internet | 45 | 6 % | 11 % |
| With siblings | 25 | 3 % | 6 % |
| With friends on the Internet | 22 | 3 % | 5 % |
| With work or study mates | 18 | 2 % | 4 % |
| With parents | 2 | 0.2 % | 0.5 % |

Among all the respondents, there were 16 % of those who told us that they only played alone (30 % of "All Gamers"). 18 % played both alone and with someone else (34 % of "All Gamers"), and 8 % said that they played with others, but did not play alone at all (15 % of "All Gamers"). Thus, a half of the gamers in our whole sample could with certainty be said to be social gamers. Of course, it is a different thing to play with friends in the same room or with strangers on the Internet (the question of how different it really is will be examined more closely in Chapter 5).

Age seems to have an effect on gaming habits in this regard; a majority of those who were older than 45 years of age only played alone, whereas younger people tended to play both alone and with others. The only significant difference in regard to gender was within the age group of 25 to 34 year-olds, in which a much larger proportion of women than of men only played with others (p=0.015).

To sum up, the most notable difference between "All gamers" and non-gamers was their age. The average gamer was younger than the average non-gamer and also somewhat more likely to be a man. Gamers were more accustomed to digital technology and used the Internet more frequently than non-gamers. Nevertheless, otherwise their habits and attitudes did not differ more than they generally differed between the older and the younger respondents.

## 4.3.  The games they play: the most popular titles and genres

In this chapter we will shift our focus from the "All Gamers" to the "Active Gamers" group, which is formed from a smaller gamer sample of the respondents. The group of the gamers who carried on answering the more detailed questions about their

gaming was merely 29 % of the respondents, which is to say that it is quite a small sample in terms of quantitative research. Thus, the results and the descriptions produced with this data cannot be assumed to be fully representative of the Finns' digital gaming habits. On the other hand, we consider the information given by this smaller gamer group to be more reliable, since they surely had fresh experience about digital games and gaming. The "Active Gamers" sub-sample serves as a source of valuable and interesting information, and is also taken as a starting point for the qualitative research phase of InGa.

The gender distribution in the group of "Active Gamers" was more or less equal. The proportion of men was 56 %, and respectively 44 % of the participants were women. Out of all respondents, 23 % of the women and 36 % of the men filled in the digital gaming form (Table 13, p. 31). Thus, although there were more women than men among all of our respondents, this difference evened out and actually turned around when considering the sub-group of "Active Gamers".

The age distribution within this sub-group was very unbalanced, tilted towards the young. The mean age was 33 years and the median age was 29 years, and thus half of them were younger than 30 years of age. Only one out of four was older than 42 years of age. Thus, it is not reasonable to divide the "Active Gamers" into as many as six age groups in the following analyses. We decided to divide them into three age groups, each containing roughly one third of them (Table 24). The eldest one of these gamers was a 71 year-old senior, the youngest a 15 year-old youngster.

**Table 24. Age and gender distributions of the Active Gamers.**

|  |  | Men | Women | Total |
|---|---|---|---|---|
| Age | 15-24 | 40 | 36 | 76 |
|  |  | 31% | 35% | 33% |
|  | 25-39 | 55 | 31 | 86 |
|  |  | 42% | 30% | 37% |
|  | 40-71 | 35 | 35 | 70 |
|  |  | 27% | 34% | 30% |
| Total |  | 130 | 102 | 232 |
|  |  | 100% | 100% | 100% |

The respondents belonging to the "Active Gamers" group were much younger than the rest of the respondents on average, and the proportion of women was smaller. There were no significant differences in other background factors or living conditions of these gamers when compared with the other respondents, which backs up the impression that life situations do not affect digital playing practices or vice versa on a broad level, when the effects of age and gender are controlled. Yet the background of the gamers may affect the types of games

they play or the nature of their playing, e.g., casual or committed, which will be discussed in the following chapters.

The following analysis focuses on the games that the "Active Gamers" played. The popular titles and genres can be estimated to represent the general gaming tastes of the Finns to a certain extent, even if the popular game genre naming conventions produce some arbitrariness while classifying individual games. (For a discussion of genres in games, see Crawford 1982/1997 [*Chapter 3*] and Wolf 2001, 113-34. In this study we have mainly followed a familiarity and utility based categorisation introduced in Ermi & al. 2004.)

In the beginning of the digital games section of our questionnaire the respondents were asked to write down up to three games which they had played the most during the past year. In total 97 respondents (42 %) only reported one game, whereas 66 (28 %) reported two games and 69 (30 %) reported three games. These numbers add up to 436 reported games, out of which we could reliably discern and name 149 different individual games or game series. 63 of these games were mentioned more than once.

To simplify, we decided to group the games which belonged to the same series under the same category, e.g. both "*Sims*" and "*Sims 2*" were grouped under "*The Sims*". This seemed sensible because the games in the same series are in most cases fundamentally similar and, more importantly, there was no way of knowing whether or not the respondent who wrote down "*Sims*" actually meant the first instalment of the series or the second.

In addition to these recognisable games, there were some cases in which the respondent did not name the game they had played, but merely reported having played "*Xbox*" or "*mobile phone*". In total there were 27 responses in which the name of the game could not be defined, and in twelve of these cases game type could not be determined either. However, we have also included these responses in the data, since they form their own group; those whose answers were this vague probably were not that interested in games themselves, but perhaps played games randomly to pass time (this issue will be examined in more detail later on in the analysis).

"Active Women Gamers" had less variation in their responses than the men in this group. On the whole, women reported 170 games (approximately 1.67 each) and 62 individual games or game series, whereas men reported 266 games (approximately 2.04 each) and 119 individual games or game series. This indicates that either men played more games, or that women were more reluctant to make the effort to answer the sections about the second and the third game.

One game in particular stood out in the responses: *Solitaire*. Solitaire was by far the most popular game reported by the respondents, as it was mentioned by 54 people. This means that 23 % of all "Active Gamers" had solitaire in their list of the three games played, and that its share was 12 % of

all reported games. The median age of these solitaire-players was 48 years of age, and two thirds of them were women. Other games in the top ten list (Figure 16) were more or less evenly distributed. Other favourites of the women were *The Sims*, *Tetris* and *Mahjong*, all of which share certain problem-solving characteristics along with solitaire. Other games in the top ten list were mainly favoured by men, especially *Civilization* and *Counter-Strike*.
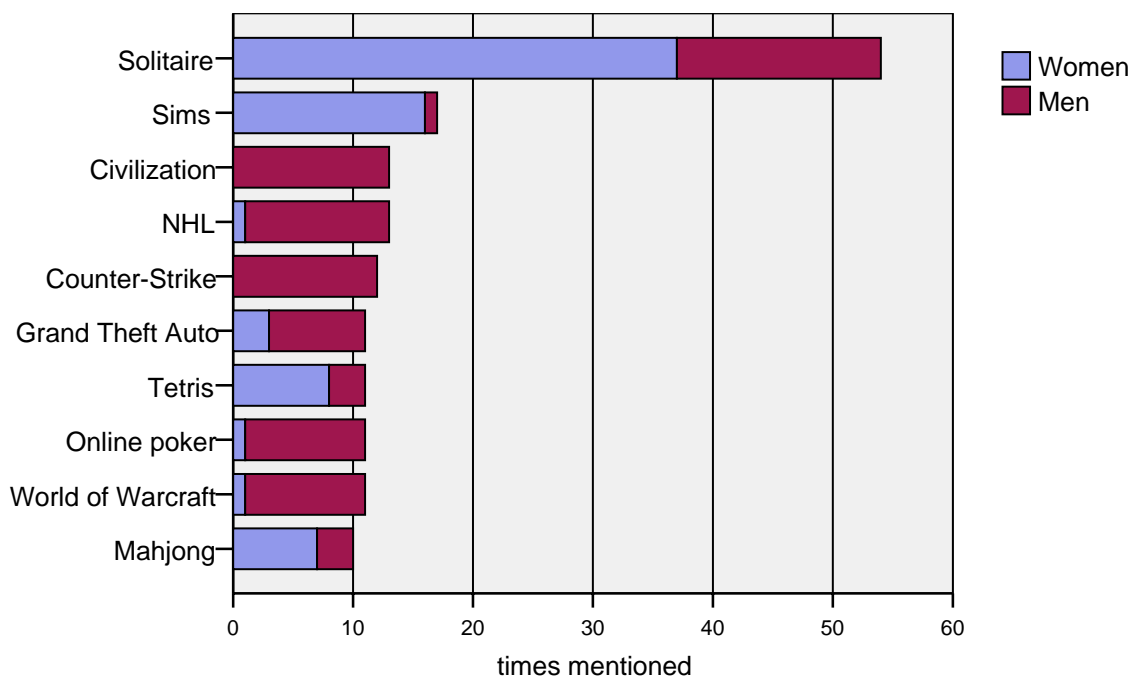


Figure 16. The most popular games played by our "Active Gamers" during the past year.

The popularity of *Solitaire* is an interesting finding, although not unexpected in retrospect. It is a game that is effortlessly accessible to every Windows-user, easy to learn and quick to play. Respondents of every age group played it, although it was somewhat more favoured by older respondents. Other games in the top ten list cannot be said to have reached the masses, at least not on the basis of our survey; even *The Sims*, a popular title, was mentioned as one of the most played games by only 7 % of the respondents. However, this means that there was a great deal of diversity among game titles.

*Solitaire* was the most popular game among both men and women. Otherwise the top games differed between genders (see Table 25 below). The women's list was populated with small classic or puzzle games, although there were also a couple of more extensive, commercially produced and marketed "off-the-shelf" game titles, like *Silent Hill*. *The Sims* was naturally on the list, accompanied by *SingStar*, a popular karaoke game. In contrast, the men's list consisted largely of first-person or third-person shooters. As mentioned before, on the whole, men

tended to report more than one game more often than women, and thus they also had more variation in their game choices.

**Table 25. The most popular games or game series among the "Active Gamers" according to gender.**

| | Men | | | Women | |
|---|---|---|---|---|---|
| 1 | Solitaire | 13 % | 1 | Solitaire | 36 % |
| 2 | Civilization | 10 % | 2 | The Sims | 16 % |
| 3 | Counter-Strike | 9 % | 3 | Tetris | 8 % |
| | NHL | 9 % | 4 | Mahjong | 7 % |
| 5 | Online poker | 8 % | 5 | Sudoku | 5 % |
| | World of Warcraft | 8 % | 6 | aapeli.com[3] | 4 % |
| 7 | Battlefield | 6 % | | SingStar | 4 % |
| | Grand Theft Auto | 6 % | 8 | Grand Theft Auto | 3 % |
| 9 | Call of Duty | 3 % | | Minesweeper | 3 % |
| | Day of Defeat | 3 % | | Silent Hill | 3 % |
| | Freecell | 3 % | | | |
| | Need for Speed | 3 % | | | |
| | Quake | 3 % | | | |
| | Wolfenstein | 3 % | | | |

The most popular games also differed between the age groups to some extent. The most common game among the 15 to 24 year-olds was *The Sims*, followed by *Counter-Strike*, *Grand Theft Auto* and *Solitaire*. The 25 to 39 year-olds had mostly played *Solitaire*, *Civilization*, online poker and *NHL* games. The 40 to 71 year-olds who answered these questions favoured *Solitaire* above all the others, followed by *Mahjong* and *Tetris*. Thus, on the basis of this survey, *Solitaire* seems to be the game that the Finns play the most, regardless of gender or age.

In the analysis, the games which the respondents reported were classified into genres (see Figure 17). The genres were based on a classification created during our earlier studies on children's gaming practices, "The Power of Games and Control of Playing – Children as the Actors of Game Cultures" (Ermi et al. 2004). However, we made some modifications to the genre classifications, which in this earlier study were adapted to classify 10–12 year-old informants' favourite games. None of our respondents wrote down any edutainment games, so the edutainment genre was dropped out. In addition, we also wanted to add three genres: party games, money games and massively multiplayer online role-playing games (MMORPGs), as these games turned up

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[3] *aapeli.com* is a Finnish web portal offering various small puzzle style games.

in adult gamers' responses and these game types could not be easily fitted into any genres from this earlier study.

In conclusion, we ended up having twelve genres instead of the ten in the earlier study, accompanied by the "undefined" category in the figures. These genre nominations are commonly used by games journalists and hobbyists, and they have their historical basis. The categorisation is, however, far from unproblematic, as we will see.
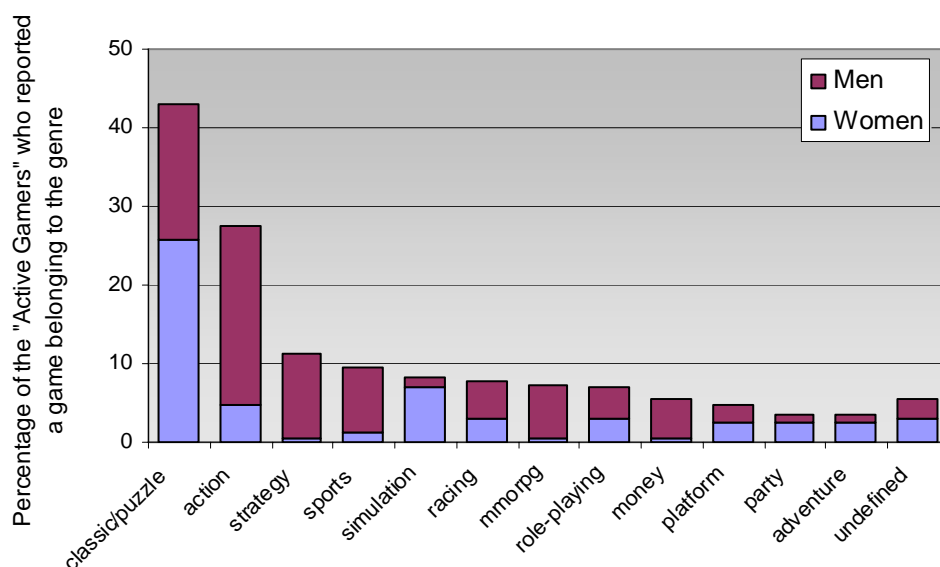


Figure 17. The popularity of digital game genres among "Active Gamers".

Different kinds of classic/puzzle games were clearly the most popular ones among our "Active Gamers", with action games taking second place. Classic/puzzle games included e.g. *Solitaire*, *Mahjong* and some small games reminiscent of classic arcade games. In some cases, genre classifications were quite arbitrary, especially with games which combined many characteristics from different genres, such as adventure, role-playing and action elements. This shows that generally speaking the lines between many gaming genres are blurry.

We found the adventure genre particularly hard to define, since there are only a precious few pure adventure games in the market nowadays. Thus, in this analysis adventure games include both some children's point-and-click games and adult-oriented puzzle-focused games like *Myst* and *CSI*. All in all, adventure and party games were the least popular, and mainly played by women. Party games mainly included *SingStar*, dance games and *WarioWare*.

Widest variation in game titles was under the action category, which included everything from *Call of Duty*, a World War II themed first-person shooter, to *Mario & Luigi: Superstar Saga*, a GameBoy action game with role-playing elements. This partly explains why the proportion of the action genre

became so large. The most frequently mentioned action games were *Counter-Strike*, only mentioned by men, and *Grand Theft Auto*, which women had also played.

There were a couple of genres which were almost exclusively men's domain: strategy, money and massively multiplayer online role-playing (MMORPG) games. The most popular MMORPG was *World of Warcraft*, and almost all money gamers played online poker. Strategy games were governed by *Civilization*. Women dominated the simulation genre, but this is only due to *The Sims*, a life simulator. *The Sims* is actually quite different from traditional simulation games, which are usually very technical and impersonal. There were only two simulation games other than *The Sims* among the responses; they were both flight simulators and reported by men.

Sports games were also mostly played by men, and *NHL* games were the most popular among them. In the rest of the genres the gender division was more equal. Platform games included in our analysis e.g. *Mario* games, *Crash Bandicoot* and *Rayman*. In role-playing games a relatively popular title was *Oblivion*. Racing games had much diversity, with *Need for Speed* mentioned most frequently.

The popularity of game genres among different age groups varied somewhat. 15 to 24 year-olds, especially men, played many action games (Figure 18). Simulation, party and adventure games were exclusively played by women, and strategy games by men.
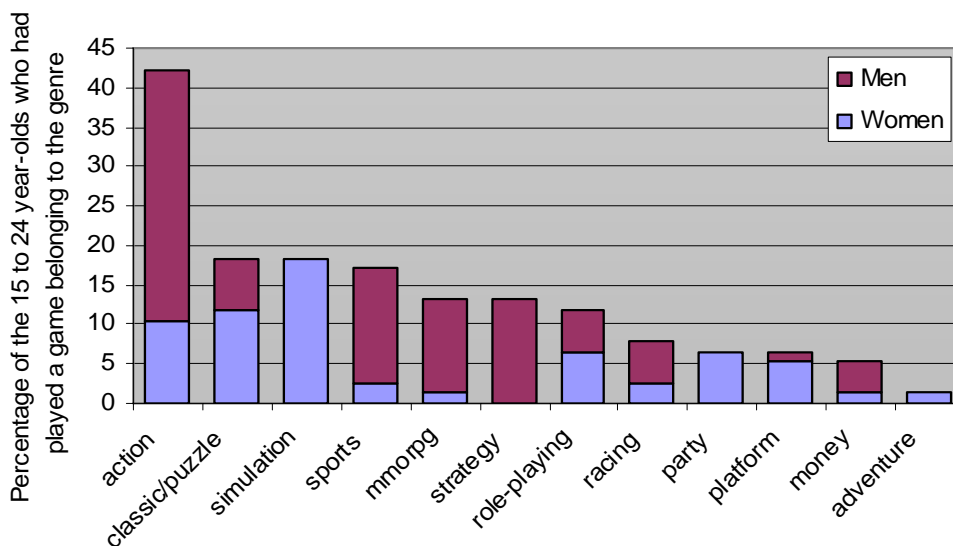


Figure 18. The popularity of digital game genres among 15 to 24 year-olds.

The 25 to 39 year-olds of our "Active Gamers" also played action games, but classic/puzzle games rose past them in popularity (Figure 19). Strategy was more popular among them than among the younger gamers, but the popularity of other genres dropped a bit with age. There were also quite a few "undefined" games reported in this age group. There were no respondents who only

gave the name of the gaming device in the youngest age group, whereas a nonchalant attitude towards the titles of games was more common amidst the older. Thus, young players appeared more knowledgeable about, or focused on, digital games.
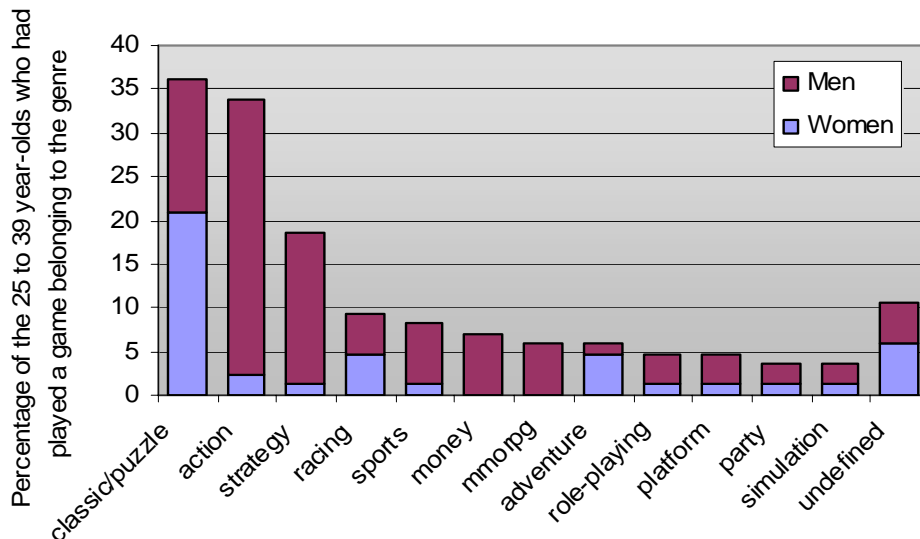


**Figure 19. The popularity of digital game genres among the 25 to 39 year-old "Active Gamers".**

The eldest "Active Gamers" from 40 to 71 years of age had practically no variation in their popular game genres (Figure 20). 79 % of the respondents had played at least one game which belonged to the classic/puzzle genre, and the other genres each had approximately 3-5 % popularity. The share of undefined games was 6 %. Therefore, those who were more than 40 years old mainly concentrated on games which are commonly considered small, short and quite simple. This raises a question of classic/puzzle games and casualness. Can any of the gamers who only played classic/puzzle games be considered "Hardcore Gamers", since the games they play are so "light" or non-demanding? These problematics will be discussed in more detail in the next chapter.
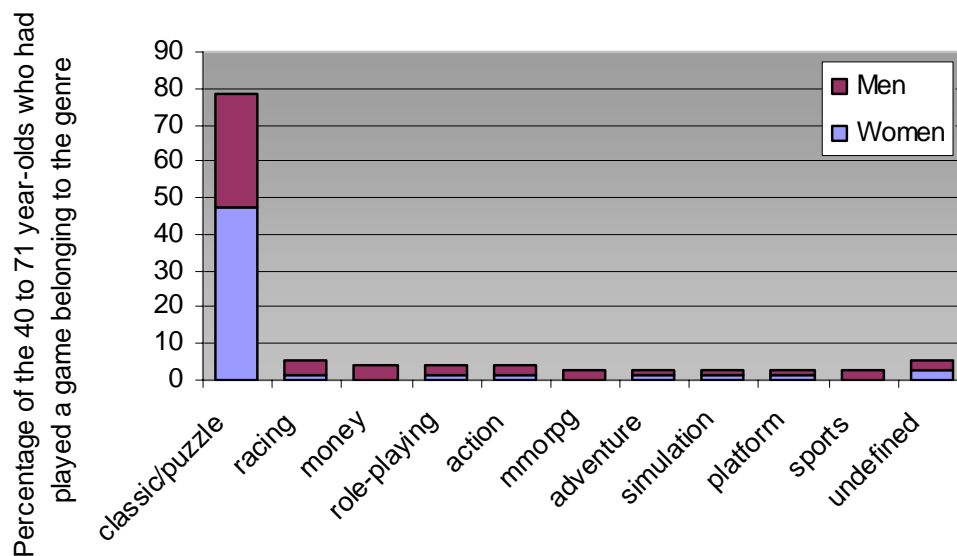
**Figure 20. The popularity of digital game genres among the 40 to 71 year-old "Active Gamers".**

The most popular games among our respondents included many of the games which have been on the top of the lists of the most-selling games during the past year, such as *World of Warcraft* and *Civilization*. However, the game mentioned most often by far was *Solitaire*, and other simple classic/puzzle games were also quite popular, especially among women and older gamers. Thus, it seems that the players of these classic/puzzle games form a major part of the field of digital gamers in Finland. However, as public discussion or the media evoke issues related to video or computer games (e.g. the cases of school violence in various Western societies), they almost never take this mainstream of digital games cultures into consideration. Apparently, *Solitaire* players do not represent a suitably sensational or spectacular phenomenon, and  are thus ignored.

## 4.4. Serious business or casual pastime? The nature of digital gaming

The distinction between casual and committed gamers has lately attracted more researchers' attention while the games industry has also moved in a more outspoken way to address the 'casual gamer' audiences, as evidenced by the proliferation of Internet casual games services, the number of 'classic' or casual games offered through Microsoft Xbox Live service and in the new devices focused on casual games. Most notably these include Nintendo DS handheld console and Nintendo Wii game console with its 'Wiimote' game controller. Wiimote was designed to appear familiar to new casual users and similar to a television remote controller, while supposedly providing more intuitive gameplay control through movement recognition than the control schemes associated with typical console

'gamepads'. (See e.g. *wii.nintendo.com*.) One goal of this study was to specify the role of casual games and casual playing styles in the contemporary digital game cultures.

The most "committed" gamers were relatively easy to distinguish from among the respondents. On the contrary, drawing the line between committed and casual gaming appeared to be rather difficult. There are casual *games* and casual *gamers* (or casual game players), and one does not necessarily indicate the other (cf. Kuittinen & al. 2007). Casual games are the kinds of games which do not require much investment in either time or skills, and their rules and gaming techniques are quite simple. All games belonging to the classic/puzzle genre in our study can be defined to be casual, although this does not mean that someone could not play them in a committed way. Instead, casual gamers are people who do not invest as much time on digital games or are not as interested in them as committed gamers. They may participate in various kinds of gaming activities, e.g. for social reasons. Therefore, this group is quite hard to define in a quantitative study, and requires further contemplation.

In this analysis we examine the casualness and the level of commitment of both "All Gamers" and "Active Gamers". First, we will divide the "All Gamers" group (total gamer population of respondents, 53 %, n=424) into groups based on their responses about the regularity and amount of gaming. However, since the "Active Gamers" group gives a much richer source of information we will use their data through the rest of the analysis.

In our questionnaire we had three general questions which could offer information on the nature of digital gaming (see Appendix 1; also, Table 26). The contents of these questions were discussed in Chapter 2.6. To put it shortly: the first question inquired how much time the respondents spent on digital gaming per week, the second one asked them to describe their way of gaming and the third one inquired if they consider themselves to be digital game hobbyists. Anyone who answered affirmatively to the hobbyist question is probably not a casual gamer. Therefore these 63 people were classified to be non-casual. The other questions, however, were not as simple to interpret.

**Table 26. The questions about the nature of digital gaming in Form A.**

| Number | Question |
| --- | --- |
| 12 | How much time do you usually spend on playing computer or video games? (hours per week) |
| 26 | Which of the following best describes your playing? |
| 30 | Do you consider yourself to be a digital game hobbyist? |

"All Gamers" can be divided into sub-groups by considering the time spent on gaming each week. The answers to this question

were divided into four categories: zero hours, one hour at most, one to seven hours and seven hours or more. 4 % of the gamers left the question unanswered. About 28 % of the gamers told us that they played zero hours per week (see Figure 21 below). This would indicate that they did not play regularly, but it does not rule out the possibility that they could still be committed gamers: there are gamers who are active only a few times during a year, concentrating on happenings, holidays or other special occasions. The rest of the "All Gamers" (68 %) were more regular gamers, at least in terms of weekly playing time.

On a weekly gaming level, 25 % of "All Gamers" (13 % of all respondents) were "light" gamers, meaning that they played one hour at most. The share of "medium" gamers, who played more than one hour but less than seven hours, was 29 % (15 % of all respondents). Finally, 14 % of "All Gamers" (7 % of all respondents) were "heavy" gamers who would play at least seven hours per week, on average at least an hour per day. Overall, men played more than women. One fifth of the male gamers belonged to the heavy gamer group, whereas only 8 % of the women had a habit of spending plenty of time on gaming. Thus, 12 % of all our male respondents and 4 % of our female respondents were considered to be committed gamers. It can be noted here that our findings about the Finnish people are quite different from those reported about UK gamers by the BBC report, which claimed that 48 % of UK 6–65 year-olds are 'heavy' gamers. Their criteria were different, and they classified anyone who played (for any duration) one digital game at least once a week as "heavy gamers". We did not consider a short session once a week as a sufficient criterion for identifying heavy gamers and thus used the above qualification based on weekly playing time instead. Even taking this difference into account, our findings appear to suggest significantly lower involvement in digital play in Finland than what takes place in the UK, calling for further comparative study. (Cf. BBC 2005, 5.)
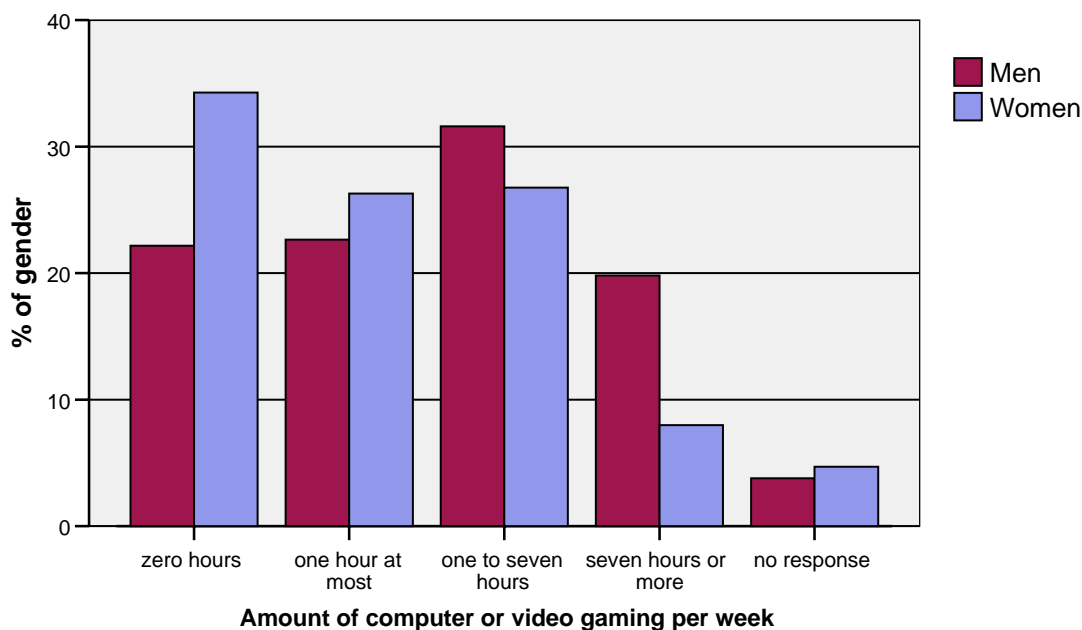
Figure 21. The distribution of time that the "All Gamers" told us they spent on digital gaming per week.

There was an obvious need to analyse the difference in playing styles and degrees of involvement in digital play in more detail. Instead of simply dividing "All Gamers" into casual and non-casual, we created four classes of gamer types. The respondents were allocated into these types on the basis of their answers to the aforementioned questions (12 & 26).

Those who told us that they played digital games seven hours or more per week were classified as "Hardcore Gamers". The group that played more than one hour but less than seven hours per week or told us that they played several minutes a day or several hours a week, was called "Regular Gamers". Those who did not belong to either of the previous groups but reported playing a couple of days a month, a couple of weeks per year, or only occasionally, were termed "Occasional Gamers".

Outside of these three groups were left the gamers who either did not answer the question about their way of playing or said they did not play at all, and told us they played at most one hour per week, or left the question blank. This group needed further examination. We found that most of them said their weekly gaming time was one hour, and some of them still filled in the B Form, and had thus played at least some game during the past year, even though they might be of the opinion that they did not actually play games anymore. Thus, they were still counted as digital gamers and called "Light Gamers". Their way of responding gave the impression that they did not feel they were gamers and gaming was not important to them at all, and this impression is reflected in the naming choice of their group.

Table 27. Different gamer types and their proportions among "All Gamers".

| | | Men | Women | Total |
|---|---|---|---|---|
| Type of gamer | Hardcore | 42 | 17 | 59 |
| | | 20 % | 8 % | 14 % |
| | Regular | 80 | 65 | 145 |
| | | 38 % | 31 % | 34 % |
| | Occasional | 73 | 100 | 173 |
| | | 34 % | 47 % | 41 % |
| | Light | 17 | 30 | 47 |
| | | 8 % | 14 % | 11 % |
| Total | | 212 | 212 | 424 |
| | | 100 % | 100 % | 100 % |

The proportion of men was found to be significantly larger among the "Hardcore" or "Regular" gamers than among the "Occasional" or "Light" gamers (Table 27). The largest group of "All Gamers" belonged to the group of "Occasional Gamers". Here it should be noted that these groupings do not represent the respondents' *attitudes* towards gaming, but merely the time they said they spend on gaming, and the regularity.

There were no open questions presented to all respondents about how they perceived themselves as gamers. The attitudes of the "Active Gamers" were somewhat easier to examine, since the second form provided much information about the game genres the respondents favoured, the amounts of time they spent on playing the games non-stop, the things they felt were important in games, and their overall opinions about games and gaming.

The first observation that we made about the two gamer groups was that the aforementioned four groups of "All Gamers" were slightly differently represented among the subgroup of "Active Gamers" (Table 28). The shares of "Hardcore" and "Regular" gamers were larger in the latter one, and respectively "Occasional" and "Light" gamers held a lesser share. The "Regular" gamer group was the largest of these four. This backs up the hypothesis that those who play more are also more interested in discussing their gaming.

Table 28. Different gamer types and their distributions among "Active Gamers".

| | | Men | Women | Total |
|---|---|---|---|---|
| Type of gamer | Hardcore | 34 | 13 | 47 |
| | | 26 % | 13 % | 20 % |
| | Regular | 59 | 35 | 94 |
| | | 45 % | 34 % | 41 % |
| | Occasional | 31 | 43 | 74 |
| | | 24 % | 42 % | 32 % |
| | Light | 6 | 11 | 17 |
| | | 5 % | 11 % | 7 % |
| Total | | 130 | 102 | 232 |
| | | 100 % | 100 % | 100 % |

Gamer type classifications can be found useful in quantitative analysis, but it should be kept in mind that this kind of categorisation is always biased in one direction or another. Thus, to support the results produced by this classification, we also wanted to examine the actual game choices of the respondents to further define our categories of more and less committed gaming. The game genres have already been introduced in the previous chapter, so the following is just to summarise.

*Classic/puzzle games*, the most popular game genre among the respondents, are commonly thought to be casual. They include small card, puzzle and arcade games, in which gameplay is simple and it is possible to complete the game or individual levels in a short period of time so that the games can be played in short bursts. The plot and characters are usually simple or nonexistent. Typical examples of casual games are Windows-bundled *Solitaire*, the mobile phone game *Snake* and browser-based quiz games. Other game genres do not include casual games very often, although some racing games, platform games and, in some sense, virtually any game can be played in a casual way.

However, a casual game does not make a "Casual Gamer". In addition to the genre, there were more factors to consider when trying to figure out how casual or committed an individual gamer was. Many "Hardcore Gamers" also play casual games every now and then, and some of them may even have reported them in the form. Thus, we needed to consider the actual games that the respondents had played the most during the past year, the most important factors in the game for them, the time spent on gaming non-stop, and their answers about their gaming habits and attitudes.

More than a half of those who we grouped as "Active Hardcore Gamers" based on the time they spent on gaming reported all three games they had played the most during the past year. In contrast, most of the "Active Light Gamers" wrote down only one game, and none of them reported three

games. The relationship was linear in the way that on average "Regular Gamers" reported less games than "Hardcore Gamers", "Occasional Gamers" less than "Regular Gamers", and "Light Gamers" the least.

After each game title that the respondents reported, there were three sections of additional questions about the game (see Appendix 2, Questions 2-4). The first question inquired which factors the respondents thought were important and successful in the game, listing twenty factors from theme and background stories to easiness and controllability. The choices were given in a five-point Likert scale. For the analyses, the scale was reduced down to three points. On the whole, there was one factor which was found to be important in most of the games: the appropriate level of challenge (79 %). The least important factor of the ones we asked about was felt to be exploration, which was marked as unimportant in 49 % of the games, and important in only 23 % of the games.

The second question, in which we asked the time spent on continuous gaming, was essential for the study of casual gaming. This question included eight choices, which we grouped into four categories for the analysis: less than fifteen minutes, less than an hour, one or two hours, and many hours or more. The difference between the first two original choices, ("a few minutes" and "less than fifteen minutes") is not substantial, and the other responses of those who chose one of the two items were pretty similar. For their part, the last three choices were only chosen by seven respondents in total, which would have been too small a group for analysis. The most common case was that the favourite game had been played continuously for an hour or two (Table 29).

Table 29. Distribution of continuous play time of all reported games.

|  | Number of games | Percent of games | Cumulative percent |
|---|---|---|---|
| Less than fifteen minutes | 93 | 21 | 21 |
| Less than an hour | 109 | 25 | 46 |
| An hour or two | 163 | 37 | 84 |
| Many hours or longer | 64 | 15 | 98 |
| No response | 7 | 2 | 100 |
| Total | 436 | 100 | |

Most of the games which were played for less than a quarter of an hour at a time were classic/puzzle games. About a half of the classic/puzzle games were also played for less than fifteen minutes, and four out of five were played for less than an hour. Nevertheless, 17 % of them were played for more than one hour, which is a long time to spend with small and simple games.

With one exception, the respondents who played classic/puzzle games more than an hour at a time all felt that killing time was an important factor with the game in question. These massively played classic/puzzle games did not differ from the ones which were played less; they included various card games, pinball games and *Sudoku,* for example. The amount of time spent on these games would suggest that this was not merely casual gaming, and that this subgroup of nineteen respondents needs to be examined more closely in the qualitative part of the study.

Other game genres usually held the respondents' attention for a longer time. Every MMORPG player told they played the game continuously at least an hour, and most played many hours or more. This was also true for almost all role-playing games, although play time was more inclined to be an hour or two. For the most part, strategy games and action games were also played continuously at least for an hour. Gaming time in the rest of the genres was more evenly distributed between the choices, but most of them were played for more than fifteen minutes. Only some adventure games, racing games, platformers and sports games were said to be played less than a quarter of an hour.

We also wanted to find out if "Active Gamers" had increased or decreased their gaming during the past year. This was explored with two sets of questions in which the respondents could report their reasons for increasing/decreasing their gaming (Questions 16 and 17 in the Form B, see Appendix 2). The leading question to the first section was "If you have *decreased* your digital gaming during the past year, is the reason one or several of the following". The wording of the second section was similar; the word *decreased* was only replaced by *increased*.

Approximately two-thirds (66 %) of the "Active Gamers" apparently felt that they had decreased their gaming, since they ticked at least one of the reasons or wrote down their own reason. In contrast, only 26 % of these gamers indicated they had increased their amount of playing. Evidently, there were some "Active Gamers" who felt they had done both, since 24 of them (10 %) gave reasons for both increasing and decreasing their playing. These answers can each be understood to tell us about different games, some of which have been played less by the respondent and some more. 19 % of the "Active Gamers" answered neither section. We assumed that either their gaming had stayed the same, or they decided not to answer for some other reason.

The most common reason for reducing the amount of gaming was "I no longer have time to play". This answer was chosen by 61 % of all those who felt that they had decreased their playing. Other relatively common reasons were that the respondents had played too much earlier, or that they did not have suitable equipment, or the games repeated themselves

too much. In the responses to the open question it was generally stated that the loss of interest in gaming or games had reduced gaming. On the other hand, the most common reasons for increases in gaming were that games were better nowadays (30 % of all those who had increased their amount of gaming) and that the respondents had good game equipment nowadays (28 %). There was more variation in the reasons for increasing the amount of gaming than for decreasing it.

It seems that, in general, a large part of every gamer group felt that they had reduced their gaming during the past year (see Table 30). Those who felt that they had increased their gaming were mostly either "Hardcore" or "Regular" gamers. Practically only "Hardcore" and "Regular" gamers also told us that they had both increased and decreased their amount of playing. These differences between gamer types were statistically significant (p=0.002). Based on the "Active Gamers" responses, it would seem that the gamer population is not increasing their gaming exceedingly (cf. in contrast, ESA reporting that according to their survey, "Fifty-three percent of game players expect to be playing as much or more ten years from now than they do today"[4]).

**Table 30. The changes in the amount of digital gaming among the different types of "Active Gamers".**

|  | Type of gamer | | | | Total |
|---|---|---|---|---|---|
|  | Hardcore | Regular | Occasional | Light |  |
| Decrease | 22 | 49 | 46 | 12 | 129 |
|  | 47% | 52% | 62% | 71% | 56% |
| Increase | 11 | 17 | 8 | 0 | 36 |
|  | 23% | 18% | 11% | 0% | 16% |
| Both | 8 | 15 | 1 | 0 | 24 |
|  | 17% | 16% | 1% | 0% | 10% |
| No change | 6 | 13 | 19 | 5 | 43 |
|  | 13% | 14% | 26% | 29% | 19% |
| Total | 47 | 94 | 74 | 17 | 232 |
|  | 100% | 100% | 100% | 100% | 100% |

As mentioned above, the respondents were asked to write down up to three games they had played the most during the past year. We determined the maximum amount of time that the gamers said they played the games continuously. In other words, we wanted to find the game on which each respondent spent the most time. 19 % of the "Active Gamers" had not spent more than fifteen minutes non-stop on any game. One out of four spent an hour at most (Table 31). Once again, the differences between the gamer types were clearly visible and

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[4] See ESA "Top Ten Industry Facts" 2007, online:
  http://www.theesa.com/facts/gamer_data.php

also significant (p<0.001). Most "Hardcore Gamers" had indeed played at least one game on which they spent more time than one hour continuously.

**Table 31. The maximum length of continuous play time in the games the "Active Gamers" reported.**

| | Type of gamer | | | | Total |
|---|---|---|---|---|---|
| | Hardcore | Regular | Occasional | Light | |
| Less than fifteen minutes | 1 | 11 | 24 | 8 | 44 |
| | 2% | 12% | 32% | 47% | 19% |
| Less than an hour | 7 | 22 | 25 | 5 | 59 |
| | 15% | 23% | 34% | 29% | 25% |
| One or two hours | 18 | 38 | 22 | 3 | 81 |
| | 38% | 40% | 30% | 18% | 35% |
| Many hours or longer | 21 | 21 | 2 | 0 | 44 |
| | 45% | 22% | 3% | 0% | 19% |
| No response | 0 | 2 | 1 | 1 | 4 |
| | 0% | 2% | 1% | 6% | 2% |
| Total | 47 | 94 | 74 | 17 | 232 |
| | 100% | 100% | 100% | 100% | 100% |

When examining gaming times, it should be kept in mind that the question about continuous gaming could also be misinterpreted by the respondents. Since having breaks when using a computer or playing video games is a common health advice, it is possible that some respondents interpreted the question as "continuous play time without any breaks" and others as "continuous play time of the same game with short breaks".

There were a couple of cases in gameplay duration which called for closer examination. First, we found a "Hardcore Gamer" who had not played any of her most played games more than fifteen minutes. She turned out to be a middle-aged *Solitaire*-player, who played at home and at work and said she played computer and video games ten hours per week. The only factor she felt was important in the game was killing time. She also said she typically did other things while playing. Thus, she was by no means a committed gamer who would immerse herself in games for hours. Nevertheless, she stated that she usually played ten hours per week. Thus, we found that the only possible interpretation is that she played plenty of solitaire at home and at work to kill time – perhaps not ten hours every week, but many hours in any case. Thus, she was a "Casual Gamer", but one whose amount of weekly play was more like that of a "Hardcore Gamer".

Second, the two "Regular Gamers" who did not specify the length of continuous play of their games were also solitaire-players, and close to the age of retirement. Their gaming styles were probably quite casual, although this was difficult to determine, since they left many questions unanswered. On

the other hand, the "Occasional Gamers" who played their games for many hours or longer did indeed play more extensive kinds of games (for example *Metal Gear Solid 3* and *GTA: San Andreas*). They reported their gaming time to be a few weeks per year or a couple of days a month. Apparently, they were the kinds of gamers who had time to play only occasionally, but when they had the time, they played for many hours: periodical, non-casual gamers.

Among the factors whose importance in games we inquired from the "Active Gamers", there were two elements which fit the description of casualness, namely *killing time* and *easiness and controllability*. The games which scored high on these factors and lower on others were most likely played mainly for casual purposes. All in all, there were 170 games in which both of these factors were thought to be important. Still, there were only two reported games in which they were considered the only important factors: *Minesweeper* and a browser game called *Bubbles*. They were both played continuously for less than an hour; the players were both middle-aged women.

On the whole, there appeared to be plenty of variation between the games in which the aforementioned casual characteristics were considered important. There was one genre, however, in which almost every game fulfilled the requirement – platform games. Of course, killing time, easiness and controllability are not exclusively properties of casual games and they can be major reasons for playing even for more committed gamers. In fact, the most casual gamers probably did not bother to think about the questions very much. We saw a handful of forms in which the respondents had basically chosen an initial opinion and then drawn a line through the questions so that the answer to every question about the game was the same.

For example, one solitaire-player apparently felt that none of the factors we listed was important or successful in the game, since he marked all of them as *not very important*. In contrast, all of the elements were thought to be important by two people playing two games, *Medal of Honor* and *Day of Defeat*, both first-person shooters. One gamer who had played "a set-top box game" chose the middle option, "I cannot say", for all of the elements in the game. These kinds of answers probably tell us more about the impatient or nonchalant nature of the respondents than their actual opinions about the games.

There was also a group of "Active Gamers" who left the titles of their games undefined (23 gamers and 27 games). In addition to these undefined games, most of them did not report any other game titles. Most of their games were played for less than an hour continuously, and most were played only at home. The gamers in this group were between 26 and 64 years of age and 61 % of them were women. Most of them were either "Occasional Gamers" (48 %) or "Regular Gamers" (30 %). Two-thirds of them lived with their partner and chil-

dren. Most of those who had children also said that their children played, and that they played with their children.

This could be the reason for the vagueness of their answers; if children were the enthusiastic gamers in the family, the parents perhaps did not pay such close attention to the names of the games they played. Thus, the game they had played the most during the past year was, for them, merely "Xbox" or "PlayStation". Also, *playing together* was an important factor in the games for almost every one of the parents. Therefore, the group of the respondents who did not define the titles of the games they had played was not homogenous. Some of them certainly seemed to have a casual attitude towards the games, but the parents who played with their children did not necessarily play casually. However, the questions about gaming patterns of families cannot be answered on the basis of this survey, but it is an issue worth examining in the qualitative part of the study.

We attempted to measure the "Active Gamers'" enthusiasm towards games with two questions. First, the question "Do you usually play games through or from start to finish without stopping?" with the options of "Yes, as soon as possible", "Yes, if I have time" and "I do not usually play games through". The wording of the question was slightly clumsy in retrospect, because there is a difference between playing games through and completing them at one sitting. Casual kinds of games can be played quickly through but more extensive games usually require many hours or days of play time. In any case, about a half of the "Active Gamers" (51 %) said they played games through if they had the time. 19 % of them told us that they played games through as soon as possible, and 28 % of them told us that they did not usually play games through. The remaining two percent of these "Active Gamers" did not answer the question. A larger part of the gamers who we classified as "Hardcore" or "Regular" gamers gave an affirmative answer than of the "Occasional" or "Light" gamers.

Second, the question "When you lose a game or suffer a significant defeat, do you try to play again?" was introduced with the same options as the previous one, except for the last option, which was formed: "I do not usually continue playing". About two-thirds (69 %) of the "Active Gamers" said that they would usually play again if they had the time. 16 % of them were enthusiastic to carry on: they continued as soon as possible. Only 13 % of them told us they did not usually continue to play. Almost every "Hardcore" and "Regular" gamer said they tried to play again after losing, whereas a smaller group of less "Regular Gamers", three out of four "Occasional Gamers" and 63 % of "Light Gamers" continued to play.

Time spent on gaming is a quantitative measure of the level of commitment to gaming. On the other hand, attitudes and opinions can reveal a more definite picture about the true place

of games in the gamers' lives. In the analysis of the last multiple choice question of our survey we created sum variables from the statements related to casualness or commitment in gaming. The two created components were named *presence of games in life* and *casual play style*. The elements which formed the two components are listed in Appendix 4, together with the other sum variables (for a more detailed analysis of the attitudes and opinions towards games and gaming see Chapter 5).

The *presence of games in life* measured the respondents' enthusiasm towards digital games and the involvement of games in everyday life. Ten "Active Gamers" had a specifically high value on the *presence of games in life* component (on average at least a four per each statement on a five-point scale). Half of them were "Hardcore Gamers", half "Regular Gamers", and most of them reported all three games that they had played the most during the past year. These games were not casual in any sense, and the continuous gaming time was more than one hour for every one of them, at least in one of their games. The age range of these ten people was from 15 to 45 years of age, although half of them were under 23 years of age. Only two of them were women. Half of the group had full-time jobs and the rest were students.

On the other hand, a bit over a hundred, almost a half of the "Active Gamers", scored quite low on this component (on average a two or less per each statement on a five-point scale). 62 % of these gamers were women, but the age distribution of this group did not differ from the overall distribution. The proportion of classic/puzzle games was higher and the proportion of action games lower than in the whole sample. Two thirds of these gamers had not played any game they reported for more than an hour at a time. However, the people who scored low on this component were not necessarily especially casual towards games. The statements were such that they emphasised the importance of games to the respondent also outside the actual act of gaming.

On average, the *presence of games* in women's lives was lower than in men's, although the difference was not significant in the oldest age group. Neither did games form as large a part of life for the gamers who had children as for those who did not.

The *casual play style* component measured the extent to which the respondents' concentration was diverted towards other things than the game when they were playing. It also included a statement about playing at work to relax. We assumed that the casual gamers among our "Active Gamers" would be distinguishable by this component. 22 respondents (9 % of the "Active Gamers") had an exceptionally high score on this accord. Perhaps surprisingly, 73 % of them were "Hardcore" or "Regular" gamers. The proportion of classic/puzzle games was somewhat higher than average and there were no *Sims*-players among these people. Half of them were men and

half women, and the age distribution was not notably different from the whole "Active Gamers" sample. Actually, there was nothing about this group on the whole that would suggest that they were particularly "Casual Gamers".

"Hardcore" and "Regular" gamers probably also played casual kinds of games in addition to more extensive ones and thus agreed with the statements we had in this component. It is also possible that although they played games such as *Civilization*, *Dark Messiah of Might and Magic* and *Operation Flashpoint* continuously for more than an hour at a time, they did not immerse themselves into them as much and did not concentrate only on the game when they played. Unfortunately, the survey form did not enable us to make in-depth conclusions about the playing styles of individual games. Thus, this will be one important issue to take up in the interviews.

Since one of the statements included in this component was *"I play at work to relax"*, this measure was also slightly skewed towards those who played at work. It could be that those who played regularly in their free time also had a habit of playing at their workplace.

The *casual play* style component had no significant connection to gamer type. Therefore, the statements included in it are most likely not a good measure of the casualness of the respondent's gaming. On the other hand, overall, the *presence of games* component had a strong and quite linear connection to gamer type. On average, "Light Gamers" scored the lowest and "Hardcore Gamers" the highest in this regard. This was an obvious result, but still, it gave validity to the classification into gamer types based on their reported use of time on games. "Hardcore Gamers" appeared to be the most committed about gaming and "Light" the most casual. The less time was spent on games, the less they mattered to gamers on average. Thus, the division between committed and casual playing style is not binary, but more like a continuum.

The distinction between casual and hardcore is a useful one for anyone thinking about and studying games cultures, precisely because of the complexities it reveals in our cultural relationships with games. For an industry representative 'casual games' and 'casual gamers' are mostly rather unambiguous in their meaning: these concepts suggest simple, easy to learn games and a related group of players who prefer uncomplicated games (IGDA 2006). But as our study has hopefully pointed out, when one starts to look at the behaviours and preferences of actual players closer, many different combinations emerge and complicate the picture. It is perfectly possible to play games several hours per week, and yet do it just to kill time, in a non-committed manner. Equally, it is possible to play complex and extensive games in a committed manner, but only periodically. Thus, a 'casual gamer' might appear more dedicated than a periodic hardcore role-player in her

playing behaviour, if only weekly playing hours are taken into account. For a more reliable picture, multiple factors need to be carefully taken into account.

# 5.  Social Aspects and Meaning Making

## 5.1. The social life of games

The social aspect of gaming form a particularly interesting issue in cultural game studies. Cultures are formed and reproduced in the common practices of everyday life, where people confront each other in various ways. Thus, we wanted to explore the social meanings of gaming already in this phase of the study, although these questions will be raised more thoroughly in the qualitative phase of the study.

"Social gaming" can take many forms. It can be cooperative or competitive. It can take place in front of the same computer or console, or in different rooms of the household joined with local area network; one can play with people who live across the street, as well as with people who live on the other side of the globe. The Internet, for one, has made it possible to widen the scope of social gaming to a considerably large extent. (Cf. Williams 2006a.)

The meaning of social gaming also differs between people. For some, games are a nice way to spend time with friends. For others they are a way to test their skills against human opponents. And, some may think that the social angle is merely a side benefit or a nuisance. Then again, there are gamers who do not play with other people at all, and many games do not even offer a multiplayer option. But digital games can also have social meanings outside the actual act of playing: they can be a common interest, a conversation piece, something to talk about with friends or on various message boards on the Internet. There exist numerous ways of building a shared games sub-culture.

At this pilot phase our study does not offer a means for a truly in-depth exploration of the social life of games and gamers. Nevertheless, we had various informative questions about the social aspects of our respondents' gaming life in our questionnaire. We have already scratched the surface at the end of Chapter 4.2. We concluded that a half of "All Gamers", 26 % of all our respondents, could be said to be social gamers because they told us they played digital games with other people (see Table 23, p. 75). The younger the respondents, the less likely they were to play only alone. Overall, there was no significant difference in this aspect between men and women, except among the 25 to 34 year-olds, among whom a larger portion of gamer women only played with others, not alone, compared to gamer men (31 % versus 12 %, p=0.018).

However, gaming companions of the men and the women were quite different in general. Men played more with their friends and on the Internet, whereas women played with their

families and not as much on the Internet. Two-thirds (68 %) of those who played with others agreed with the statement that gaming is a nice way to spend time together, whereas only 25 % of those who played alone agreed.

The playing companions of "All Gamers" were also examined in regard to gamer types (see Figure 22). The differences between "Hardcore", "Regular" and "Occasional" gamers were statistically significant, though not very big. Almost every "Light Gamer" skipped the whole question which probably indicates that they were already tired of the questionnaire at this point. "Active Gamers" are also examined separately in this regard in Figure 23 below; the distributions were quite similar, although the relative proportions of "Regular" and "Occasional" gamers changed a bit. "Hardcore Gamers" were slightly more versatile than others, since most of them played both alone and with other people.
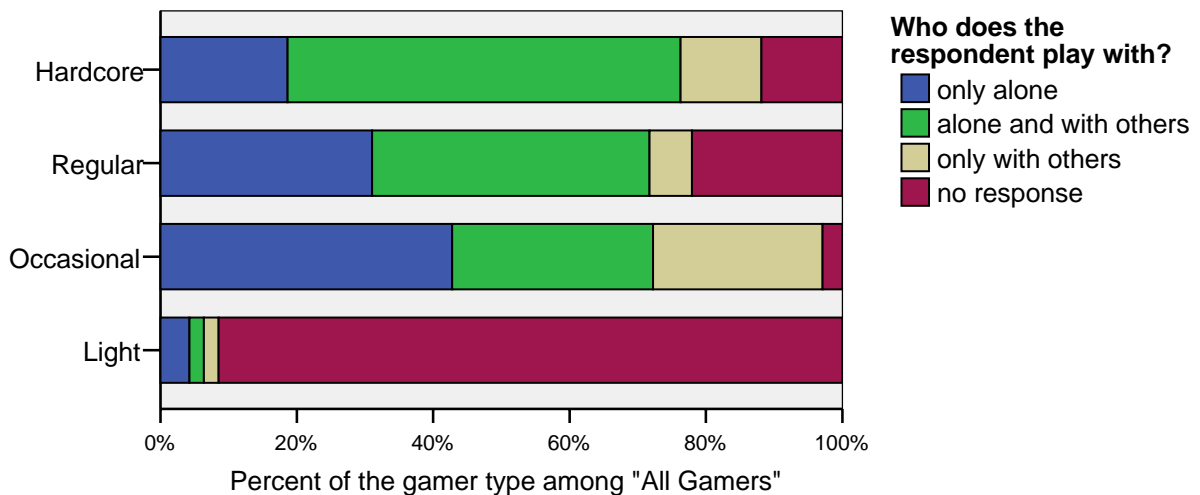


Figure 22. Playing partner choices of "All Gamers".
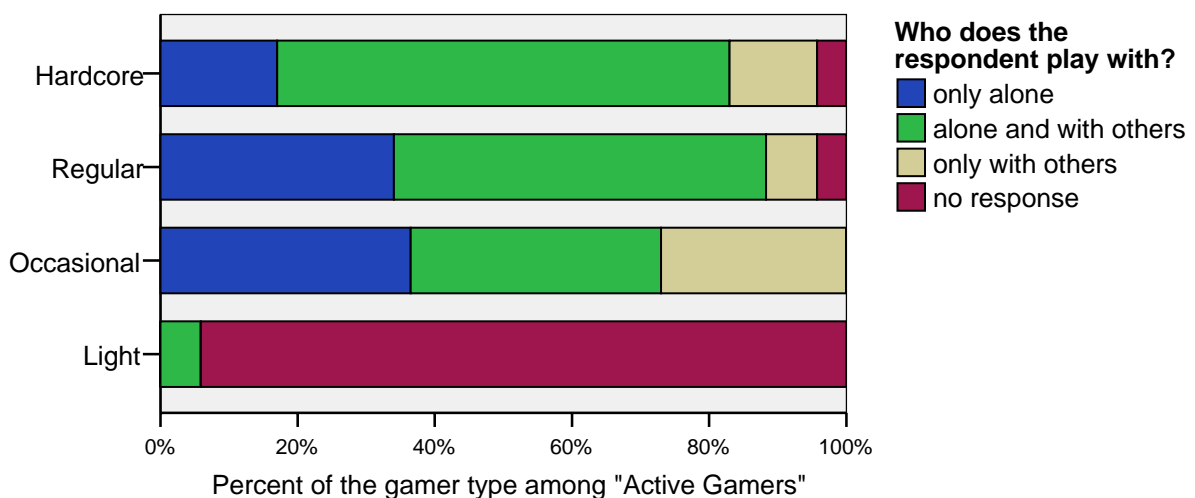


Figure 23. Playing partner choices of "Active Gamers" according to gamer type.

Some 58 respondents (14 % of "All Gamers") also told us they usually played at a friend's place. There was no difference between genders, but age correlated here in a similar way as in regard to gaming partners: the older the respondents, the less likely they were to have played at a friend's place. This is understandable in the light of the fact that the older respondents mostly played solitaire, Windows-bundled games, browser games and other short classic/puzzle games, which do not encourage social play. Gamer type did not seem to have much to do with whether or not the gamers said they usually played at a friend's place, except that almost every "Light Gamer" also left this question unanswered.

Eleven "All Gamers" told us that they played only at a friend's place, not at home or at any other place either, except for one who also played at work. Almost every one of them described their gaming to be only occasional. Four of them also answered the questions about the digital games they had played during the past year; here we noted that two of them said that they also played the games at home. One of them reported of decreasing his playing during the past year, since he no longer had time to play, nor suitable equipment. The other one also listed these reasons for the decrease in her gaming, and in addition she said that the games were too difficult and that it was hard to acquire new games. It might be that these two respondents no longer played at home, although they had done so during the past year.

The various reasons and aspects of social gaming were studied more closely on the basis of the responses by the "Active Gamers". Among the questions about important and successful factors in a particular game was also "*playing together*". The respondents who said this element was important or very important in the game in question were examined more closely. Gaming together was actually felt to be important at least in one game by nearly half of the "Active Gamers", 113 people, and in 165 games. 65 % of these gamers were men and 35 % were women. Their age ranged from 15 to 63 years, the median being 27 years. The most popular individual games were *Counter-Strike* and *World of Warcraft*. Other first person shooters and online poker were also mentioned frequently.

The aspect of playing together was considered important in almost every MMORPG and party game, but not so universally in other genres. This was a predictable result, since the nature of these two genres is social. The only MMORPG in which playing together was not thought to be important was *Kingdom of Loathing*, which is a browser-based game with stick figure graphics and does not necessitate much multiplayer interaction. The player of this game was a young man who played the game at home and at school, and was classified as a "Regular Gamer". On the other hand, the only reported party game in which playing together was unimportant was

*SingStar*, which can very well be played alone if so desired (although the respondent had played it at a friend's place, and she was classified as an "Occasional Gamer").

The integration level of games into the social lives of the respondents was inquired with the question *"Do you tend to discuss games with your friends?"*. 43 % of the "Active Gamers" did not discuss games very often. 41 % of them talked about games if the topic came up, and 16 % of them actively started discussions on gaming. Almost none of the "Occasional Gamers" and none of the "Light Gamers" started discussions on their own accord, whereas nearly one fourth of the "Regular" and "Hardcore" gamers did so (see Figure 24). Two-thirds of the "Occasional" and "Light" gamers tended not to talk about games, while this percentage was 32 % for "Regular" and 21 % for "Hardcore" gamers. Since digital gaming was a more integral part of life for these latter two groups, it is natural that it was also more often present in their talks with friends.
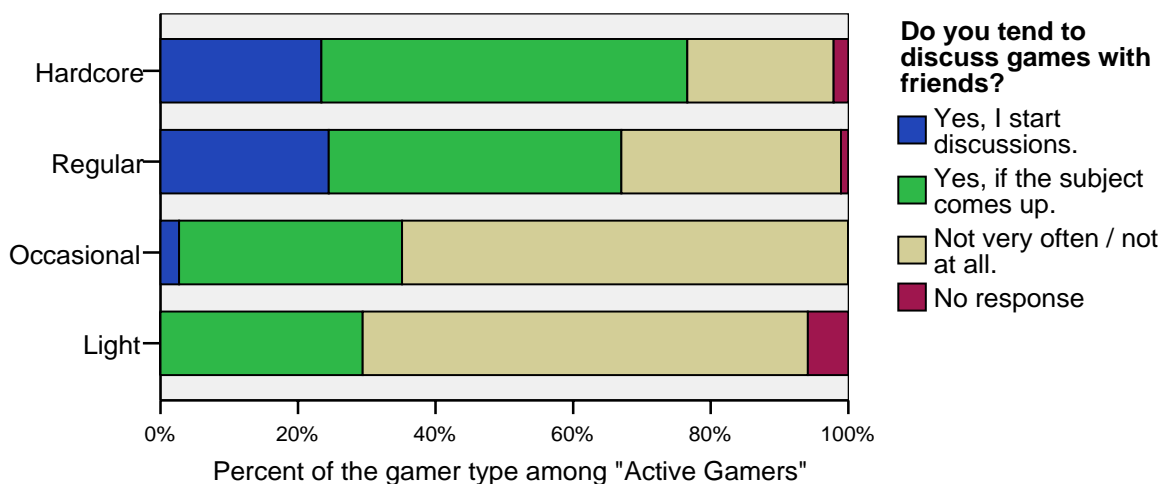


Figure 24. Tendencies to discuss games and gaming among different types of gamers.

The difference in discussion habits between the gamer types was also reflected in the differences between genders. In the oldest age group games were talked about equally rarely among both men and women (around 31 % talked about games), but men were more enthusiastic discussers among the two younger age groups. Even though the proportion of those who talked about games if the topic came up was similar for both men and women, only around 6 % of the younger women started discussions themselves, whereas approximately one third of the men did so. The women who tended to initiate discussions about games were "Regular" or "Hardcore" gamers, and none of them lived alone.

In the previous chapter we distinguished gamers for whom the presence of games in their lives was high. This was expected to be reflected in their discussion habits too. We studied the connection between the presence of games and the

discussion habits of gamers within gamer types. It was clear that regardless of the gamer type, the more the respondents tended to discuss gaming with their friends, the more central place gaming held in their lives. "Light Gamers" were the only exception; none of them started discussions about games and the *presence of games* was low even for those who talked about the subject if it came up.

Among the questions about the most played games was also the question *"Where do you usually play the game"*. An interesting answer option from the social viewpoint was *"at a friend's place"*. In total, there were 52 games which had been played at a friend's place by 35 individual gamers; in 81 % of the games, *playing together* was considered to be important. The genre distribution of the games was quite similar to the overall distribution, although strategy and platform games were missing. The gamers were once again quite young, more than a half were under twenty years old and only two were over thirty, both of them men. The gender division, however, did not differ. The common factor for these respondents was that almost every one of them lived in an urban area. Perhaps this reveals some real differences in gaming styles caused by the respondents' living area; it is certainly easier to go to a friend's house to try out games or to play together if the friend lives a couple of blocks away instead of many kilometres.

The games which were played at a friend's place, but in which playing together was felt to be unimportant, were *Black, God Hand, MineSweeper, Sims, SingStar and Tetris*. Killing time was considered important in the majority of them. These games were probably played at a friend's place to try them out or to kill time while waiting for something to happen. All except *SingStar* were also played at home, and almost every one of the gamers reported they had also played other games.

Then again, almost all of the games in which playing together was felt to be important were also played at home. The individual exceptions were *Final Fantasy*, the mobile phone game *Snake*, *Pro Evolution Soccer*, *Quake* and *World of Warcraft*, which were played mainly at a friend's place by certain gamers. In three of these cases, the game was the only one the respondent reported; thus, their gaming was perhaps limited to the friend's house. One of these three was actually classified in this study as a "Hardcore Gamer", although based on her responses she only played with others. The remaining two were less enthusiastic about games, especially the *Snake* player, who seemed to have lately gotten tired of gaming in general.

Although the most played games and the gamers' opinions about them were worth exploring, the best way to find out who the social gamers really were and how their sociability manifested itself was to examine the "Active Gamers'" opinions about the vast selection of statements about digital gaming. The response rate to this section was good enough: 90 %

of "Active Gamers" revealed their opinion about every single statement. Still, ten (4 %) skipped the whole section. Out of the remaining 6 % about a half answered every statement except for one, but the other half left a considerably larger number of options unfilled.

We applied principal component analysis to the statement variables to see if there were any clear-cut, simpler components among them. We were well aware that the number of our respondents was insufficient for getting reliable and proper results from the analysis, but we still hoped to find out whether or not the resulting groupings of statements would fit our own classifications. Indeed, among the other components, which shall be discussed in more detail in Chapter 5.2, we could discern three groups of statements which represented different social aspects of gaming. A delightful finding was that they were also similar to the groupings that we had created beforehand by the help of our previous understanding on gaming. Even though the results of the analysis cannot be claimed to have solid statistical value, it is possible that the underlying correlations were partly revealed even with the insufficient sample size. Thus, we assume that with more data these factors of gaming attitudes could be confirmed.

The components measuring different social aspects of gaming were titled *playing with others*, *team play* and *common interest with friends*. The individual statements belonging to each component are listed in Appendix 4. The higher the respondents scored on one component, the more it described their opinions about gaming. The statements which we included in the *common interest* component were actually a part of a larger group of statements forming a component based on principal component analysis. This larger group of statements was about the general presence and importance of games and gaming in the respondents' lives, which was discussed in Chapter 4.4.

All three aforementioned components had a relatively strong correlation with each other (correlation coefficients between 0.435 and 0.493; p<0.001), which suggests that the three aspects are connected. On average, women's scores were somewhat lower than men's. Not many scored extremely high on all three accounts; only three people considered nearly all of the statements to be true for them. These three were all male; two of them were classified as "Hardcore Gamers" and one as a "Regular Gamer". They also said they discussed games with their friends if the topic came up. Every one of them had played multiplayer games during the past year: *World of Warcraft*, *Counter-Strike* and *Knight Online* were their most played games. Of course, those who scored high overall on our social factors could not be anything else than players of online multiplayer games. This is explained by the inclusion of the team play component: the respondents who scored high on *team play*, in addition to the other meas-

ures, had to belong to some kind of a guild or a team, since the statements were worded that way. There are practically no game teams or guilds which would just play digital games face-to-face and not do it online.

In contrast, the 56 respondents (24 % of "Active Gamers") who scored low on all three accounts had mainly played single player games. Most did not feel that playing together was important in the games which they reported, and they did not tend to discuss games with their friends, at least not on their own initiative. A majority of them (80 %) was classified as "Occasional" or "Regular" gamers. More than a half of these unsocial gamers had played classic/puzzle games the most, and the games of the rest of them were mostly single player games, although a few of the games could also be played with other people.

There were twelve male gamers, but only two female gamers, who scored above the middle of the scale in team play; this group is only 6 % of the "Active Gamers". Interestingly, the games that the two women had played the most during the past year were not multiplayer games at all. Surprised by this notion we took a more detailed look into the cases and found out that it was two mothers who played with their children, in addition to playing alone. This brings the statements about team play into new light; apparently these mothers answered thinking that their children formed their game team, whose success was more important than their own and whom they did not want to let down by not playing (children and digital games will be discussed in more detail in Chapter 5.3). The male team gamers, on the other hand, were mostly young and played with friends and strangers on the Internet. The games they had played during the past year were for the most part first person shooters.

Some 17 % of the "Active Gamers" were identified to be above average by the *playing with others* component. Seven out of ten of them were male, and a half of them were under 23 years olds. 89 % of them were "Hardcore" or "Regular" gamers. All, except for one individual, told us that they played with other people too; the one exception was a *Knight Online* player. The games these people had played the most during the past year, however, were not specifically social in nature. There were, of course, a handful of MMORPGs (among others, *Knight Online*) and multiplayer first person shooters, but overall their percentages were not much higher than in the whole sample.

It is possible that a large portion of those who considered the statements related to playing together to hold true for them did not play with others *inside* the game, but rather were playing together in the sense that they *shared the controller* with others and took turns in playing. However, the questionnaire did not equip us to determine the quality of playing together, and the related statements can be interpreted in many ways - it is always complicated to determine

how the respondents read them. It should also be kept in mind that the games which were reported by the respondents may only consist of a small part of all the games they had played during the past year, and thus the conclusions based on this information are certainly not the whole truth.

As measured by the two statements mentioned earlier, 14 % of "Active Gamers" clearly had gaming as a common interest with their friends. There were only five women among them; thus, men also dominated this aspect. In general, these gamers were quite young, the median age was 22, but there was also a handful of those who were over forty. Every one of them, except for one *Sims*-player, discussed games with their friends. There were no "Light Gamers" and only three "Occasional Gamers" among this group, and there was a notable absence of classic/puzzle games among the games they had played the most during the past year. Half of the games they reported were action games. Thus, people who had friends with whom they discussed games and shared their experiences with were more committed gamers, at least in terms of the time spent on playing and the genres of the most played games. Casual gamers probably did not have that much to discuss.

Another interesting subject matter for us was to look at digital games as a family hobby. Given that we had no question which would have asked "Do your parents play?", and the survey was directed to people over 15 years of age, this group of gaming families includes only the parents who have children. Out of the whole sample of the "All Gamers", there were 22 respondents (3 % of all respondents) who told us that they played themselves, their partner played and their children also played; thus, everyone in the family were digital gamers. In addition, out of the single parents two told us that they played themselves, and that their children played. The age of all these parents ranged from 27 to 51 years of age and the gender distribution was slightly unequal (63 % of them were women). Most were "Regular" or "Occasional" gamers. Almost two thirds of them played with their children, but only five played with their partner. Out of these 24 gamers, seventeen also filled in the second form about their digital gaming; thus, 7 % of the "Active Gamers" were parents whose whole family played digital games. More than half of the games that they reported were classic/puzzle games.

We have discussed different kinds of social gaming from various viewpoints, but the wider cultural aspects of digital games have not been explored yet. We did not expect to get large amounts of information about the cultures of digital games, but we hoped to capture some of the general patterns of gamer activities.

The common habits and traditions of "Active Gamers" and their gaming fellows were inquired with an open question. In total 26 of them (11 %, 3 % of all respondents) answered the

question, nineteen of them men and seven women. They were mostly young people; only two were over thirty years of age. The responses of the men covered a variety of activities, e.g. LAN parties, poker nights and evening gatherings where both traditional and digital games were played. Role-playing games were mentioned in a couple of the responses. For some of the men, alcohol was also a part of the game evenings. Overall, almost every man who responded to this question mentioned some kind of a social gathering with friends. On the other hand, only one of the women told us that she held game evenings with her friends. Two mentioned that they had a tradition to play games with their siblings during the Christmas holidays. One elderly woman said that she played board and card games with her children on a regular basis. In general, it appeared that women had common habits and traditions with their relatives, whereas men did gaming-related things with their friends. None of the men mentioned their families or other relatives in their responses.

"Active Gamers" were also asked to tell us about the "jargon", the words and expressions they used, which were related to games and not a part of common language. This question was answered by 31 of the gamers (13 %, 4 % of all respondents), 23 of them men and eight women. The responses included various kinds of abbreviations, quotes from the games, corruptions of English words into "Finglish", and self-made expressions for the things in games. The most commonly mentioned were the English terms which were used and inflected in a Finnish way. The abbreviations "lol", "omg" and so forth were also usual, although none of the women mentioned they used such expressions. Overall, women seemed to have more specific games in mind when answering this question, whereas men spoke more about games in general.

It seems that the women who play digital games are not as much a part of the general gaming culture as the men. Even though the women among our respondents played with other people as much as the men did, their gaming was more restricted within their families, whereas the gamer men favoured online multiplayer games and playing with friends. The proportion of the women who discussed games with their friends was also smaller than that of the men. Still, the majority of the gamers apparently were social gamers. Yet these results should only be understood in the context of the current adult generations. There are plenty of signs which imply that digital gaming is becoming more and more popular among girls and young women. The aspect of sociability has remained important also to these new "girl gamers", but it seems to be taking different forms as the games develop.

## 5.2. Meanings attached to games

Perhaps the most intriguing part in this quantitative study of our survey data was to dig out the meanings that our respondents attached to games and to figure out the reasons and motivations for their playing. The casual and social aspects have already been discussed in previous chapters, but here we will focus on the gamers' personal motivations. What are the attractions of games, and are they different for different people? This question entails the key problematics of the next phase of our study.

We used principal component analysis for tentative divisions of both the questions about important factors in games and the statements about digital gaming. The important elements of the games formed five quite well-defined components, although there was obviously some overlap, and the components put together did not explain more than 65 % of the variance. Still, these components offer useful simplifications of the factors that are generally felt to be important in digital games and the individual elements that go together. They also back up our own conceptions of the factors which form aspects that matter to gamers. The elements which belonged to each factor are summarised in Appendix 5.

The first component clearly had much to do with both the richness of the content and the appearance of the game. The elements that belonged to this component were *theme*, *background story*, *game world*, *game characters*, *exploration*, *graphical appearance*, *sounds and music* and *humour*. Some examples of the games which scored very high by certain gamers in regards to this factor were *Grand Theft Auto*, *Fallout*, *Counter-Strike*, *World of Warcraft* and *The Legend of Zelda*. A majority of these games are role-playing or action adventure games, generally thought to be immersive and noncasual. As for the games that scored very low, they mostly included casual classic/puzzle games. Even though the principal component analysis grouped all of the aforementioned elements together, this component could easily be divided into two, separating interior content and exterior appearance. However, when we talk about this component in the following it is called *content and appearance*.

The second grouping was titled *challenges and competition*. It included *development of game skills*, *improvement of other skills*, *appropriate challenges*, *excitement* and *fighting and winning*. There was a bit more variation in regards to game genres in the high end of the score. In the high end there were for example games like *Baldur's Gate*, *Wolfenstein*, online poker and *Mahjong*. The low end was, again, populated by classic/puzzle games, although there was also the occasional *Counter-Strike*, *Sims* or *World of Warcraft*.

The third component can be described as *control and planning*. There were only two elements in it, *building and govern-*

*ing* and *strategic elaboration*. Not surprisingly, many strategy and building games like *Civilization*, *Advance Wars* and *SimCity* scored high on this component; however, *Mahjong*, *Sudoku* and online poker were also placed high for some respondents. The low end had a similar proportion of classic/puzzle games as in the first two components, but also games such as *NHL*, *SingStar* and *Colin McRae Rally*, which do not necessarily require much forethought.

The fourth group was the one already used in Chapter 4.4 about the casualness of gaming. The factors of this component are *killing time* and *easiness and controllability*. There were plenty of casual classic/puzzle games on the top, but also more extensive kinds of games, as we already discussed in Chapter 4.4. The low end was considerably more lacking of casual games, instead having for example *Civilization*, *Operation Flashpoint* and *Gothic*. This component is called *casualness* in this chapter.

Finally, the fifth component was a bit more unclear. The elements which belonged to it were *playing together* and *problem-solving*, but they correlated negatively. Thus, it seems that the more respondents felt that problem-solving was important in a game, the more likely they were to consider playing together to be unimportant and vice versa. The highest scoring games on this factor (playing together important; problem-solving not) were *Wolfenstein*, *Guild Wars*, *SingStar* and *Red Orchestra*, among others. Some of these games can be played alone, but most of them are designed in a way that multiplayer gaming is the main attraction. The lowest scoring (problem-solving important; playing together not), on the other hand, were e.g. *Hitman*, *Baldur's Gate*, *Steel Panthers* and various casual classic/puzzle games. This component could be understood to focus on games as *shared social entertainment*.

There was a clear difference between gamer types in regard to how important they considered the first two factors to be in games. The average importance of *content and appearance* and *challenges and competition* increased along with the level of commitment of the gamer: "Light Gamers" cared the least about these elements, "Hardcore Gamers" the most. Obviously, a large part of the difference was probably due to the types of games they had played. As was discussed before, more casual gamers preferred simpler, smaller and shorter games, whereas more committed gamers tended to have played more complex and more audio-visually sophisticated games.

There was also a difference between genders. On average, men had higher values on all the measures of the elements except *casualness*. The same reasons for the difference apply here. Thus, we decided to control the effect of the gamer types and the game types to minimise their effect and to see if there still was a difference between the "Hardcore" men

and the "Hardcore" women or the men and the women who played role-playing games, for example.

Since most game genres had only been played by a few respondents, it was not possible to make comparisons both within genres and between gamer types at the same time. The only genre where there were enough respondents from every gamer type was classic/puzzle. Thus, for the purposes of this analysis, we made the decision to group genres into two: classic/puzzle and others. The number of "Hardcore Gamers" who had played classic/puzzle games and the overall number of "Light Gamers" were still quite small for statistical purposes.

When we excluded classic/puzzle games, there was no significant difference in the average importance of different elements in games between gamer types, except in *challenges and competition*. "Hardcore" and "Regular" gamers considered this element to be more important than "Light Gamers" and, to a smaller degree, "Occasional Gamers". This backs up the assumption that our "Occasional" and "Light" gamers really were more casual and they did not want their games to be too challenging. On the other hand, when we excluded all other genres and only examined classic/puzzle games, there were differences in *casualness* and the fifth element, *shared social entertainment*.

"Hardcore Gamers" actually appreciated casual aspects in classic/puzzle games more than the other gamer types; on the other hand, on average, "Light Gamers" felt that playing together was more important and problem-solving less important than other gamers. It may be that "Hardcore Gamers" play simple, casual games mainly to kill some time and perhaps to clear their brains between more complex games, and the casual aspects are thus the most important to them. Among "Light Gamers", there might be more people who only play because their friends play than for the sake of gaming itself.

With the section of statements regarding digital gaming, we wished to discover various groups of gamers for whom different aspects were meaningful in games. The principal component analysis of these statements gave additional support to some groupings of statements which formed factors commonly thought to be relevant to the game experience and reasons for playing. Overall, the classifications of the respondents into gamer types and their placements on most of these measures were connected. Variance analysis was used to compare the average scores of the gamer types. The individual statements belonging to each component are listed in Appendix 4.

*Immersion* was not recognisable as one of the components formed by the principal component analysis, but on the basis of our previous studies we wanted to examine the aspect regardless of this (see Ermi & Mäyrä 2005b). As described in our earlier studies, immersion is sometimes thought to be the most important quality of a good game; it is a term used for intense focus on the game and often also a loss of the sense of time. Of

course, immersion is a broad term, but the statements in our survey describing immersive behaviour most accurately were *"Time passes unnoticed while I am playing"* and *"While I am playing, I concentrate only on the events in the game world"*.

About a third of the "Active Gamers" agreed with both of these statements. Their age and gender distributions were fairly similar to the overall distributions of all the "Active Gamers", although the share of the women was slightly smaller. Only one of these gamers belonged to the "Light" category; she was, again, a solitaire-player and had not written down any other games. As for the games that this group of gamers had played, their genre distribution was not significantly different from the overall distribution. Apparently, all kinds of games can be played in such a way that the gamers lose themselves into the game at least for a while. For some people, *Solitaire* or *Mahjong* can be as immersive as *Civilization*, *Fallout* or *Resident Evil* for others. It also seemed that the people who tended to immerse themselves in the game world appreciated the content and the challenge level of the games more.

On average, the respondents who felt that the two immersion-related statements held true for them considered *content and appearance* as well as *challenges and competition* to be slightly more important and successful in the games they had played than those who did not agree with the statements ($p<0.001$ for both factors). Of course, this is for the large part due to the large proportion of "Hardcore" and "Regular" gamers; as was noted earlier, they appreciated these two elements in games more than more casual gamers.

*Empathising* with one's character and an *emotional attachment* to the events in the game are generally thought to be important especially in role-playing games, but may play a large part in making the game enjoyable in other genres too. The ten gamers who particularly stood out in this regard reported 26 games in total, out of which most were MMORPGs, action or role-playing games. Every one of these gamers had played at least one role-playing game, MMORPG or action game with strong characters and a compelling storyline. All of them were "Hardcore" or "Regular" gamers; therefore, like immersive gamers, the empathisers felt that *content and appearance* and *challenges and competition* were on average more important in the games they had played.

The importance of *fantasy and story* in games was explored with several statements, most of which were such that they indicated that the respondents were glad to be able to do and see things which they could not do or see in real life. Only three out of the twenty-three highest-scoring gamers in this comparison were women. 91 % of them were "Regular" or "Hardcore" gamers. Almost everyone wrote down three games they had played during the past year; in total 77 % of them were action games, role-playing games or MMORPGs.

The *importance of winning* was another interesting aspect. The statements which indicated how important winning was for the respondent were *"I enjoy beating others in games"* and *"Winning is not important for me".* The scale of the latter question was naturally inverted before calculating the sum variable. The 41 respondents (5 % of the entire sample) who were especially winning-oriented had no party or adventure games among the games they had played the most during the past year. There were also less classic/puzzle games, although they were still well represented, and more action games. Only 29 % of these respondents were women. 73 % of them were "Hardcore" or "Regular", 17 % of them were "Occasional" and the remaining 10 % were "Light" gamers; thus, winning can be significant for the less committed gamers too. In general, winning-oriented gamers also considered *control and planning* to be more important in games in addition to *content and appearance* and *challenges and competition*.

On the other hand, eight of the fifteen respondents who clearly felt that winning was not important for them were "Hardcore" or "Regular" gamers. Half of them were women and half men, and they were mostly older than thirty years of age. The majority of the games that they played were classic/puzzle games, and *content and appearance* and *challenges and competition* were on average considered less important in games by this group of gamers.

Thus, the gamers who recognised themselves in most of the elements that we have discussed up to this point were on average more committed and spent more time on games. They considered *content and appearance* and *challenges and competition* in the games they had played to be more important than the rest of the respondents, and those who were winning-oriented also appreciated *control and planning*. Immersion, empathising with characters, appreciation of fantasy and story and importance of winning are all indicative of a more committed style of playing digital games, and therefore it is quite natural that this was reflected in the answers of the respondents.

The average immersion scores of the "Hardcore" and the "Regular" gamers were significantly higher than those of the "Light Gamers". The difference in regard to the empathising factor was even more clear: "Hardcore" and "Regular" gamers felt more empathy towards their characters and the events in the game world than "Occasional" and "Light" gamers. However, there was not much difference in the importance of winning, although "Occasional Gamers" considered winning to be somewhat less meaningful for them than other kinds of gamers.

The other aspects that we separated and examined based on the groupings of the statements were more about the feelings that digital games invoke, both positive and negative. One point of interest was to find out how gamers felt about the violence in digital games. The statements which formed the measure of

the respondents' *negative feelings towards violence in games* were *"Games contain too much needless violence"* and *"Violence in games is harmless"*, with an inverted scale in the latter statement. There were 82 gamers (10 % of all respondents) who were particularly negative towards game violence. Here the proportion of women was larger (59 %) and this group was also older, only one fifth of them were 25 years old or younger. 42 % of them had children, which might be one explanatory factor for the negative attitude towards violence. Nearly half of this group were "Occasional Gamers" and only six percent were "Hardcore Gamers". More than a half of the games they reported belonged to the classic/puzzle category. In general, the games were not violent, although there was the occasional *Tekken*, *Aliens vs. Predator* or *Grand Theft Auto*. The factor which was not felt to be as important in games to these non-violent gamers was *challenges and competition*.

In contrast, the 61 gamers (8 % of all respondents) who felt that violence was harmless and were of the opinion that games did not contain too much needless violence were younger (half were under 25) and only one out of four of them was a woman, as expected. Still, 20 % of them had children. Four out of five were "Hardcore" or "Regular" gamers. Because of this, the genres of the games they reported to have played followed the same trend as in the earlier examinations: classic/puzzle games were less represented, action games more. Once again, *content and appearance* and *challenges and competition* were slightly more important.

From the viewpoint of casualness, the *relaxing effect of games* was worth examining. The statements which indicated that the respondents play because they wish to relax and forget their everyday responsibilities for a while were *"I can forget my own worries when I play"*, *"Playing is relaxing"*, *"I sometimes reward myself with playing"* and *"Games mean a time and a place without outside pressure for me"*. Interestingly, the 47 people (6 % of the respondents) who scored high on this factor were again mainly "Hardcore" or "Regular" gamers (89 %). Their age distribution was quite even, but the share of women was only 28 %. Classic/puzzle games were again played less in this group, forming only 19 % of the games (cf. 35 % of all reported games). On the other hand, the 42 gamers (5 % of all respondents) who felt that the aforementioned statements did not apply to them were mostly "Occasional" (60 %) or "Regular" (24 %) and seven out of ten of them were women. *Challenges and competition* were felt to be less important, otherwise the important elements in games were quite similar to the rest of the "Active Gamers".

The statements related to the *refreshing effect of games* were *"Playing cheers me up"* and *"Playing makes me feel energetic"*. A majority (88 %) of the 44 gamers who were refreshed by games were "Hardcore" or "Regular" gamers. Their age was

pretty close to the average and the proportion of women was 32 %. Game distribution was pretty similar to the general "Hardcore/Regular" game distribution, and so were the elements which were considered important. Then again, a half of the 46 gamers who felt that games did not brighten them up were women and 57 % of them were "Occasional Gamers".

General *negative feelings roused by games* were inspected with two statements, *"Playing is sometimes frustrating"* and *"Playing can sometimes also invoke negative feelings"*. 38 % of "Active Gamers", 11 % of all respondents, agreed with the statements and their gender distribution was close to even. 21 % of them were "Hardcore", 44 % "Regular", 32 % "Occasional" and 3 % "Light" gamers. All game genres were fairly represented. On average, there was no difference in the elements which the respondents considered important in games between this group and the "Active Gamers" on the whole.

In contrast, the 13 % of the "Active Gamers", 4 % of the entire sample, who disagreed with the aforementioned statements about negative feelings were older than average and 41 % of them were women. 82 % of this group were "Regular" or "Occasional" gamers and 64 % of them had children. 46 % of the games they reported were classic/puzzle games. It is possible that these people did not play games that could frustrate them or invoke negative feelings, or they were simply calmer.

There was also a handful of statements which projected certain kinds of feelings of *empowerment or independence* created by playing games. Most of the 28 gamers (3 % of all respondents) who strongly agreed with these statements were, once again, mostly "Hardcore" or "Regular" and their ages and genders were distributed accordingly. Action games and role-playing games were the most popular among them, followed by MMORPGs and classic/puzzle games. This group had plenty of similar characteristics to those who felt that fantasy and story were meaningful for them, and the two measures also correlated strongly (coefficient 0.546; $p<0.001$).

Finally, the last group of statements that we wished to single out was the *perceived benefit gained from gaming*. The obvious statements included in this component were *"I learn new skills from games"* and *"I gain new knowledge from games"*. The principal component analysis also grouped a third statement with them, *"I like to watch other people's playing"*. We examined the correlations of the three statements and although the correlation between the first two was much stronger (coefficient 0.636; $p<0.001$), the correlation coefficient was also a bit above 0.4 between them and the third. However, we decided not to include the statement into the measure about the benefits of games, although it is still interesting that apparently some of the people who feel they learn new things from games also like to watch others play. Perhaps

for some, new skills and knowledge are gained by watching other people's gaming.

In any case, the 19 % of the "Active Gamers" who felt they learnt from games had pretty similar characteristics to almost every group we have examined thus far: on average, they were slightly younger, the proportion of women was a bit smaller, the proportions of "Hardcore" and "Regular" gamers were somewhat larger and they had played less classic/puzzle games and more other genres, which is explained by the demographics of the group.

The main trends in the different meanings of games were pretty much what one could have expected to see. Those who spent more time on games also tended to have a more reflective relationship towards them, and those who played only occasionally did not feel as strongly or have as many opinions about games. The "Occasional" and "Light" gamers tended to be more neutral in their opinions. Therefore committed gamers and casual gamers were separated not only by their time usage but also by their attitudes. However, there were quite a few of those who defied the general divisions, such as "Hardcore Gamers" who were fairly non-committed towards games in their answers, or "Occasional Gamers" who had strong opinions and games clearly meant much to them. If the "Committed Gamers" and the "Occasional Casual Gamers" form the major demographics inside the gamer population, perhaps these are the minorities which cannot be easily classified into either of the two categories.

## 5.3. Further issues for analysis: Gaming as a family business

In this chapter we have brought up some questions central to cultural game research. The social aspects of gaming, the meanings attached to different kinds of games, and the reasons for gaming itself together form the major objective of our extensive research project. The data collected in this survey provides good starting points for both of the upcoming phases, the qualitative interview and the comparative international study.

Next, our research project will involve semi-structured interviews of a large group (94) of our "Active Gamers", and continue with in-depth focus group interviews. One more theme will be introduced in this qualitative part of the study, concerning the generational aspects of gaming, and age and gender in more detail, which have both been raised as key questions in the recent research on games and the new media (e.g. Hardy et al. 2007; Kremer-Sadlik &. Kim 2007; Ogletree at al. 2007; Wallenius et al. 2007). However, instead of considering girls, boys, men and women as gamers *per se*, we will concentrate on revealing the different roles that gaming has within families and other institutional contexts. This viewpoint builds on our

understanding of children and young people's games cultures as multi-layered, situational and constantly changing social constructions, in reference to critical childhood, youth and family studies (Ermi et al. 2004; 2005ab; Kallio 2006; 2007, cf. Alanen & Mayall 2001; James & James 2004; Brocklehurst 2006).

Digital gaming is generally recognised as one of the new virtual agendas which, on the one hand, poses threats and dangers to children and young people but, on the other hand, provides them with opportunities and competence (e.g. Fisher et al. 2007; Rosser et al. 2007). The same applies to most of the new media forms (cf. Lahikainen et al. 2005; Nikunen 2007; Mazzarella 2007). At the same time digital games are becoming more and more popular among children and young people, particularly due to their growing variety and divergence. Thus, home being the central arena of children and young people's gaming, and gaming itself being mostly provided, guided and supervised by adult family members, gaming can be largely considered to be a "family business".

In our survey, the youngest respondents were in their late teens. Due to this demarcation of data gathering we cannot say much about children's gaming on the basis of our analysis, except for the parts reported by their parents. However, prior to this study, we have gathered some data on children's gaming in the *"Power of Games and Control of Playing: Children as the Actors of Game Cultures"* project. Thus, as an introduction to our qualitative study, we can present some figures and presumptions about the gaming of children, young people and families in Finland by combining our findings from the two projects.

Moreover, bringing these findings together with our other area of expertise, i.e. our understanding of the social construction of childhood and youth, and children's agency and politics in everyday life, we can open discussion on the multiple forms of digital gaming in the contemporary information society (Kallio 2007; 2006; 2005; Mäyrä et al. 2005). This orientation, as mentioned before, will be taken forward in the following qualitative research phase. Thus, the next contemplation only brings up a couple of interesting themes on digital gaming in the context of children, young people and families.

Out of our "All Gamers", a group of 123 respondents identified themselves as parents, with a gender distribution of 61 fathers and 62 mothers. In nearly 80% of these families, it was reported that children play digital games (Table 32). On the basis of the parent-informants' responses it can also be assumed that a fifth of them only gamed with their children, whereas a half of them did not play with their children at all. But then again, only a couple of our under-aged respondents (15–17 years of age) told us that they ever played with their parents, and these were all girls. Not many of the teenagers even played digital games with their siblings, even though most of them had a habit of playing with their friends, and the

most common place for gaming was their own home. These results underpin our earlier findings on children's, sibling's and parent's joint gaming activities (Ermi et al. 2004, 57).

Table 32. The parent-respondents' gaming in reference to sociability.

|  | Men | Women | Total |
|---|---|---|---|
| Children play | 72% | 79% | 76% |
| Partner plays | 20% | 39% | 29% |
| Plays with children | 31% | 45% | 38% |
| Plays with partner | 10% | 15% | 12% |
| Plays in the company of others | 16% | 26% | 21% |

In the current public debate on the risks of children's and young people's digital gaming it has been repeatedly brought up that parents should be more aware of their offspring's movements in virtual worlds, and digital games in particular. Joint gaming, or sharing the world of gaming with children on a comprehensive level, has been presented as one way of responding to the challenges posed by these novel arenas of childhood and youth. This suggestion, true to the idea of communicative problem-solving, can be found constructive to some extent. For sure, there is no harm in knowing and keeping an eye on your children's doings and hobbies, be they sporty, musical, or "gamy". Most children and young people find it encouraging and pleasing if their interests are noticed and shared. Yet this is not the whole truth about children and young people's everyday life experiences.

The more personal and sub-cultural a playing activity, game, hobby, friendship or, e.g. a circle of friends gets, the more there is to be protected and hidden from adult authorities in it. These private, often more or less forbidden aspects of childhood form a "grey area", which can only exist beyond exterior authority and control. The "grey" aspects (of gaming) may not always appear as unacceptable or extraordinary to the adult authorities, but to the children and young people themselves they are personal and, thus, private.

For example, the questions of sexuality and self-esteem, moral issues (e.g. sense of justice), or relationships between family members and peers can be contemplated in game playing, just as well as they are present in the practices of reading books, listening to music and watching television series and films. This work, inseparably connected to the identity production and maturation processes, cannot be enforced in joint activities. Neither can these aspects of digital gaming be shared with parents or teachers. Hence communication can only offer solutions to certain kinds of problems there are to

digital gaming, and children and young people's usage of virtual spaces in more general.

The distinction between the two meaning making aspects of gaming, the communicative and the incommunicable, can be approached theoretically in the context of children's (political) agency. In this view it is first understood that children and young people can participate in adult-oriented politics as members of their everyday environments, or "ruling", in both familial and institutional levels. They can make suggestions and negotiate common practices, and by so doing have influence on their living conditions. In addition to this, as a part of the on-going empowerment trend, even young children can be mobilised to take part in official political arenas, e.g. school boards and child parliaments (see e.g. City of Tampere 2007). This participation, however, presumes certain kinds of opinions, and certain ways of presenting them.

Thus, in addition to the former, it must also be understood that when children and young people feel, think or act in a way which is not considered appropriate or "good" for them, they are not understood to be participants, but persons under guardianship, regardless of the environment. This two-fold role is embedded in every position that children *as children de jure* occupy in Western societies: as sons, daughters, pupils, patients, community members and citizens they are at the same time objects and subjects – people with rights, but under custody (cf. UN Convention on the Rights of the Child 1989). Therefore, if they wish to feel, think and act on their own grounds, they must do it in a way which cannot be denied or taken away. This is to say that they need to either *hide* the inappropriate matters in one way or another, or *demand a right to them* in an aggressive or manipulative manner. These tactics, which are also common to digital gaming cultures, can be recognised as *politics of everyday life* (Kallio 2007; 2006; see also de Certeau 1984).

When digital gaming and virtual space are approached this way, from two directions, it can be discovered that they function as arenas of children and young people's everyday lives in multiple ways. On the one hand, these worlds are shared with parents, siblings, teachers, it-club advisers and peers. At the same, though, there are sub-cultural and personal aspects to them which cannot be accessed "without permission". In these private spaces children and young people feel, think and act on their own grounds as *political selves* (Philo & Smith 2003). This activity does not pose dangers or risks to them *per se* more than any other everyday activity does. Yet, as a relatively new and uncontrolled arena, virtual spaces can portray and initiate some difficult situations which adults, and parents in particular, are still somewhat ill-equipped to handle.

The "grey area" of digital gaming, which has not gained much attention in recent cultural research, contains various interesting issues which we want to tap into in our upcoming research. For

instance, girls' growing interest in gaming, concentrating on simulation and MMORPGs with an extensive emphasis on social relations and embodiment, raises questions of identity formation in reference to sexuality and womanhood. Another example of a current problem related to digital gaming and virtual space concerns the socially marginalised and/or disturbed boys and young men, whose violent acts have recently concluded in gruesome massacres in schools in various Western societies. As unlikely as it first may seem, these apparently very different contexts of digital gaming have much in common when examined from the point of view of everyday life politics.

Both girls' sexual awakening in early teens and boys' aggressive violence in late teens involve inappropriate and "unacceptable" feelings, thoughts and acts. They can be dealt with in various contexts, so in this regard Internet gamer communities or digital games themselves cannot be considered as the "origins of evil or seduction" in either case. But, this said, it can still be recognised that in these very contexts children and young people are often more vulnerable and open to fast ideas than in other everyday life situations. New kinds of relationships, be they erotic, violent or ideological, are far easier to come by in the disembodied, multicultural and often fantasy-driven spatialities of the Internet and digital games than in the embodied contexts of daily life. Commitments to relationships are often quickly made, but at the same time they may involve extremely intense feelings, thoughts and experiences.

It is also crucial to note that even though these relationships may only take place in virtual space, the experiences are embedded in the embodied persons – the children and young people, who are not expected to be sexually active or violent in their daily environments. These contradictions, which cannot be solved by communicative strategies, are hidden, confronted and negotiated in everyday life politics. If they are too difficult to process, or too controversial to encounter in families, schools, peer-groups or other contexts, serious problems may occur.

To summarise, children, young people and families form a distinct and multi-layered context of digital gaming. However, in media and public debates the meanings of games and other virtual spaces are often approached rather narrowly and not from their own points of view. Gaming is either demonised, or otherwise portrayed merely as a new form of play. Both approaches tend to alienate gaming from those spaces in which children and young people constantly feel, think, experience and express — i.e. their everyday life environments. Thus, in our future research we will take a closer look at the meanings attached to the games cultures of childhood and youth. From this point of view, we want to critically examine the risks and potentials of digital gaming, and to reveal some of the various sub-cultures that children and young people create in their everyday embodied and virtual spaces.

# 6. Conclusions

Since this survey has been the pilot part of our research project, we need to be cautious about what conclusions we can draw on the basis of it. Perhaps the main results could be seen to relate to the methodology and approach of this study; the closer one looks at a phenomenon like digital game playing, the more complex it appears. This study has taught us to be more cautious about simple truths that get tossed around in the media about *all* gamers, *all* game playing and generally about publicised figures that try to capture and reduce the full spectrum of game playing behaviours of entire populations into absolute numbers. Even a simple "fact" like "How large a part of the Finnish population are digital game players" can be constructed in multiple ways, depending on the applied criteria and methodology.

The first finding was that we need to make changes to our methodology in the future steps of this study. We sent out 4 000 questionnaires, but only 20 % of them were returned to us (final n=805). This we related partly to our experimental instrument: even though it was designed to be 'scaleable' so that those who were not particularly interested in or active in their relationship to digital games could skip the entire (B form of the) survey instrument, the entire survey was still an overtly sizeable and arduous undertaking for many potential respondents. On the other hand, one possible explanation for the low response rate could be that there are large numbers of people who have so little interest in games that they ignore research inquiries focused on the subject matter. On the other hand, when comparing the background variables of our sample with those of the entire Finnish population, we did find a rather good match, suggesting that our respondents represent the entire nation rather well. When reading our report it nevertheless should be kept in mind that 80 % of those who received our survey forms decided not to participate in the study.

In terms of the key findings from this prestudy data, some of the most important ones were in those areas in which we did not find anything radical; there appeared to be no significant differences between those who play digital games and those who do not – no such background factor as living in the country or in a city, no household income or educational level appeared to differ significantly between those who play, and those who do not play digital games. A digital game player can be practically "anyone" today: coming from any kind of an educational background, life situation and living area.

In order to get deeper into the role of digital game players in a contemporary society, we constructed a way of defining a 'gamer' for the purposes of this study; by our criteria, a gamer is someone who spends some time each week on playing com-

puter or video games, says she plays digital games when asked directly, describes her way of gaming in some way, thinks of herself as a digital game hobbyist, or reveals detailed information about the digital games she has played during the last year. In the analysis, we found that according to these criteria, 53 % of our respondents were digital gamers. Comparing this finding to the other interesting finding that the single largest group among those who reported their weekly digital play time was those who said they play zero hours, we came up with a picture of Finland as a "divided nation" regarding digital game playing. Roughly half of the Finnish population in 2007 could be categorised as gamers, and half appeared to be non-gamers.

It was also interesting to observe that other types of games were more popular among the Finnish population than digital games. Our survey instrument measured the popularity of 17 different types of games, including very popular as well as marginal types of games currently played in Finland. Through principal component analysis, four major categories of games and their player groups were discovered; in other words, the game playing behaviours reported by our informants correlated in a manner in which certain types of games were more likely to be played by the same people than some other games. Most digital games came together in a group of their own, providing us with a chance to compare 'digital game players' as a group with other kinds of game player groups in the Finnish population. (This categorisation was not entirely technology-driven; the popularity of online role-playing games was found to be more strongly related to other types of role-playing games than to other computer or console games, for example.) This formation of four meta-categories is probably one of the first times when an entire population has been statistically categorised in terms of their game playing behaviours, and provides interesting starting points for further studies.

Within the largest of these four categories, 66 % of our respondents told us that they had played during the last month some game belonging to our category of *traditional games,* which contains all board, card, problem-solving and outdoor games. As a second largest category, *money games* (meaning betting and slot machine games) were popular among all demographics, having been played during the last month by 59 % of the respondents. In contrast, *engrossment games* which we defined to include table-top role playing games, live action role-playing and online role playing games, as well as miniature war games and collectible card games were only played by 4 % of the respondents during the last month. In our survey, *digital game* playing (computer, video games etc.) emerged as the third largest category and these games were played during the last month by 31 % of the respondents.

Our study includes more detailed analysis of people who can predominantly be identified to belong to one of these

categories as a certain kind of a player (see Chapter 3.3). In demographic terms it was discovered, e.g. that engrossment game players are dominantly young males, while money game players are rather evenly distributed in all age groups and both genders. Traditional game players were an even larger group and well represented in the Finnish population, men and women of all ages. In contrast, digital game players were more typically young and tilted towards the male population. The largest demographic subgroup of digital players was young men between 15 and 24 years of age. The average age of digital game players in this analysis was 33 years, compared to the average age of 51 years among all who had not played any digital games during the last month. A summary of these player categories' distribution in different age and gender groups can be seen in the report's Figure 15 above.

After analysing all the abovementioned factors, we conclude that participation in digital play is currently dividing the Finnish population. Particularly young people are likely to be digital players, while older people more typically are not. But there are quite a few exceptions if one searches deeper, and looks things at the level of individuals: in some form or another, digital play has already become diffused in all age groups we examined. The non-symmetrical age distribution of digital play nevertheless deserves some careful thought. Traditional games and money games both have a longer history than digital entertainment, being more deeply rooted and popular parts of the overall games culture than digital games are at the moment. Digital games have particularly strong popularity among the younger demographics, and this may suggest probable growth of their popularity in the future. An interesting figure in this regard is that of the informants who have children, 38 % played digital games with them (cf. an earlier study, Ermi et al. 2004, in which we identified an apparent 'digital gaming divide' between game-playing children and their non-gamer parents). On the other hand, we are still missing reliable longitudinal studies, which could be used to verify whether today's young people will continue to play digital games actively also in their adult years and elder life in the future. There are some suggestions that a particularly busy family life may lead to a drop in game play during the mid-life years (cf. here also the finding from the BBC funded study of games' significance dropping among the 36–50 year-olds; BBC 2005, 18-20).

The role of games in general appears strong in the Finnish culture. Overall, almost 100 % of all respondents said that they had played at least some type of game at least once. Under closer analysis, traditional betting (lottery) type of money games was the single most popular kind of game played by the Finns (54 % of respondents reported having played them lately). On the basis of this finding, Finland could be called "a betting nation".

Within our sample, two particular factors that pointed towards significant differences in game play were gender and age: on average, males appeared to be more interested in digital play than females, and young people more than the elderly. There were no significant differences between men and women in other areas except for time used for playing digital games, where the group of 15 to 24 year old men had a weekly average play time of almost 9 hours, compared to the average play time of women of the same age, which was 2.5 hours. The most typical (median) estimate of all respondents of their weekly digital play time was zero hours, meaning that the single largest group of the population appears not to be active game players. On the basis of this measure at least, young men appear to be the most dedicated or 'hard-core' in their digital gaming.

The slight dominance of all men, and particularly that of young men particularly in digital play activities can possibly be related to the often discussed tendency of information technology becoming gendered as masculine, as well as of the adoption of digital gaming being something that has come early to the lives of only those generations who have been born into a world saturated by games and gaming devices. (For an update and critique of 'gendered IT' discussion from a feminist media studies perspective, see: Lee 2006.) Other than in terms of age and gender, digital play appears to be rather well integrated into the society, and there appears to be no radical divides among players and non-players.

In closer scrutiny, there appear to be some further differences between men and women in their relation to games. In terms of potential for conflicts and problems around game playing, more men than women recognised issues in this pilot survey. More men than women tried to restrict their gaming (18 % versus 8 %) and more men than women also felt that someone tried to restrict their gaming (11 % versus 2 %). This is consistent with the observation that, on average, men appeared to play more than women; as noted in Chapter 4.4, one fifth of the male gamers belonged to the "heavy gamers" group, compared to only 8 % of the women.

Thus, it appears that the possible downsides of dedicated gaming are also more concentrated on male players. On the other hand, this does not prove that female gaming is without its problems. Rather than rising from too 'intensive' dedication to hard core gamer cultures, those problems might just be on other areas that our survey was not designed to detect. The most typical problems related to gaming appeared to be related to an extensive use of time to play games.

In areas related to social gaming an interesting finding also emerged. There was a significant difference among the age group of 25–34 years of age, in which a much larger proportion of the women than of the men played only with others (p=0.015). This group of young, adult women thus appeared to

associate digital game playing with company and social situations, which was an interesting discovery. Overall, social situations of varying kinds were typical for Finnish digital play. While playing alone was common, half of all gamers in our sample could be described as 'social gamers', meaning they played with someone else from their family, with friends, with co-workers or with other people over the Internet. Age was a dividing factor here: majority of those who were over 45 years of age only played alone, while younger people tended to play both alone as well as with others.

An interesting finding was also that while most of the active digital game players (and notably 75 % of those who are willing to call themselves "game hobbyists") are men, the difference between genders appears to even out as people get older. In older demographics we found that digital game playing was not as popular as it was among the young, but that it was more evenly distributed among men and women. We also found evidence of digital gaming practiced by someone in all age groups.

On the other hand, it still seems a rather marginal element in the Finnish society to belong to some active gamer subculture, or to consider oneself to be an active 'digital game hobbyist' – 8 % of our respondents said they were game hobbyists. On the other hand, 8 % of the entire population is already quite many people (out of c. 5 200 000 population living in Finland, 8 % would mean c. 416 000 active game hobbyists). The findings of our survey, however, cannot be generalised directly to the whole population because our sample weighs in favour of the gamers.

There appeared to be various factors that related the perceived tilt towards males in the active gamer group. For example, we also found out that the middle-aged gamer men read more consumer advice than the non-gamers, which could mean that these gamer men had greater interest in digital technology in itself, which might also translate into more attraction towards digital forms of play.

We also wanted to know what kinds of games our respondents played at the time of the survey. The most popular digital game in Finland, which was discovered after analysing all answers, was certain kind of a surprise: the digital version of *Solitaire*. The popular card game comes bundled with computer operating systems like Microsoft Windows, and it appears to be the most mainstream of all digital games. 12 % of all those who filled in our more detailed Questionnaire part B, and could be described as "Active Gamers", reported playing Solitaire. The median age of these solitaire-players was 48 years, and two thirds of them were women. Thus, more than anything, from games cultures point of view Finland could well be described as "a Solitaire nation".

Solitaire was at the top of both male and female gamers' lists, but beyond that, people of different genders differed clearly in their preferences of digital games. Finnish men play

strategy and shooting games in particular (*Civilization* and *Counter-Strike* at the top of the list), while women most often play *The Sims* series games or *Tetris* and other classic puzzle, problem-solving or digital card games. These kinds of 'casual games' are the most popular category overall among all other age groups except that of the youngest players. We found out that the gaming taste of the 15–24 year-olds differs clearly from that of the older people in our survey, as they strongly favoured various kinds of action games.

Thus, certain interesting final conclusions emerge from this study. First of all, the reality of digital play appears so fluid and variable in terms of content as well as forms of play, that it is possible to construct multiple, even contradictory views about digital play in Finland. Depending on how 'gamer' or 'digital game player' criteria are defined, it is possible to construct versions of this study where gamers in Finland are a group of people that is in size anything between 29 % and 75 % of the population. Taking a closer look, there appears to be no radical, clear-cut division line between players and non-players, but rather, there emerges a continuum of different behaviours where some people are just more likely to dedicate their time to digital games as compared to more traditional games than others.

One of our central findings is that particularly the current, violence focused media perception of games and gamers in our society is one-sided and limited. "Finnish gamers" according to this view are just about anyone: they are a bit more likely to be younger in age and male in gender, but gamers also include significant numbers of older people and women. The most typical sort of digital gamer in Finland according to this study is an occasional player of a familiar puzzle or card game like Solitaire, who dedicates couple hours per week to digital play. On the other hand, if a "gamer" is defined more narrowly as a certain kind of a very active or "hardcore" game player, or game hobbyist, then the picture changes. We are now building an image of a small group, less than 10 % in size of the entire Finnish population, which is predominantly young and male. This group would most likely be playing digital games that are distinctively different from the casual games the larger, "lighter gamers" group favours: e.g. extensive strategy games like *Civilization*, action-oriented sports games like *NHL* series games, or team action and shooter games like *Counter-Strike*.

The uneven distribution of active engagement in these, more complex and challenging forms of current digital games and associated games cultures can even cause some concern. Why the majority of people are not interested in the most visible part of offerings from contemporary games industry? These more extensive games are after all those with the highest production values, and those which are being most actively marketed. There appears to be a "digital games divide" which

leaves more than half of the nation excluded from these contemporary games cultures – or, in other terms, majority of people within older generations appear to be alienated from virtual game worlds, while many young people spend significant parts of their lives within them. There appears to be room for improvement both within the ways in which games are currently produced and marketed as art, culture and entertainment, and also need for games literacy education which would be specifically targeted to bridge this intergenerational divide, and make people of different ages and genders to share, discuss, have fun and critically play games together. Only this way can digital games cultures evolve beyond subcultural or "ghettoised" status.

# 7.  References and Appendices

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## 7.2. Appendix 1: Original Finnish Questionnaire, Part A

Arjen pelit
– pelaamisen arki

LOMAKE **A**

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Osoitelähde: Väestörekisterikeskus

Hyvä vastaanottaja,

Tampereen yliopiston Hypermedialaboratoriossa on meneillään kansainvälinen pelikulttuurien tutkimusprojekti InGa (*International Study of Games Cultures*). Tutkimuksessa selvitetään suomalaisten pelikokemuksia ja käsityksiä pelaamisesta. Olemme kiinnostuneita *sekä pelaajien että ei-pelaajien näkemyksistä*. Tutkimuksessa keskitytään erityisesti *digitaalisten pelien* eli tietokone-, video-, konsoli-, kännykkä- ja verkkopelien maailmaan.

Keräämme tutkimusaineistoa oheisella kaksiosaisella kyselylomakkeella, jonka avulla pyrimme tavoittamaan kattavasti eri ikäisiä ja eri paikkakunnilla asuvia suomalaisia. Sinut on valittu tähän tutkimukseen Väestörekisterikeskuksen avulla. Vastauksesi on meille erittäin tärkeä. Toivomme, että ehdit käyttää *10-20 minuuttia aikaasi* tämän kyselyn täyttämiseen ja kertoa meille *mitä sinä ajattelet pelaamisesta*. Harkintasi mukaan voit vastata joko molempiin lomakkeisiin tai pelkkään A-osaan. Palauta kysely oheisessa kirjekuoressa Tampereen yliopiston Hypermedialaboratorioon, mistä saat halutessasi myös lisätietoja tutkimuksesta.

Vastauksianne mielenkiinnolla odottaen,
InGa-tutkimusryhmä

Vastuullinen tutkija: Kirsi Pauliina Kallio (HT), kirsipauliina.kallio@uta.fi, +358-3-3551 6110
Projektin johtaja: Frans Mäyrä (FT), hypermedian, erityisesti digitaalisen kulttuurin ja peilitutkimuksen professori

### ARJEN PUITTEET

Aluksi pyydämme sinua kertomaan muutamia taustatietoja. Ole hyvä ja rastita itseäsi tai talouttasi parhaiten kuvaava vaihtoehto tai kirjoita vaihtoehtoisesti vastauksesi viivalle.

1. Ikä
_____ vuotta

2. Sukupuoli
Nainen ☐
Mies ☐

3. Äidinkieli/ -kielet
Suomi ☐
Ruotsi ☐
Muu, mikä? ☐
_____

4. Koulutus
Peruskoulu ☐
Lukio ☐
Ammattikoulu ☐
Opistoasteen koulutus ☐
Ammattikorkeakoulutus ☐
Yliopistokoulutus ☐

5. Asuinpaikka
Pääkaupunkiseutu ☐
Muu kaupunkiseutu ☐
Kuntakeskus ☐
Maaseudun taajama ☐
Maaseutu ☐

6. Asema työmarkkinoilla
Kokopäivätyössä ☐
Päätoiminen opiskelija ☐
Eläkkeellä ☐
Osa-aikatyössä ☐
Osa-aikaeläkkeellä ☐
Opiskelija ja osa-aikatyössä ☐
Työtön/koulutuksessa ☐

7. Työnkuva
Työntekijä ☐
Esimies ☐
Toimihenkilö ☐
Asiantuntija ☐
Yrittäjä ☐
Opiskelija ☐
Työtön ☐

8. Perheenjäsenet (samassa taloudessa)
Asun yksin ☐
Asun puolisoni kanssa ☐
Asun puolisoni ja lastemme kanssa ☐
Asun vanhempieni kanssa ☐
Kanssamme asuu muita sukulaisia ☐
Asun kimppakämpässä ☐

9. Talouteni kuukausitulot (brutto)
Alle 2000 euroa ☐
2000 – 4000 euroa ☐
4000 – 6000 euroa ☐
6000 – 8000 euroa ☐
Yli 8000 euroa ☐

10. Pääasialliset tulonlähteet
Palkka ☐
Eläke ☐
Opintotuki ☐
Työttömyyskorvaus ☐
Perheeni huolehtii peruskuluistani ☐
Muu, mikä? ☐
_____

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Arjen pelit – pelaamisen arki

# A

## TOTTUMUKSIA JA KÄSITYKSIÄ

### 11. Milloin kävit viimeksi...?

| | Parin viime päivän aikana | Kuukauden sisällä | Viimeisen puolen vuoden aikana | Joskus aiemmin | En koskaan |
|---|---|---|---|---|---|
| Museossa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Elokuvissa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Konsertissa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Teatterissa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kirkossa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelihallissa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ruoka-ravintolassa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Viihde-ravintolassa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pikaruoka-paikassa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Lenkillä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Mökillä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Luontoretkellä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Harrastuksessa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Yhdistyksen tapaamisessa | ☐ | ☐ | ☐ | ☐ | ☐ |

### 12. Paljonko aikaa tavanomaisesti käytät seuraaviin asioihin?

Työskentely _____ tuntia viikossa

Kotiaskareet ja asiointi _____ tuntia viikossa

Harrastukset _____ tuntia viikossa

Ulkoilu _____ tuntia viikossa

Kirjojen/lehtien lukeminen _____ tuntia viikossa

Television katselu _____ tuntia viikossa

Videoiden/dvd:n katselu _____ tuntia viikossa

Tietokone-/videopelaaminen _____ tuntia viikossa

### 13. Onko sinulla mielestäsi riittävästi vapaa-aikaa?

Kyllä, ehdin harrastaa ja rentoutua tarpeeksi. ☐

Kyllä, pystyn järjestämään itselleni vapaa-aikaa. ☐

Ei, aikani kuluu enimmäkseen työhön ja askareisiin. ☐

### 14. Onko sinulla mielestäsi riittävästi rahaa harrastamiseen?

Kyllä, minulla on varaa harrastaa mieleni mukaisesti. ☐

Kyllä, kun käytän rahaa maltillisti. ☐

Ei, harrastaisin enemmän jos minulla olisi varaa. ☐

### 15. Kuinka usein käytät Internetiä?

Useita kertoja päivässä ☐
Kerran päivässä ☐
Pari kertaa viikossa ☐
Pari kertaa kuussa ☐
Harvemmin ☐
En koskaan ☐

### 16. Missä käytät Internetiä muuhun kuin työhön/opiskeluun?

Kotona ☐
Koulussa ☐
Kirjastossa ☐
Internet-kahvilassa ☐
Kerhotilassa ☐
Ystävän luona ☐
Töissä ☐
Mobiiliyhteydelläni missä vain ☐

### 17. Mitä mieltä olet seuraavista väittämistä?
(1= täysin eri mieltä, 3=en osaa sanoa, 5=täysin samaa mieltä)

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Teen työtä ensisijaisesti rahan ansaitsemisen vuoksi. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Jos saisin enemmän palkkaa tekisin vähemmän töitä. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Olen ylpeä työstäni. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kulutan yleensä kaiken ansaitsemani rahan. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Shoppailu saa minut hyvälle tuulelle. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ostan mielelläni laitteeni käytettyinä säästääkseni rahaa. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ostaessani laitteen uutena hyväksyn kovankin hinnan. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kodissani on monia laitteita, joita käytän varsin harvoin. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Hyvää ei saa halvalla. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Koneiden ja teknologian tarkoitus on helpottaa elämää. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Merkkituotteet ovat muita tuotteita luotettavampia. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Muodit ja trendit eivät ole minulle kovin tärkeitä. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Perinteet ovat minulle tärkeitä. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Luen kuluttaja-arvioita välttääkseni huonoja kokemuksia. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Asioin mieluiten tutuissa paikoissa. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Testaan mahdollisimman pian alueeni uudet ravintolat. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Käyttämäni tuotteet vastaavat aatemaailmaani. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Osallistun aktiivisesti yhteiskunnalliseen toimintaan. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Olen huolissani kulutukseni vaikutuksesta ympäristöön. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Turhaudun usein maailman epäoikeudenmukaisuuteen. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Olen pääasiassa tyytyväinen suomalaiseen yhteiskuntaan. | ☐ | ☐ | ☐ | ☐ | ☐ |

Arjen pelit – pelaamisen arki

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## PELAAMINEN

Seuraavassa osiossaon selvitetään pelaamiseen ja erityisesti digitaalisiin peleihin liittyviä kysymyksiä. Haluamme tähdentää, että olemme kiinnostuneita paitsi intensiivisestä pelaamisesta, myös lyhytkestoisesta ja satunnaisesta pelaamisesta. Jos olet edes joskus pelannut jotakin digitaalista peliä (esim. tietokonepeli, kännykkäpelit, konsolipelit), pyydämme sinua vastaamaan kaikkiin kysymyksiin.

### 18. Milloin viimeksi...?

| | Parin viime päivän aikana | Kuukauden sisällä | Viimeisen puolen vuoden aikana | Joskus aiemmin | En koskaan |
|---|---|---|---|---|---|
| Puhuit puhelimessa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kirjoitit sähköpostia | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kirjoitit kirjeen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Tapasit ystäväsi | ☐ | ☐ | ☐ | ☐ | ☐ |
| Aterioit perheesi parissa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kävit syömässä ystävän kanssa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Katselit televisiota | ☐ | ☐ | ☐ | ☐ | ☐ |
| Katselit videoa tai dvd:tä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kuuntelit musiikkilevyä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kuuntelit mp3-soitinta | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kuuntelit musiikkia tietokoneelta | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ostit musiikkia | ☐ | ☐ | ☐ | ☐ | ☐ |
| Valokuvasit filmikameralla | ☐ | ☐ | ☐ | ☐ | ☐ |
| Valokuvasit digikameralla | ☐ | ☐ | ☐ | ☐ | ☐ |
| Luit kirjaa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ostit kirjan | ☐ | ☐ | ☐ | ☐ | ☐ |
| Luit lehteä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Luit verkkolehteä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kuuntelit radioa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kuuntelit verkkoradioa | ☐ | ☐ | ☐ | ☐ | ☐ |
| Chattailit | ☐ | ☐ | ☐ | ☐ | ☐ |
| Etsit netistä tietoa (esim. säätiedot) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Käytit nettipalvelua (esim. pankki) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Teit ostoksia netissä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Seurasit pörssikursseja nettisivulta | ☐ | ☐ | ☐ | ☐ | ☐ |
| Seurasit pörssikursseja lehdestä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Etsit netistä viihdepalveluita | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelasit seurapeliä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelasit rahapeliä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelasit tietokonepeliä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelasit konsolipeliä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelasit verkkopeliä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelasit puhelinpeliä | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ostit seurapelin | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ostit digitaalisen pelin | ☐ | ☐ | ☐ | ☐ | ☐ |

### 19. Milloin olet viimeksi pelannut seuraavanlaisia pelejä?

| | Parin viime päivän aikana | Kuukauden sisällä | Viimeisen puolen vuoden aikana | Joskus aiemmin | En koskaan |
|---|---|---|---|---|---|
| Lauta- ja seurapelit (esim. Yatzy, Monopoli) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Perinteiset korttipelit (esim. Ristiseiska, Pasianssi) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ongelmanratkaisupelit (esim. Ristisana, Sudoku) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pubipelit (esim. Darts, Biljardi) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Veikkauspelit (esim. Lotto) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Raha-automaattipelit (esim. Hedelmäpeli) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Verkkorahapelit (esim. Nettipokeri) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ulkopelit (esim. Hippa, Petankki) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Keräilykorttipelit (esim. Magic the Gathering) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Käsikonsolipelit (esim. GabeBoy, PSP) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Tietokonepelit (esim. Tetris, Sims) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Verkkoroolipelit (esim. World of Warcraft) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kännykkäpelit (esim. Nokian matopeli) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Roolipelit (esim. GURPS) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Larpit eli eläytymisroolipelit (esim. Vampire) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Miniatyyritaistelupelit (esim. Warhammer 40.000) | ☐ | ☐ | ☐ | ☐ | ☐ |

### 20. Pelataanko taloudessanne digitaalisia pelejä?
(Voit valita useita vaihtoehtoja.)

Kyllä, pelaan itse. ☐
Kyllä, puolisoni pelaa. ☐
Kyllä, lapset pelaavat. ☐
Taloudessamme ei pelata lainkaan digitaalisia pelejä. ☐

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*Hypermedialaboratorio, InGa-A, 2007*

Arjen pelit – pelaamisen arki

# A

**21. Mitä seuraavista laitteista taloudestanne löytyy?**

- Kännykkä ☐
- PC-tietokone ☐
- Macintosh-tietokone ☐
- DVD-soitin ☐
- Laajakuvatelevisio ☐
- Kotiteatterijärjestelmä ☐
- Satelliitti/kaapelikanavaviritin ☐
- Digi-tv/Digiboksi ☐
- Pelikonsoli ☐
- Käsipelikonsoli ☐

**22. Entäpä näistä pelilaitteista?**

- Atari ☐
- DreamCast ☐
- GameBoy ☐
- GameCube ☐
- Neo Geo Pocket Color ☐
- Nokia NGage ☐
- Nintendo DS ☐
- Nintendo 64 ☐
- NES (Nintendo 1986) ☐
- Super NES (Nintendo 1992) ☐
- PC-tietokone ☐
- PlayStation ☐
- PS2 (Playstation 2) ☐
- PS3 ☐
- PSP (Playstation Portable) ☐
- Sega Genesis ☐
- Sega Saturn ☐
- Xbox ☐
- XBox 360 ☐
- En tiedä ☐

**23. Paljonko rahaa taloudessanne on käytetty näiden laitteiden hankintaan parina viime vuonna?**

Noin _____ euroa

**24. Mitkä seuraavista väittämistä kuvaavat suhtautumistasi digitaalisiin peleihin ja niiden pelaamiseen?**

- Pelaaminen kehittää monia taitoja. ☐
- Pelaaminen on kiva tapa viettää aikaa yhdessä. ☐
- Pelaan joskus silloinkin, kun minun pitäisi oikeastaan olla tekemässä jotakin muuta. ☐
- Pelaisin enemmän, jos ehtisin. ☐
- Pelaamisesta seuraa joskus sanaharkkaa. ☐
- Olen toisinaan huolestunut pelaamiseni määrästä. ☐
- Minua on kehotettu vähentämään pelaamista. ☐
- Pyrin rajoittamaan pelaamistani. ☐
- Joku muu rajoittaa pelaamistani. ☐
- Olen kehottanut jotakuta vähentämään pelaamista. ☐
- Tunnen aika ajoin syyllisyyttä pelaamisesta. ☐
- Koen mielipahaa rajoittaessani toisten pelaamista. ☐
- Pelaaminen on melko edullinen harrastus. ☐
- Pelaamiseen käyttämäni raha on ongelma. ☐
- Pelaamiseen kuluu perheessämme liikaa rahaa. ☐
- Pelaamiseen liittyvistä vaaroista puhutaan liikaa. ☐

*KYSYMYKSET 25-30 KOSKEVAT DIGITAALISTA PELAAMISTA.*

**25. Jos olet joskus pelannut, tai kokeillut pelata digitaalista peliä, minkä ikäisenä pelasit ensimmäistä kertaa?**

_____ vuotiaana

**26. Mikä seuraavista kuvaa parhaiten omaa pelaamistasi?**

- Pelaan joitakin minuutteja päivässä. ☐
- Pelaan joitakin tunteja viikossa. ☐
- Käytän pelaamiseen pari päivää kuussa. ☐
- Pelaan muutaman viikon vuodessa. ☐
- Pelaan vain satunnaisesti. ☐
- En pelaa lainkaan (voit ohittaa loput kysymykset). ☐

**27. Mihin aikaan yleensä pelaat? (Valitse yksi vaihtoehto.)**

- Aamulla (klo 6-12) ☐
- Päivällä (klo 12-18) ☐
- Illalla (klo 18-24) ☐
- Yöllä (klo 24-6) ☐

**28. Missä yleensä pelaat? (Voit valita useita vaihtoehtoja.)**

- Kotona ☐
- Koulussa tai opiskelupaikassa ☐
- Töissä ☐
- Erityisessä harrastuspaikassa ☐
- Kirjastossa ☐
- Internet-kahvilassa tai –kerhossa ☐
- Ystävän luona ☐
- Kannettavalla laitteellani missä vain ☐

**29. Entä kenen kanssa yleensä pelaat? (Useita vaihtoehtoja.)**

- Yksin ☐
- Puolison kanssa ☐
- Lasten kanssa ☐
- Vanhempien kanssa ☐
- Sisarusten kanssa ☐
- Ystävän/ystävien kanssa ☐
- Työ-/opiskelukavereiden kanssa ☐
- stävien kanssa Internetissä ☐
- Tuntemattomien kanssa Internetissä ☐

**30. Pidätkö itseäsi digitaalisten pelien harrastajana?**

- Kyllä ☐
- En ☐

Tähän päättyy kyselymme yleisosio. Nyt pyydämme sinua harkitsemaan, haluatko vastata myös *varsinaisesti digitaalista pelaamista koskevaan osioon.* B-lomakkeen avulla pyrimme selvittämään, millaisia pelejä suomalaiset pelaavat ja miten pelaamiseen suhtaudutaan. Toivomme saavamme tietoa kaikenlaisesta digitaalisesta pelaamisesta - työskentelyn lomassa pelattu pasianssi on yhtä kiinnostava kuin viikonlopun ajan kestävä verkkopelisessiokin. Olisi siis mukavaa, jos *mahdollisimman monenlaiset pelailijat* vastaisivat. Mikäli kuitenkin lopetat vastaamisen tähän, kiitämme sinua osallistumisesta. Jokainen täytetty lomake on meille kullanarvoinen! *Kiitos kun olet mukana rakentamassa Suomeen keskustelevaa pelikulttuuria.*

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## 7.3. Appendix 2: Original Finnish Questionnaire, Part B

Digitaaliset pelit
– pelaamisen arki

LOMAKE **B**

InGa-pelaajatutkimus, Hypermedialaboratorio, 33014 Tampereen yliopisto    puh. +358-3-3551 6110    email: kirsipauliina.kallio@uta.fi
Osoitelähde: Väestörekisterikeskus

TAMPEREEN YLIOPISTO

Mukavaa, että päätit vastata myös kyselymme toiseen osioon, jossa käsitellään *digitaalista pelaamista*. Olemme kiinnostuneita tietämään millaisten pelien parissa viihdyt, missä ja millä tavalla pelaat ja - ennen kaikkea - millaisia kokemuksia, näkemyksiä ja tuntemuksia sinulla pelaamiseen liittyy. Aluksi kartoitamme muutamia seikkoja itsellesi mieluisimmista peleistä, jonka jälkeen siirrymme kyselemään pelaamisesta yleisemmin. Kysymykset on laadittu monenlaisia pelaajia ajatellen, joten joillakin osin ne saattavat tuntua sinulle vierailta. *Tärkeintä on, että vastaat kysymyksiin omien kokemustesi pohjalta.* Näin saamme kerättyä mahdollisimman monipuolista tietoa suomalaisesta digitaalisten pelien kulttuurista.

1. Mitä peliä olet pelannut eniten kuluneen vuoden aikana?

_____

2. Mitä seikkoja pidät onnistuneina ja tärkeinä tässä pelissä?
(1=ei kovin tärkeä, 3=en osaa sanoa, 5=erittäin tärkeä)

|  | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Teema | ☐ | ☐ | ☐ | ☐ | ☐ |
| Taustatarina | ☐ | ☐ | ☐ | ☐ | ☐ |
| Äänet ja musiikki | ☐ | ☐ | ☐ | ☐ | ☐ |
| Graafinen ulkoasu | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ongelmanratkaisu | ☐ | ☐ | ☐ | ☐ | ☐ |
| Strategian laatiminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelitaitojen kehittyminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Muiden kykyjen paraneminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kamppailu ja voittaminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Rakentaminen ja hallitseminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Yhdessä pelaaminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ajan tappaminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelihahmot | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelimaailma | ☐ | ☐ | ☐ | ☐ | ☐ |
| Löytöretkeily | ☐ | ☐ | ☐ | ☐ | ☐ |
| Huumori | ☐ | ☐ | ☐ | ☐ | ☐ |
| Jännitys | ☐ | ☐ | ☐ | ☐ | ☐ |
| Sopiva haasteellisuus | ☐ | ☐ | ☐ | ☐ | ☐ |
| Helppous ja kontrolloitavuus | ☐ | ☐ | ☐ | ☐ | ☐ |

3. Kuinka kauan yleensä pelaat tätä peliä yhtäjaksoisesti?

- Muutamia minuutteja ☐
- Vajaan vartin ☐
- Alle tunnin ☐
- Tunnin tai pari ☐
- Monta tuntia ☐
- Koko päivän ☐
- Pari päivää ☐
- Viikon ajan tai kauemmin ☐

4. Missä yleensä pelaat sitä? (Voit valita useita vaihtoehtoja.)

- Kotona ☐
- Kaverin luona ☐
- Koulussa ☐
- Työpaikalla ☐
- Kirjastossa ☐
- Internetkahvilassa tai pelisalissa ☐
- Mobiililaitteellani eri paikoissa ☐

5. Mitä peliä olet pelannut toiseksi eniten kuluneen vuoden aikana?
( Jos olet pelannut vain yhtä peliä, siirry kysymykseen 13.)

_____

6. Mitä seikkoja pidät onnistuneina ja tärkeinä tässä pelissä?
(1=ei kovin tärkeä, 3=en osaa sanoa, 5=erittäin tärkeä)

|  | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Teema | ☐ | ☐ | ☐ | ☐ | ☐ |
| Taustatarina | ☐ | ☐ | ☐ | ☐ | ☐ |
| Äänet ja musiikki | ☐ | ☐ | ☐ | ☐ | ☐ |
| Graafinen ulkoasu | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ongelmanratkaisu | ☐ | ☐ | ☐ | ☐ | ☐ |
| Strategian laatiminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelitaitojen kehittyminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Muiden kykyjen paraneminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kamppailu ja voittaminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Rakentaminen ja hallitseminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Yhdessä pelaaminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ajan tappaminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelihahmot | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelimaailma | ☐ | ☐ | ☐ | ☐ | ☐ |
| Löytöretkeily | ☐ | ☐ | ☐ | ☐ | ☐ |
| Huumori | ☐ | ☐ | ☐ | ☐ | ☐ |
| Jännitys | ☐ | ☐ | ☐ | ☐ | ☐ |
| Sopiva haasteellisuus | ☐ | ☐ | ☐ | ☐ | ☐ |
| Helppous ja kontrolloitavuus | ☐ | ☐ | ☐ | ☐ | ☐ |

7. Kuinka kauan yleensä pelaat tätä peliä yhtäjaksoisesti?

- Muutamia minuutteja ☐
- Vajaan vartin ☐
- Alle tunnin ☐
- Tunnin tai pari ☐
- Monta tuntia ☐
- Koko päivän ☐
- Pari päivää ☐
- Viikon ajan tai kauemmin ☐

8. Missä yleensä pelaat sitä? (Voit valita useita vaihtoehtoja.)

- Kotona ☐
- Kaverin luona ☐
- Koulussa ☐
- Työpaikalla ☐
- Kirjastossa ☐
- Internetkahvilassa tai pelisalissa ☐
- Mobiililaitteellani eri paikoissa ☐

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**9. Mitä olet pelannut kolmanneksi eniten kuluneen vuoden aikana?**
(Jos olet pelannut vain yhtä kahta peliä, siirry kysymykseen 13.)

_____

**10. Kuinka kauan yleensä pelaat tätä peliä yhtäjaksoisesti?**

- Muutamia minuutteja ☐
- Vajaan vartin ☐
- Alle tunnin ☐
- Tunnin tai pari ☐
- Monta tuntia ☐
- Koko päivän ☐
- Pari päivää ☐
- Viikon ajan tai kauemmin ☐

**11. Missä yleensä pelaat sitä?** (Voit valita useita vaihtoehtoja.)

- Kotona ☐
- Kaverin luona ☐
- Koulussa ☐
- Työpaikalla ☐
- Kirjastossa ☐
- Internetkahvilassa tai pelisalissa ☐
- Kännykällä eri paikoissa ☐

**12. Mitä seikkoja pidät onnistuneina ja tärkeinä tässä pelissä?**
(1=ei kovin tärkeä, 3=en osaa sanoa, 5=erittäin tärkeä)

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Teema | ☐ | ☐ | ☐ | ☐ | ☐ |
| Taustatarina | ☐ | ☐ | ☐ | ☐ | ☐ |
| Äänet ja musiikki | ☐ | ☐ | ☐ | ☐ | ☐ |
| Graafinen ulkoasu | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ongelmanratkaisu | ☐ | ☐ | ☐ | ☐ | ☐ |
| Strategian laatiminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelitaitojen kehittyminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Muiden kykyjen paraneminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Kamppailu ja voittaminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Rakentaminen ja hallitseminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Yhdessä pelaaminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ajan tappaminen | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelihahmot | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pelimaailma | ☐ | ☐ | ☐ | ☐ | ☐ |
| Löytöretkeily | ☐ | ☐ | ☐ | ☐ | ☐ |
| Huumori | ☐ | ☐ | ☐ | ☐ | ☐ |
| Jännitys | ☐ | ☐ | ☐ | ☐ | ☐ |
| Sopiva haasteellisuus | ☐ | ☐ | ☐ | ☐ | ☐ |
| Helppous ja kontrolloitavuus | ☐ | ☐ | ☐ | ☐ | ☐ |

**13. Pelaatko pelit yleensä "läpi" tai kerralla alusta loppuun?**

- Kyllä, mahdollisimman nopeasti. ☐
- Kyllä, jos minulla on aikaa. ☐
- En yleensä pelaa pelejä läpi asti. ☐

**14. Onko sinulla tapana keskustella pelaamisesta ystäviesi kanssa?**

- Kyllä, oma-aloitteisesti. ☐
- Kyllä, jos se tulee puheeksi. ☐
- Ei kovin usein / ei lainkaan. ☐

**15. Kun häviät pelin tai koet merkittävän tappion, koetatko pelata uudelleen?**

- Kyllä, mahdollisimman nopeasti. ☐
- Kyllä, jos minulla on aikaa. ☐
- En yleensä jatka pelaamista. ☐

**16. Jos olet viimeisen vuoden aikana vähentänyt digitaalisten pelien pelaamista, onko syynä jokin/jotkut seuraavista:**

- Pelaaminen on liian kallista. ☐
- Pelilaitteet ja pelit ovat turhan monimutkaisia. ☐
- Pelaaminen on mielestäni noloa. ☐
- Pelaamisella on huono maine. ☐
- Pelasin aiemmin liikaa. ☐
- Minua on kielletty pelaamasta. ☐
- Pelit ovat liian vaikeita. ☐
- Uusien pelien hankkiminen on vaikeaa. ☐
- Pelit toistavat liikaa itseään. ☐
- Ystäväni ovat vähentäneet pelaamistaan. ☐
- Minulla ei ole enää aikaa pelata. ☐
- Minulla ei ole sopivaa laitteistoa. ☐
- Pelit ovat nykyään huonompia. ☐
- En menesty peleissä. ☐
- Olen nykyään liian vanha pelatakseni. ☐
- Muu syy, mikä? ☐

_____

**17. Jos puolestaan olet lisännyt digitaalisten pelien pelaamista viimeisen vuoden aikana, onko syynä jokin/jotkut näistä:**

- Käytössäni on enemmän rahaa peleihin. ☐
- Minulla on enemmän aikaa pelata. ☐
- Ystäväni pelaavat enemmän. ☐
- Pelaaminen on trendikästä. ☐
- Uusia pelejä on paremmin saatavilla. ☐
- Olen muuttanut uuteen asuinympäristöön. ☐
- Pelit ovat halvempia. ☐
- Saan peleistä irti enemmän kuin ennen. ☐
- Pelit ovat nykyään parempia. ☐
- Peleissä on nykyään enemmän pelattavaa. ☐
- Olen saanut uusia pelejä. ☐
- Olen nykyään parempi pelaaja. ☐
- Käytössäni on nykyään hyvä pelilaitteisto. ☐
- Olen siirtynyt toisenlaisiin peleihin. ☐
- Menestyn peleissä paremmin. ☐
- Muu syy, mikä? ☐

_____

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18. Seuraavaksi esitämme joukon digitaalista pelaamista koskevia väittämiä. Toivomme, että otat väittämiin kantaa 'fiilispohjalta' eli rastitat *ensimmäisenä mieleesi tulevan vaihtoehdon.* (1=ei vastaa kokemuksiani lainkaan, 3=en osaa sanoa, 5=vastaa kokemuksiani täysin)

| | 1 2 3 4 5 | | 1 2 3 4 5 |
|---|---|---|---|
| Pelaaminen piristää minua. | ☐☐☐☐☐ | Uppoudun helposti pohtimaan pelien pulmia. | ☐☐☐☐☐ |
| Pelaan mieluiten seurassa. | ☐☐☐☐☐ | Vertailemme lähipiirissäni peleissä menestymistä. | ☐☐☐☐☐ |
| Opin peleistä uusia taitoja. | ☐☐☐☐☐ | Vaihdamme ohjeita ja kokemuksia ystävieni kanssa. | ☐☐☐☐☐ |
| Opin peleistä uusia tietoja. | ☐☐☐☐☐ | Minulle on tärkeää olla osa peliryhmää tai -kiltaa. | ☐☐☐☐☐ |
| Pelit sisältävät turhaa väkivaltaa. | ☐☐☐☐☐ | Ryhmän menestys on omaani tärkeämpää. | ☐☐☐☐☐ |
| Pelatessa aika kuluu huomaamatta. | ☐☐☐☐☐ | Näen mielelläni vaivaa, että peliporukkani menestyy. | ☐☐☐☐☐ |
| Pelatessa tunnen olevani tärkeä. | ☐☐☐☐☐ | Jos jätän pelaamisen väliin, tunnen pettäväni tiimini. | ☐☐☐☐☐ |
| Pelatessa voin unohtaa omat huoleni. | ☐☐☐☐☐ | Olen ylpeä pelaamalla karttuneista kokemuksistani. | ☐☐☐☐☐ |
| Tapanani on pelata tietyissä tilanteissa. | ☐☐☐☐☐ | Mietin pelejä joskus myös silloin kun en pelaa. | ☐☐☐☐☐ |
| Pelaaminen on rentouttavaa. | ☐☐☐☐☐ | Minulla on peleissä selkeitä tavoitteita. | ☐☐☐☐☐ |
| Pelaaminen on joskus turhauttavaa. | ☐☐☐☐☐ | Pelaan kunnes saan nimeni pistelistalle (high score). | ☐☐☐☐☐ |
| Pelaaminen on yksi arkisia puuhiani. | ☐☐☐☐☐ | Pelaan pelejä 'väärin' eli itse keksimilläni tavoilla. | ☐☐☐☐☐ |
| Pelaan ollessani pitkästynyt. | ☐☐☐☐☐ | Suunnittelen pelistrategioita usein etukäteen. | ☐☐☐☐☐ |
| Pelaan töiden lomassa rentoutuakseni. | ☐☐☐☐☐ | Tultuani pelissä riittävän hyväksi kokeilen sitä uudelleen jollakin toisella tavalla. | ☐☐☐☐☐ |
| Seuraan mielelläni toisten pelaamista. | ☐☐☐☐☐ | Peleissä on liian vähän erilaisia toimintavaihtoehtoja. | ☐☐☐☐☐ |
| Pelaamisesta tulee energinen olo. | ☐☐☐☐☐ | Suunnittelen mielelläni itse peleihin parannuksia. | ☐☐☐☐☐ |
| Pelaaminen voi joskus herättää myös negatiivisia tunteita. | ☐☐☐☐☐ | Pelaaminen haastaa ponnistelemaan taitojen rajoilla. | ☐☐☐☐☐ |
| Palkitsen itseäni joskus pelaamisella. | ☐☐☐☐☐ | Peleissä voin tehdä asioita, joita muuten en voisi. | ☐☐☐☐☐ |
| Pelatessa olen 'oma herrani'. | ☐☐☐☐☐ | Pelaaminen on tapa viettää aikaa ystävien kanssa. | ☐☐☐☐☐ |
| Pelatessani tiedän, mitä olen tekemässä. | ☐☐☐☐☐ | Pelatessani tunnen olevani toisten kanssa vuoro-vaikutuksessa ilman turhia ennakkoluuloja. | ☐☐☐☐☐ |
| Peleissä voin olla täysin oma itseni. | ☐☐☐☐☐ | Keskustelen pelatessani usein jonkun kanssa. | ☐☐☐☐☐ |
| Nautin muiden voittamisesta peleissä. | ☐☐☐☐☐ | Teen pelaamisen aikana tyypillisesti myös jotakin muuta (esim. katselen tvtä, vastaan puhelimeen). | ☐☐☐☐☐ |
| Voittaminen ei ole minulle tärkeää. | ☐☐☐☐☐ | Pidän erityisesti peleistä, joissa peliohjainta ei käytetä vain sormilla (esim. Eyetoy, Tanssimatto). | ☐☐☐☐☐ |
| Keskittyminen on pelatessa tärkeää. | ☐☐☐☐☐ | Kierot ja ovelat pelihahmot ovat minulle mieleisiä. | ☐☐☐☐☐ |
| Pelitapahtumat voivat olla liikuttavia. | ☐☐☐☐☐ | Nautin pelien tarjoamasta fantasiasta ja tarinasta. | ☐☐☐☐☐ |
| Pelien väkivalta on harmitonta. | ☐☐☐☐☐ | Peleissä minulla on vapaus tehdä mitä haluan. | ☐☐☐☐☐ |
| Pelien maailmat ovat liian samanlaisia. | ☐☐☐☐☐ | Pelatessani tunnen olevani todella olemassa. | ☐☐☐☐☐ |
| Pelatessani keskityn ainoastaan pelimaailman tapahtumiin. | ☐☐☐☐☐ | Peleissä ihmiset ovat epätasa-arvoisia. | ☐☐☐☐☐ |
| Pelihahmoilla on ominaisuuksia, joita haluaisin itselleni. | ☐☐☐☐☐ | Nautin pelatessani sellaisten asioiden tekemisestä, joihin taitoni tai rahani eivät tosielämässä riitä. | ☐☐☐☐☐ |
| Koen yhteenkuuluvuutta pelihahmoni kanssa. | ☐☐☐☐☐ | Pelien maailmat ovat liian epärealistisia. | ☐☐☐☐☐ |
| Eläydyn pelihahmoni kokemuksiin. | ☐☐☐☐☐ | Peleissä ei ilmene yhteiskunnallisia ongelmia. | ☐☐☐☐☐ |
| Joskus pelin tapahtumat tuntuvat tapahtuvan minulle. | ☐☐☐☐☐ | Peleissä olen vapaa iän, sukupuolen, statuksen ja yhteiskuntaryhmän muodostamista rajoituksista. | ☐☐☐☐☐ |
| Jotkut pelihahmot tuntuvat eläviltä. | ☐☐☐☐☐ | Pelit merkitsevät minulle aikaa ja paikkaa ilman ulkopuolisia paineita. | ☐☐☐☐☐ |
| Harmistun kun pelihahmoni kuolee. | ☐☐☐☐☐ | | |

*Hypermedialaboratorio, ItGe-B, 2007*

# B

Digitaaliset pelit – pelaamisen arki

19. Onko sinulla ja pelitovereillasi yhteisiä tapoja tai perinteitä?

Ei ole.  ☐

On, millaisia? _____

_____

_____

_____

_____

20. Käytätkö peleihin liittyviä sanoja tai ilmaisuja, jotka eivät ole yleiskieltä eivätkä näin ollen tuttuja muille ihmisille.

En.  ☐

Käytän, millaisia? _____

_____

_____

_____

_____

Kiitos kun vastasit kyselyymme! Voit postittaa molemmat lomakkeet oheisessa kirjekuoressa Tampereen yliopiston Hypermedialaboratorioon, postimaksu on maksettu. Käsittelemme vastauksesi tutkimuseettisiä periaatteita noudattaen anonyyminä eli siten, että yksittäistä vastaajaa ei ole mahdollista tunnistaa.

Syksyllä 2007 ryhdymme tekemään tutkimuksessamme *teemahaastatteluja* tämän kyselyn pohjalta. Näissä haastatteluissa pyritään kartoittamaan syvemmin ja perusteellisemmin digitaalisen pelaamisen merkityksiä ja tapoja Suomessa. Toivomme, että myös haastatteluihin osallistuvien pelaajien kirjo olisi laaja. Oletpa sitten Tetriksen, The Simsin tai World of Warcraftin ystävä, *kuulisimme mielellämme lisää pelikokemuksistasi ja pelaamiseen liittyvistä ajatuksistasi.* Ole siis hyvä ja jätä lomakkeen alaosaan yhteystietosi, jos olet kiinnostunut olemaan mukana myös haastatteluvaiheessa. Nimensä ja postiosoitteensa jättäneiden kesken arvomme pieniä peli- ja kirjapalkintoja. Yhteystietojen jättäminen ei sido sinua osallistumiseen, vaan antaa meille mahdollisuuden tiedustella sinulta asiaa tutkimuksen edetessä.

Osallistumisestasi kiittäen,
InGa-tutkimusryhmä

-----------------------------------------------------------------------------------------------------------------

Nimi _____

Postiosoite _____

_____

Sähköpostiosoite _____

Puhelinnumero _____

## 7.4. Appendix 3: English Translation of Questions and Statements

**FORM A: Common games – the everyday life of gaming**

Dear recipient,

We are currently conducting an international study of games cultures (InGa) at the Hypermedia Laboratory at the University of Tampere. Game experiences and gaming impressions of the Finns are explored in this study. We are interested in ***the opinions of both the players and the non-players***. The study is especially focused on the world of digital games, meaning computer, video, console, mobile phone and online games.

We are collecting research material with the enclosed two-part questionnaire, with which we try to reach a wide range of Finns of various ages living in various places. You have been chosen for this study with the help of the Population Register Centre. Your response is very important to us. We hope that you can spare ***10-20 minutes of your time*** to fill in this questionnaire and to tell us ***what you think about playing***. At your discretion, you can answer either both forms or only form A. Return the questionnaire in the enclosed envelope to the Hypermedia Laboratory at the University of Tampere, where you can also get more information about the study, if you wish.

Awaiting your responses with interest,
The InGa research group

Responsible researcher: Kirsi Pauliina Kallio
Project leader: Frans Mäyrä

**The framework of everyday life**

At first we would like you to give us some background information. Please pick the choice which best describes you or your household, or alternatively write down your answer on the line.

1. Age _____ years

2. Gender
   Female
   Male

3. Native language
   Finnish
   Swedish
   Other, what?

   _____

4. Education
   Elementary school
   High school
   Vocational school
   College-level training
   Higher vocational school
   University

5. Living area

Capital region
Other city region
Municipal centre
Population centre
Countryside

6. Position on the labour market
Full-time job
Full-time student
Retired
Part-time job
Part-time retirement
Student and part-time job
Unemployed / in training

7. Job description
Employee
Superior
Functionary
Specialist
Entrepreneur
Student
Unemployed

8. Family members (in the same household)
I live alone
I live with my partner
I live with my partner and our children
I live with my parents
I live with other relatives
I live with roommate(s)

9. Monthly household income (gross)
Less than 2000 euros
2000 – 4000 euros
4000 – 6000 euros
6000 – 8000 euros
More than 8000 euros

10. Primary source of income
Salary
Pension
Student grant
Unemployment benefit
My family takes care of my basic expenses
Other, what?
_____

## Routines and opinions

11. When was the last time you went to…?
(during the last couple of days / within the last month / during the last six months / sometime earlier / never)
Museum
Movies
Concert

      Theatre
      Church
      Game arcade
      Food restaurant
      Entertainment restaurant
      Fast food restaurant
      Walking / jogging
      Cottage / summer house
      Outdoor trip
      Hobbies
      Association meeting

12. How much time do you usually spend on the following things? (_____ hours per week)
      Working
      Household chores and shopping
      Hobbies
      Outdoor activities
      Reading books / newspapers
      Watching television
      Watching videos / DVDs
      Playing computer / video games

13. Do you have enough spare time?
      Yes, I have enough time to follow my interests and relax.
      Yes, I can arrange free time for myself.
      No, work and other chores take most of my time.

14. Do you have enough money for your interests?
      Yes, I can afford to follow my interests as I please.
      Yes, if I spend my money reasonably.
      No, I would engage in more activities if I had the money.

15. How often do you use the Internet?
      Several times a day
      Once a day
      Couple of times a week
      Couple of times a month
      Less frequently
      Never

16. Where do you use the Internet for other things than working or studying?
      At home
      At school
      At the library
      At an Internet café
      At a clubhouse
      At a friend's place
      At work
      With my mobile access anywhere

17. What do you think about the following statements?
(1 = completely disagree, 3 = cannot say, 5 = fully agree)
      I work primarily because of the salary.
      If I earned more, I would work less.
      I am proud of my work.
      I usually spend all the money I earn.

Shopping puts me in a good mood.
I readily buy devices second-hand to save money.
I accept a high price for a new device.
At home, I have many devices which I seldom use.
Good cannot be cheap.
The purpose of devices and technology is to make life easier.
Brand products are more reliable than others.
Fashion and trends are not very important to me.
Traditions are important to me.
I read consumer advice to avoid bad experiences.
I prefer to do shopping in familiar places.
I try out new restaurants in my area as soon as possible.
The products I use match my ideology.
I take active part in societal activities.
I worry about the influence of my consumption on the environment.
I often get frustrated with the injustice in the world.
I am mostly satisfied with the Finnish society.

18. When was the last time you…?
(during the last couple of days / within the last month / during the last six months / sometime earlier / never)

Talked on the phone
Wrote an email
Wrote a letter
Met your friend
Had a meal with your family
Went out to eat with a friend
Watched television
Watched videos or DVDs
Listened to a music album
Listened to an mp3 player
Listened to music on a computer
Bought music
Took pictures with a film camera
Took pictures with a digital camera
Read a book
Bought a book
Read a journal
Read an online journal
Listened to radio
Listened to an Internet radio
Chatted on the Internet
Searched for information on the Internet (e.g. weather forecasts)
Used an online service (e.g. a bank)
Did shopping on the Internet
Followed stock exchange quotation on the Internet
Followed stock exchange quotation in a newspaper
Searched for entertainment services on the Internet
Played a parlour game
Played a money game
Played a computer game
Played a console game
Played an online game
Played a mobile phone game
Bought a parlour game
Bought a digital game

**Playing**

The next part explores questions related to playing games and especially digital games. We would like to emphasise that we are interested not only in intensive gaming but also in short-term and occasional gaming. ***If you have played any digital game (e.g. computer game, mobile phone games, console games) even at some occasion, we ask you to answer all of the questions.***

19. When was the last time you played the following kinds of games?
(during the last couple of days / within the last month / during the last six months / sometime earlier / never)

> Board and parlour games (e.g. Yatzy, Monopoly)
> Traditional card games (e.g. Solitaire)
> Problem-solving games (e.g. Crosswords, Sudoku)
> Pub games (e.g. Darts, Pool)
> Betting games (e.g. Lottery)
> Slot machine games (e.g. Fruit machine)
> Online money games (e.g. Online poker)
> Outdoor games (e.g. Tag, Petanque)
> Collectible card games (e.g. Magic the Gathering)
> Handheld console games (e.g. GameBoy, PSP)
> Computer games (e.g. Tetris, Sims)
> Online role-playing games (e.g. World of Warcraft)
> Mobile phone games (e.g. Nokia Snake game)
> Role-playing games (e.g. GURPS)
> Live action role-playing games (e.g. Vampire)
> Miniature fighting games (e.g. Warhammer 40k)

20. Are digital games played in your household? (You can choose several options.)

> Yes, I play myself.
> Yes, my partner plays.
> Yes, the children play.
> Digital games aren't played in our household at all.

21. Which of the following devices do you have in your household?

> Mobile phone
> Personal computer
> Macintosh computer
> DVD player
> Widescreen television
> Home theatre system
> Satellite / cable television receiver
> Digital television / set-top box
> Game console
> Handheld game console

22. What about these gaming devices?

> Atari
> DreamCast
> GameBoy
> GameCube
> Neo Geo Pocket Color
> Nokia NGage
> Nintendo DS
> Nintendo 64
> NES (Nintendo 1986)
> Super NES (Nintendo 1992)

Personal computer
PlayStation
PS2 (PlayStation 2)
PS3
PSP (PlayStation Portable)
Sega Genesis
Sega Saturn
Xbox
Xbox 360
I don't know

23. How much money has been spent on purchasing these devices during the last couple of years in your household?

About _____ euros

24. Which of the following statements describe your attitudes towards digital games and digital gaming?
Playing develops many skills.
Playing is a nice way to spend time together.
I sometimes play even when I should be doing something else.
I would play more if I had the time.
Playing can sometimes cause arguments.
I am sometimes worried about the amount of my playing.
I have been advised to reduce my playing.
I try to restrict my playing.
Someone else restricts my playing.
I have advised someone to reduce their playing.
I feel guilty about my playing every now and then.
I feel bad when I restrict the playing of others.
Playing is quite a cheap hobby.
The money I spend on playing is a problem.
Playing consumes too much money in our family.
The dangers related to playing are discussed too much.


*QUESTIONS 25-30 CONCERN DIGITAL GAMING.*

25. If you have at some point played or tried out digital games, at which age did you play for the first time?
_____ years

26. Which of the following best describes your own playing?
I play a few minutes a day.
I play a few hours a week.
I spend a couple of days a month on playing.
I play a few weeks per year.
I play only occasionally.
I don't play at all (you can skip the rest of the questions).

27. When do you usually play? (Choose one option.)
In the morning (from six a.m. to noon)
In the daytime (from noon to six p.m.)
In the evening (from six p.m. to midnight)
At night (from midnight to six a.m.)

28. Where do you usually play? (You can choose several options.)
At home
At school or a study place

At work
At a special hobby place
At the library
At an Internet café or club
At a friend's place
With my mobile access anywhere

29. And with whom do you usually play? (Several options.)
Alone
With my partner
With my children
With my parents
With my siblings
With my friend/friends
With my work/study fellows
With my friends on the Internet
With strangers on the Internet

30. Do you consider yourself to be a digital game hobbyist?
Yes
No

This is the end of the general part of our questionnaire. Now we ask you to consider if you also want to answer ***the part which primarily concerns digital gaming***. Form B is used to find out what kinds of games Finns play and what kinds of attitudes they have towards gaming. We hope to gain information about all kinds of digital gaming – solitaire which is played during breaks from work is as interesting as a LAN session over a weekend. Thus, it would be nice if ***as many kinds of gamers as possible*** would answer. But if you decide to finish here, we thank you for your participation. Every filled form is worth its weight in gold to us! ***Thank you for being a part in building a discussing games culture in Finland.***

## FORM B: Digital games – the everyday life of gaming

It is nice that you decided to also answer the second part of our questionnaire concerning digital gaming. We are interested in finding out what kinds of games you enjoy, when and how you play, and – above all – what kinds of experiences, opinions and feelings you have related to gaming. At first we chart a few things about your favourite games, and after that we move on to more general questions about gaming. The questions have been composed with various kinds of gamers in mind, and thus they may seem strange to you in some parts. ***The most important thing is that you answer the questions on the basis of your own experiences.*** In this way, we can collect information as diverse as possible about digital games cultures in Finland.

1. Which game have you played the most during the past year?

                _____

2. Which things do you consider to be successful and important in this game?
(1 = not very important, 3 = I cannot say, 5 = very important)
- Theme
- Background story
- Sounds and music
- Graphical appearance
- Problem-solving
- Strategic elaboration
- Development of game skills
- Improvement of other skills
- Fighting and winning
- Building and governing
- Playing together
- Killing time
- Game characters
- Game world
- Exploration
- Humour
- Excitement
- Appropriate challenges
- Easiness and controllability

3. How much time do you usually spend on playing this game continuously?
- A few minutes
- Less than fifteen minutes
- Less than an hour
- An hour or two
- Many hours
- Entire day
- A couple of days
- A week or longer

4. Where do you usually play it? (You can choose <u>several</u> options.)
- At home
- At a friend's place
- At school
- At work
- At the library
- At an Internet café or a game arcade
- With my mobile device in various places

5. Which game have you played the second most during the past year? (If you have played only one game, move on to question 13.)

_____

6.-8. *These questions are similar to the questions 2-4.*

9. Which game have you played the third most during the past year? (If you have played only one or two games, move on to question 13.)

_____

10.-12. *These questions are similar to the questions 2-4.*

13. Do you usually play games "through" or from the beginning to the end at one sitting?
Yes, as fast as possible.
Yes, if I have time.
I don't usually play games through.

14. Do you tend to discuss gaming with your friends?
Yes, I start discussions.
Yes, if the topic comes up.
Not very often / not at all.

15. When you lose a game or suffer a significant defeat, do you try to play again?
Yes, as fast as possible.
Yes, if I have time.
I don't usually continue playing.

16. If you have **decreased** the playing of digital games during the past year, is the reason one or more of the following:
Playing is too expensive.
Game devices and games are too complicated.
I think that playing is embarrassing.
Playing has a bad reputation.
I used to play too much.
I have been forbidden to play.
Games are too difficult.
It is hard to acquire new games.
Games repeat themselves too much.
My friends have decreased their playing.
I no more have time to play.
I don't have suitable equipment.
Games are worse nowadays.
I'm not successful in games.
I'm too old to play nowadays.
Other reason, what?

_____

17. If you have instead **increased** the playing of digital games during the past year, is the reason one or more of these:
I have more money at my disposal to spend on games.
I have more time to play.
My friends play more.
Playing is trendy.
New games are more accessible.

I have moved into a new neighbourhood.
Games are cheaper.
I get more out of games than I used to.
Games are better nowadays.
There is more play content in games nowadays.
I have gotten new games.
I am a better player nowadays.
I have good gaming equipment nowadays.
I have moved on to different kinds of games.
I'm more successful in games.
Other reason, what?

_____


18. Next we present you with a group of statements concerning digital gaming. We hope that you commit yourself to the statements based on your feelings, meaning that you choose *the first option which comes to your mind*. (1 = does not match my experiences at all, 3 = I cannot say, 5 = matches my experiences entirely)

Playing cheers me up.
I preferably play in company.
I learn new skills from games.
I gain new knowledge from games.
Games contain too much needless violence.
When I play, time passes unnoticed.
When I play, I feel I am important.
I can forget my own worries while I am playing.
I tend to play in certain situations.
Playing is relaxing.
Playing is sometimes frustrating.
Playing is one of my everyday routines.
I play when I am bored.
I play at work to relax.
I like to watch others play.
Playing makes me feel energetic.
Playing can sometimes also rouse negative feelings.
Sometimes I reward myself with playing.
When I play, I am my 'own master'.
When I play, I know what I am doing.
I can be entirely myself in games.
I enjoy beating others in games.
Winning is not important to me.
Concentration is important in playing.
Events in games can be touching.
Violence in games is harmless.
Game worlds are too similar.
When I play, I only concentrate on the events in the game world.
The characters in games have qualities which I would like to have for myself.
I bond with my character.
I empathise with my character.
Sometimes the events in games seem to happen to me.
Some game characters feel alive.
I get annoyed when my character dies.
I easily lose myself into thinking about games' problems.
We compare our success in games in my circle of friends.
We share hints and experiences with my friends.
It is important to me to be a part of a game team or a guild.

The success of my team is more important to me than my own.

I am happy to do a lot for my game team.

If I skip playing, I feel I am letting my team down.

I am proud of the experiences I have gained from playing.

Sometimes I think about games when I am not playing.

I have clear goals in games.

I play until I get my name on the high score list.

I play games "in the wrong ways", meaning the ways I have invented myself.

I often plan game strategies in advance.

When I have become good enough in a game, I play it again in a different way.

There are too few alternative courses of action in games.

I like to plan improvements for games on my own.

Playing challenges me to push my skills to the limit.

In games, I can do things I otherwise could not.

Playing is a way to spend time with friends.

When I am playing, I feel I am interacting with others without prejudices.

I often talk with someone while I play.

I typically also do something else while I am playing (e.g. watch TV, answer the phone).

I especially enjoy games in which the controller is not used merely with the fingers (e.g. Eyetoy, Dance mats).

I like crooked and cunning characters.

I enjoy the fantasy and the story in games.

I am free to do whatever I want in games.

When I play, I feel that I truly exist.

People are unequal in games.

When I play, I enjoy doing things I otherwise could not do or afford to do.

Game worlds are too unrealistic.

There are no societal problems in games.

In games, I am free of the restrictions set by age, gender, status and social group.

Games mean a time and a place without outside pressure for me.

19. Do you and your gaming companions have common habits or traditions?

No, we don't.

Yes, what are they like? _____

20. Do you use game-related words or expressions, which are not common language and thus not familiar to other people?

No.

Yes, what are they like? _____

Thank you for answering our questionnaire! You can mail both forms in the enclosed envelope to the Hypermedia Laboratory at the University of Tampere. The postage has been paid. Your answers will be handled anonymously following the ethical principles of research, meaning that it will not be possible to recognise individual respondents.

In the fall 2007 we will begin to carry out thematic interviews based on this questionnaire. These interviews aim to chart the meanings and ways of digital gaming in Finland more deeply and intimately. We hope that the range of gamers partaking in the interviews will be broad. Whether you are a friend of Tetris, The Sims or World of Warcraft, we would like to hear more about your game experiences and thoughts related to gaming. Please leave your contact details in the lower part of the form if you are also interested in taking part in the interview phase. Small game and book rewards will be drawn out between those who leave their names and postal addresses. Leaving your contact details does not bind you in any way into participating, but it gives us a possibility to inquire about the matter from you as the study goes on.

Thank you for your participation,
*The InGa research group*

***Name***  _____

***Postal address***  _____

***Email address***  _____

***Phone number***  _____

## 7.5. Appendix 4. The sum variables created from the statements related to different aspects of digital gaming

| Commitment or casualness | |
| --- | --- |
| Presence of games in life (0.88)* | Playing is one of my everyday routines. |
| | I easily lose myself into thinking about games' problems. |
| | We compare our success in games in my circle of friends. |
| | We share hints and experiences with my friends. |
| | I am proud of the experiences I have gained by playing. |
| | Sometimes I think about games while I am not playing. |
| | I often plan game strategies in advance. |
| | When I have become good enough in a game, I play it again in a different way. |
| | I like to plan improvements for games on my own. |
| Casual play style (0.33) | I play at work to relax. |
| | I typically do something else while I am playing. |
| | When I play, I concentrate only on the events in the game world.** |

| Social aspects | |
| --- | --- |
| Playing with others (0.83) | Playing is a way to spend time with friends. |
| | I often talk with someone while I am playing. |
| | I prefer to play in the company of others. |
| | When I am playing, I feel I am interacting with others without prejudices. |
| Team play (0.85) | It is important for me to be a part of a game team or a guild. |
| | The success of my team is more important to me than my own. |
| | I am happy to do a lot for my game team. |
| | If I skip playing I feel I am letting my team down. |
| Common interest with friends (0.87) | We compare our success in games in my circle of friends. |
| | We share hints and experiences with my friends. |

| Meanings attached to games | |
| --- | --- |
| Immersion (0.33) | Time passes unnoticed while I am playing. |
| | While I am playing, I concentrate only on the events of the game world. |
| Empathy and emotional attachment (0.86) | Events in games can be touching. |
| | The characters in games have qualities which I would like to have for myself. |
| | I bond with my character. |
| | I empathise with my character. |
| | Sometimes events in games seem to happen to me. |
| | Some game characters feel alive. |
| | I get annoyed when my character dies. |
| Fantasy and story (0.86) | I can do things in games I otherwise could not. |
| | I like crooked and cunning characters. |
| | I enjoy the fantasy and the story in games. |
| | I am free to do what I want in games. |
| | People are unequal in games. |
| | When I play, I enjoy doing things my money or my skills would not be enough for in real life. |
| | In games, I am free of the restrictions set by age, gender, status and social group. |
| Importance of winning (0.63) | I enjoy beating others in games. |
| | Winning is not important to me. |
| Negativity towards violence (0.67) | Games contain too much needless violence. |
| | Violence in games is harmless.** |

| | |
|---|---|
| The relaxing effect of games (0.72) | I can forget my own worries when I play. |
| | Playing is relaxing. |
| | I sometimes reward myself with playing. |
| | Games mean a time and a place without outside pressure for me. |
| The refreshing effect of games (0.63) | Playing cheers me up. |
| | Playing makes me feel energetic. |
| Negative feelings roused by games (0.47) | Playing is sometimes frustrating. |
| | Playing can sometimes invoke negative feelings. |
| Empowerment or independence (0.74) | I feel I am important when I play. |
| | I am my 'own master' when I am play. |
| | When I play I know what I am doing. |
| | I can be entirely myself in games. |
| Perceived benefit from gaming (0.79) | I learn new skills from games. |
| | I gain new knowledge from games. |

\* The value of Cronbach's alpha for the sum variable. A value higher than 0.7 means that the measure is quite reliable.

\*\* The scales of these variables were inverted before creating the sum variables.

## 7.6. Appendix 5. Factors of the important elements in games

| | |
|---|---|
| Content and appearance (0.91)* | Theme |
| | Background story |
| | Game world |
| | Game characters |
| | Exploration |
| | Graphical appearance |
| | Sounds and music |
| | Humour |
| Challenges and competition (0.78) | Development of game skills |
| | Improvement of other skills |
| | Appropriate challenges |
| | Excitement |
| | Fighting and winning |
| Control and planning (0.64) | Building and governing |
| | Strategic elaboration |
| Casualness of game play (0.33) | Killing time |
| | Easiness and controllability |
| Shared social environment (0.05) | Playing together |
| | Problem-solving** |

* The value of Cronbach's alpha for the sum variable. A value higher than 0.7 means that the measure is quite reliable.

** The scale of this variable was inverted before creating the sum variable.