Gender and Computer Games/Video Games

Girls' Perspective Orientation

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Abstract

The topic of this thesis is “Gender Differences in Computer games/ Video games Industry”. Due to rapid development in technology and popularization of computers all around the world, computer games have already become a kind of common entertainment. Because computer games were designed especially for boys at the very beginning, there are still some remaining barriers when training female game designers and expanding game markets among female players.

This thesis is mainly based on two studies which have enormous contributions to gender issue in computer games area. A simple model is established by summarizing factors mentioned and discussed in those two books. The main purpose consists of two comparisons under Gender Differences: one comparison is between the current data with the previous one, in order to check whether there are any changes during the past 10 years. The other one compares the young people in two regions, Sweden and China, in computer games perspective.

Model designing, test, questionnaire and interview methods are used in this paper aiming to collect and categorize the data, which facilitates to analyze the results of the comparisons. The results reflect that although computer becomes a familiar “friend” in modern daily life, there are not obvious changes of girls’ perspectives in computer game industry. Certainly, there are some differences between the young people coming from two regions which will be expounded in the thesis.

Key words: gender differences, computer games, girls’ perspectives
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# Table of Contents

Abstract ......................................................................................................................... 2
Acknowledgement ......................................................................................................... 3

Chapter 1. Introduction ............................................................................................... 5
  1.1 General Background ......................................................................................... 5
  1.2 Problematization .............................................................................................. 6
  1.3 Motivation and Aim ......................................................................................... 8
  1.4 Disposition ....................................................................................................... 9
  1.5 Concepts Defined ............................................................................................ 9

Chapter 2. Theoretical Framework ........................................................................... 13
  2.1 Core and Periphery Model ............................................................................. 13
  2.2 Gender Conflict-Resolution Model ................................................................ 14

Chapter 3. Methodology ........................................................................................... 18
  3.1 Methodological Considerations ...................................................................... 18
  3.2 Experiment ....................................................................................................... 18
  3.3 Questionnaire .................................................................................................. 20

Chapter 4. Analysis .................................................................................................... 24
  4.1 Analysis of Experiment .................................................................................... 24
  4.2 Analysis of Questionnaires ............................................................................. 27
  4.3 Analysis of Interviews .................................................................................... 37
  4.4 The Summary of Analysis ............................................................................. 39

Chapter 5. Conclusion ................................................................................................ 41

Appendix ..................................................................................................................... 43

References .................................................................................................................. 53
Chapter 1 Introduction

While computers have entered millions of families in most countries, computer games also became increasingly popular and the main entertainment during leisure time among family members. It is obvious that there are some differentiations between males and females, not only when they choose games, but also when they are playing games. In order to face the large-scale market of computer games, it is necessary to investigate different attitudes between genders toward games.

1.1 General Background

Play is a function of living, which is in fact freedom and always voluntary (Huizinga, 1971). Play can be viewed as an instinct which can be instantiated by various games, from gambling to board games, from chess to Olympics, from ancient cockfighting among nobles to nowadays computer games related with everyone.

As it is shown in a popular animation movie called Summer Wars, in the near future, there will be a creation of virtual city of OZ which will make internet access possible for everyone from anywhere and anytime. The users in the digital world can do whatever they want, such as going shopping, paying for their bills and having fun by controlling their avatars (Hosoda, 2009). Subtly, it is smart to outline and predict a comprehensive world including both virtual and actual world in the near future. There are a lot of elements of computer games in the movie. For example, avatars can be controlled by citizens to fight with each other in virtual city. And at the end a Japanese girl in kimono plays card game to defeat the most powerful enemy in final round. It reflects that the virtual world derives from and increasingly overlaps the actual world.

However, gender differences could be easily noticed, even in early 1865 in toy industry. There is a picture on an engraving in Holland. The picture shows when the boys were playing some games, the girls were always looking on, with hands behind their backs (Beet & Sandwijk, 1865). Computer games or video games were mostly objects designed for boys, which is similar as the toys. According to the study by Lauwaert (2009), the characteristics of boys can explain why boys prefer to games and toys more than girls. For example, boys are more enjoying freedom, less fragile and corruptible but tougher, etc. “Boys’ games are therefore better documented because they were visible to the observer (Lauwaert, 2009, Page 24).”

On the other hand, girls are viewed as more emotional and sensitive, who always play with dolls. For example, Barbie dolls were manufactured by the American toy-company Mattel Company in 1959, which were especially designed for girls. At the very beginning, when Barbie came on the market in March 1959, it was sold 60% copies, which became popular immediately all around America. And the color “pink” became a symbol of it (Rogers, 1999). Not only in real life Barbie got huge success, but also in computer game and video game industry, “Barbie Fashion Designer”——a computer-based playware for girls, can be viewed as milestone for the Girls’ Game Movement.

“‘Barbie Fashion Designer’ sold more than 500,000 copies, outstripping such industry megaliths as ‘Doom’ and ‘Quake’ and demonstrating that interactive media aimed specifically
Since that time, more and more designers focused on so called “girls’ software”. Increasing number of entrepreneurs noticed that there was a huge potential market among female gamers. And it was also a relative new market and challenge for a lot of companies. At the same time, it was influenced by the feminism. The voice from feminists insisted that girls also needed their own space in computer games or video games area. Some girls did not like the violent games, such as fighting games and war games. Female players asked for their “private” places, in those games they were able to speak the girlish language, use their own ways to think and play, instead of killing people or shooting each other.

Compared to the previous years, even computer was viewed as a digital machine which was designed more for males than females. Approximately two decades ago, there was only one computer in the family, which was always occupied by the male family members (Cassell, J. & Jenkins, H., 2000). Nowadays, following by the popularization of computer, almost every girl has her own computer which is the same situation as boys. More and more girls not only have their own computers, but also have the same desire as the boys to have their own game machines, such as Play stations from Sony Company, Xbox from Microsoft Company and so on.

Currently, it seems that there is increasingly equality between genders. And more and more scholars concentrate on the gender differences in game industry. Are there some gender differences in computer games or video games area? What are the differentiations? Due to boys have already played main roles in game area, girls will be paid particular attention on in this thesis.

1.2 Problematization

Each computer game or video game can be viewed as a conflict (Ray, 2003). There are diverse conflicts in the games, some of them are the fighting between “you” and your “enemy”, some are the competitions, some are doing the puzzles, or some are relative the social communications, etc. The players always enjoy the experiences when they are trying to solve those conflicts. However, the common statements claim that males would like to choose competitive genre. For instance, when the males face a threat, they use direct approach, such as confrontation, and care about a decisive win-or-lose result. While, females are more indirect if they are under the similar situations. Girls always choose negotiation, diplomacy and compromise solutions to solve their problems. (Sanday, 1981) Certainly, it does not mean that women do not like competition.

The research question in this thesis is what the gender differentiations are when the girls and boys choose computer games or video games and what different attitudes they have for game-designs.

There are some stereotypes from the girls who don’t like computer games: “real girls don’t like computers.” Certainly, some are from the female gamers: “Therefore, I am not a real girl.” Actually, women always show positive attitudes toward computers score higher on masculinity trait scales (Colley, Gale and Harris, 1994). When Justine interviewed undergraduates at MIT, several young women told him that they were enthusiasts about games, but when they were kids and played video games, they “hadn’t been raised as girls” (Cassell, J. & Jenkins, H., 2000).
There are several examples below, which will show some details in digital games’ world in our daily life.

Scene One: the author’s own experience. When I was a kid, around 1990, the first game machine came to my family might be called Family Computer (FC, Picture 1), which was produced by Nitendo. The machine was bought by grandfather, which needed to be connected to television set and had two controls. The video games were saved in special cassettes. After it appeared in my family, the family members’ entertainment during leisure time was changed.

All the family members liked the games, such as Super Mario, PAC-MAN, Tetris and Battle City, etc. However, male family members almost occupied the TV in turn. Grandmother and mother, including me liked the same games as what grandfather and cousins did. But as a girl, I also liked to watch the games when my cousin was playing, especially Super Mario. Thanks to the two controls, I preferred to cooperate with my cousin rather than playing game alone, especially Battle City. Or sometime I would like to compete with my grandpa in Tetris.

Scene Two: A confused developer. As the book Gender Inclusive Game Design: Expanding Market mentioned, in the mid-1900, a developer made a survey which tried to find out what consumers want ed in the games. At last, she could not find a clear direction to follow. The results were not so easily to interpret and summarize. Most men she talked knew exactly their desires of games. Meanwhile, one of the women’s answers was “I work on one of those machines all day, why would I want to turn it on when I get home?” (Ray, 2004)

Scene Three: voices from girls questioning the assumptions being made by Girls’ Game Movement. An article was written by Jenkins (2000), included in the book From Barbie to Mortal Kombat: Gender and computer games shows game grrlz talking back. Against to some common statements for girls, such as “the girls didn’t like games designed for boys, so they preferred ‘Barbie Fashion Designer’” or “The girls did not like violence factors in the games” and so on. A girl called Nikki Douglas claimed that she really liked the games which were designed for boys, such as Star Trek.

“... like the Star Trek Enterprise that I coveted one year. That was the year I got the Barbie Townhouse. But I really loved Star Trek, I really wanted to have the Enterprise……my Mom saying to me ‘But Star Trek is for boys, Barbie is for girls. Isn’t this a cute little outfits?’” (Cassell
Laurel’s (2001) research on girls and computer games also indicates that not all girls dislike violence in game. “Girls didn’t mind violence so much as they disliked the lack of good stories and characters.”

Conclusion of those three scenes, first one shows the author as a common game player who likes the game but not as much as her female family members. And it was true to know she prefer to watch the games and cooperate with others. Scene two tells us how difficult it was a few years ago to get the answers of the questions “What kind of computer games do you like?” and “What factors do you want to see in computer games?” from female perspectives. The women in Scene two showed she did not play games at all. How could she give an opinion for game designers? The last scene reflects that there are some grrlz gamers who like violent games. This paper will pay particular attention on using results and facts from the previous studies, and trying to do some similar survey to see whether there is any development or change during the current decade. Does a girl still prefer to be an onlooker rather than playing games personally, especially when she owns a private computer? Do girls like to cooperate and what about boys? Are women able to tell their opinions what games they like nowadays? Are there more girls liking violent games than before? Those questions will be related in the following text.

1.3 Motivation and Aim

I am an enthusiast of Japanese manga (Japanese comic books called “manga”), anime and cosplay. In my daily life, I found that the fans of manga are also crazy about computer games and video games. Or the one who is the aficionado of games is also interested in manga, anime and cosplay. The interaction between those two groups of young people catches my eyes. It is the motivation for writing my thesis in game topic. After I told my thoughts to my supervisors, we discussed to narrow this general topic. At last, gender issue became the focus point.

I casually started to pay attention in game area when the first game machine was bought, as I mentioned above. Later I changed my focus to manga and anime when I was in my high school, but there was still a lot of information related to games available to me. I found that not only in America or Japan, those computer-game-developed countries, but also in China, computer games and video games become a life style or even sub-cultures among young people.

After I started my studying life in Sweden, it was amazing for me to know the Japanese manga and anime cultures also have influenced the distant Swedish young people so much. They also pay particular attention to game area.

According to my personal experience, both game and manga influence young people’s thinking and behaviors. It will be a huge task to explain the relationship between computer games and manga. Therefore, in this paper, I tried to focus on the gender differences in game area. Undoubtedly, there are some fundamental differences between two genders. The aim of this thesis is to show what the differentiations are between girls and boys in virtual game world. As I mentioned before, girl-orientation is the main direction of this study. The results of two comparisons are utilized in the analysis.
1.4 Disposition

Totally, there are 5 chapters: Introduction, Theoretical Framework, Methodology, Analysis and Conclusion. Introduction states the reason and motivation for selecting the topic; the background of computer or video games and previous study in gender differences; the design of this thesis; the outline of structure and concepts definition. Theoretical Framework emphasizes the main theories which are related to this paper. Methodology can be viewed as expatiation of the simple experiment, questionnaires and interviews which were mentioned above. Analysis part interprets all the results from the current study. Last is the brief conclusion of the whole thesis.

Additionally, there are some other parts which are also included in this paper. Before the main content, there are Abstract, Acknowledgement and Table of contents. At the end, there is a list of References and Appendix including different version of questionnaires and its result list.

1.5 Concepts Definition

1.5.1 Gender differences

The word “gender” in old studies always discusses issues from “girl’s” or “women’s” perspective, especially in feminist articles. However, the fundamental meaning of it should be the biological sexual category. In this thesis, “gender” relates both (to) male and female. Due to most games were designed for boys, it will emphasize the girls’ voice in this area.

The term “Gender differences” shows the different attitudes or interests when the boys and girls choose computer/ video games (Figure 1). There are two kinds of situations. One is the games especially designed for certain gender. The other one is the general games for all the consumers, but there might be different reasons for why the girls like them or the boys choose them. (Hanna, 2009)

![Figure 1 Gender Neutrality](Hanna, 2009)
The “Girls’ Game Movement” is originated from the feminist movement related to computer games area. “Barbie Fashion Designer” can be viewed an important symbol of it. The first game released especially for girls was in 1994, called “Hawaii high: The Mystery of the Tiki”, which was produced by Sanctuary Woods Company. The designer was one of the authors who wrote Barbie stories. Tiki was not successful. However, following several attempts for girls, “Barbie Fashion Designer” got extreme success.

1.5.2 Computer/ Video games area

Computer games and Video games: A computer game can be defined as a game that is carried out with the help of a computer program. (Smed & Hakonen, 2003) Compared with computer games, the definition of video games can be defined by two steps: firstly, the word “video” means “game action appears in some visual form on a screen” (Wolf & Perron, 2003). And the other part “game” was defined in Roger Caillois and Meyer Barash’s book Man, Play and Games (2001) as an activity with following characteristics “free, separate, uncertain, unproductive, governed and make-believe.” Simply, the difference between computer games and video games is using connecting different digital machines.

The book by Anna Heith “Texter-medier-kontexter” (2001), includes a list of games’ genres, which were also quoted by Vintetjärn (2008), too. That list is:

- Strategy games (Sid Meyer’s Civilization IV, Sim City)
- Role-playing games, RPG (Baldur’s Gate, Neverwinter Nights)
- Adventure games (The game Monkey Island, for instance)
- Shoot ‘em up games (often referred to as First Person Shooters, FPS, like Doom.)
- Simulator games (Microsoft Flight Simulator or racing games like GTR.)
- Sport games (Fifa 2008, NHL 1994 etc.)
- Fighting games (One-on-one fighting. Street Fighter IV, Tekken 5)
- Platform games (Super Mario Bros)
- Puzzle games (For example Tetris or Sodoku.)
- MMORPG, (Massively Multiplayer On-line Role Playing Game, World of Warcraft, Everquest, Age of Conan).

Game Consoles: If we mentioned about video game, another term “Game Consoles” must be related. “A video game system consists of hardware (the video game console) and software (game titles). Games are produced on cartridges or discs for use with the console (Clements, & Ohashi, 2004).” It means console is the “platform” of a game. An old game machine can be found in Picture 1 above. There are some popular consoles, for example, Gamecube, Gameboy and wii produced by Nitendo; Play Station (ps2, ps3, psp) manufactured by Sony Company; and Xbox (360), PC made by Microsoft, which are mentioned in questionnaires. In the following contents, in order to make it simplified, the term “computer games” will include both computer games and video games. Sometimes it will be short for “games”. And the word “machines” will contain computers, game machines and game consoles.
1.5.3 Derivate concepts

In this part, some derivate concepts will be explained arranging in alphabetical order. Especially, some sub-cultures are established from Japanese cultures, connected to manga, anime and games.

Boys’ Love
As a girl called Jenny Linderström (2007) wrote in her thesis, Boys’ Love comes from Japanese subculture. It appears in manga and computer games more and more frequently. This genre is especially for the girls, because it always shows the story of two nice-looking boys falling in love with each other (Linderström, 2007).

In my own point of view, both in genre area and avatar area, boys’ love is a kind of revolution for girls. Before sexy female avatars in games were designed as sexual objects for boys, which rubbed the girls in wrong way. The female characters indicate the sexual receptiveness, such as an erection, red lips, heavily lidded eyes and their unrealistic sexual organs. All these images make girls feel uncomfortable, even some female game designers. They might show that they don’t care about such female avatars appearing in games, but it does not mean that they like it. (Ray, S.G., 2003) However, in the world of boys’ love, the nice faces, gentle and sexy boys take the place of those female avatars. The common features are touching plots added with all kinds of wonderful male characters in girls’ perspectives. Even some of them have the erotic parts. It can be viewed as “Eye candies” for post-girls, which is probably influenced by feminism activities. This special phenomenon is designed as an item in the questionnaires.

Cosplay
Cosplay shorts for “costume play”, which means wearing the same costumes as the characters in manga and games, singing karaoke or performing on the stage (Kelts, 2007). It is related to games and otakudom. The stereotype is girls prefer to dress up, so more girls prefer to play cosplay than boys. Oppositely, increasing numbers of boys take part in cosplay, they think that it is awesome to act as their favorite characters in games. Cosplay can be viewed as a form of RPG (Role-playing Games) in real life. (Picture 2)

Loli
Lolita can be viewed as a sub-culture, too. In the western world, the term “Lolita” initially should be known as the novel called “Lolita” which was written by Vladimir Nabokov in 1955. The story is about that a middle-aged guy fell in love and had sexual relationship with his stepdaughter, an adolescent girl. Later, the term “Lolita complex” is used to describe the men have sexual desires for the girls who are under 12 years old. As a result of rapidly westernization in Japan, the Japanese word “Lolikon” was created following “Lolita complex”. However, “Lolikon” is more “purity”, which was associated within fashion subculture without overly sexualized appearances in 1980s. Nowadays, Japanese Lolis are always young women (not girls), or sometimes young boys who dress in cute, childish, girly modest dresses with laces, ruffles and high necklines and so on (Lunning, F., 2008). The skirts are similar as the costumes in the movie “Alice in wonderland” (2010). Otherwise, cosplay offers a large-scale stage for Lolis which are
warmly welcomed by otaku. (Picture 3)

Otaku

“Dictionary-definition ‘Otaku’: young adult males fresh from Akihabara shopping sprees (a shopping area in Tokyo), deep in the mysterious grips of moe (Simple explanation of “moe”: a Japanese verb means “like”). You’d figure that in a place like this an attractive member of the opposite sex wouldn’t last sixty seconds without some meatball all hopped up on Gal games harassing her (Macias & Machiyama, 2004, Page114).”

According the writer’s experience focusing on this area, Otaku in Japan are most male young adults who are crazy fans of manga, video games, fingurines and so-called Lolicon. This huge group has already become panic phenomenon, not only because they are the main consumers in Akihabara marketing, but also due to their crazy behaviors: staying at home, playing games day and night, mastering every detail in this area, but not caring about daily and seldom socialization in actual life. It is so difficult to say whether it is a positive influence for young people or not. There is a simple example reflecting the heavy impact on Japanese society from Otaku subculture. The new Shinkansen train has already decided to be called Hatsune (A cute Lolita loved by Japanese male Otaku in Picture 4) on March 31, 2010.

However, in China, Otaku are not only boys, increasingly number of girls joined this group. When the writer asked the people in Sweden randomly, some of them showed that they knew the meaning of Otaku. Some of them even viewed themselves as an Otaku. As a special gender relative phenomenon, Otaku will become a question in the questionnaires, too.

Uppcon

Uppcon is a large-scale anime and manga convention. It is the most popular one in Sweden. It is arranged and organized once per year since its “birth” in 2001 by the non-profit association Uppsalakai. The name “Uppcon” shorts for “Uppsala Convention”. Usually this activity lasts three days, from Friday to Sunday, the people who have the similar hobbies such as manga and anime fans, gamers (In this paper the term “gamers” means video games or computer games players or fans), cosplayer and so on, meet up together to watch animations, compete in cosplay or play games. In both 2009 and 2010, Uppcon attracted over 3000 people and gained unprecedented success. (http://live.uppcon.se/, May 11, 2010)

The photos were taken in Uppcon, Apirl 9-11, 2010
Chapter 2. Theoretical Framework

2.1 Core and Periphery Model

In the book *The Place of Play: Toys and Digital Cultures*, “Core/Periphery Model” was used to analyze how the relationship changes between producers and consumers under different situations. As the author Lauwaert (2009) mentioned in his book: different writers from different backgrounds using core/periphery model in different ways, even defining different criteria what to be the core and what to be the periphery. For instance, Jean Gottmann (1980, Page20), a French geographer, gave the definition of that model as:

“There is no periphery unless the spatial figure considered has a centre, or central sector; inversely, once a centre is determined, there is to be a periphery around it; otherwise of what is it the centre?”

Lauwaert borrowed this model to describe the toys and computer games. The core part consists of designs and functions of toys or games, or can be viewed as producers and designers. The periphery refers to the materials of toys, or the increasing number of co-designers coming from the players, not only for toys (Lego), but also for computer games.

In this paper, Core and Periphery Model (Figure 2) is borrowed to claim the gender differences in computer games industry. In other words, relating to gender issue, there are several factors around the core area—computer games, such as genres, avatars, designs of the games and players’ opinions. On the other side, the periphery part is relative with so called “derivates”, which reflects the social phenomena, such as those two kinds of sub-cultures (Otaku and Boy’s love.) mentioned above.

![Figure 2: The Core/Periphery Model (Lauwaert, 2009)](image-url)
The model can establish a bridge between the main stream and the derivations. It helps to explain the relationship between how the core part view gender differences and what kind of behaviors the male or female choose under the influence of games sub-cultures. The core part always plays a decisive role. All factors of environment surrounding it can be impacted. Certainly, the core part influences periphery strongly. However, a certain number of marketers also want to develop those fringe markets. Lauwaert noticed that there are two kinds of movements between these two parts: centrifugal and centripetal activities. He pointed out advantages and disadvantages when expanding the outside parts. However, in gender comparison, there are no strengths and weaknesses. The only purpose to choose this model is that it allows to see more directly the obvious effects being influenced by the core part. At the same time, although the influence of the fringe parts is not so strong, it still can’t be ignored. Moreover, there are no personal positive or negative statements about those phenomena. It only objectively states the phenomena the relationship between phenomena and gender differences.

Additionally, it can show there are some potential markets under those sub-cultures situations, such as the famous shopping sprees in Akihabara, Tokyo, Japan. However, whether those sub-cultures can shape the thoughts of young people or not; how deeply it will influence the consumer behavior of young people; what natures of those sub-cultures are and what size of the marketing it can be are still remained issues, which need further investigations.

2.2 Gender Conflict-Resolution Model

There is not a suitable and existing model for this topic. However, a number of scholars and students that have studied in this area made enormous contributions. The books “From Barbie® to Mortal Kombat: Gender and Computer Games” and “Gender Inclusive Game Design: Expanding the Market” are two of them, which gain great success. After reading those books, I made a simplified summary as a model for my own study which will be introduced in following part. In order to clarify how the model was established, it is necessary to introduce those two books in advance.

Book 1: “From Barbie® to Mortal Kombat: Gender and Computer Games”

It was edited by Justine Cassell and Henry Jenkins and the paperback was published in 2000. It consisted of a host of facts, collections of previous experiments, valuable interviews from the well-known designers who contributed immeasurably to girly games and opinions from true-life players. First of all, the plenty of facts and experiments reflect what differences there are between girls and boys in games, and the reasons for why most girls don’t like computer games as boys. Later, the interviews’ part shows what the opinions are from pioneer successful designers in girls’ game movement. It pays main attention on the landmark girls’ game: “Barbie Fashion Designer” and “Purple Moon”, including a few other games which were made especially for girls, such as “Let’s Talk About Me”, “Crystal’s Pony Tales” and so on, which introduces the history from “Only Boys” period in game area to girls’ orientation, from “Barbie Fashion Designer” to new attempts. At last, various opinions from girls tell us whether considerations from designers could cater to the female gamers at that time. This book can be viewed as girls’ perspectives rather than gender differences, because compared with the original “games for boys”, it emphasizes
particularly the girls’ part, in order to balance game world and expand girls’ market.

**Book 2: “Gender Inclusive Game Design: Expanding the Market”**

However, most data inside book 1 was in terms of the previous studies in 1990s. As we all know, the digital world develops all the time in high speed. The studying in this topic are never stopped, but become increasingly interested by more and more scholars. There is another book called “Gender Inclusive Game Design: Expanding the Market”, the first edition of which was published in 2003. The author Sheri Graner Ray put more details in her book. It does not only show the different attitudes towards machines between girls and boys, but also illustrates multiple-aspects of how to expand girls’ market in game industry. For example, in her view of games, it is “conflict and conflict-resolution style”. Conflicts can be viewed as definition of games, and the gender differences are revealed in different ways boys and girls choose the ways to solve the conflicts. According to ancient social life, men always took more active roles to protect their limited natural resources and their families. So the better ways for them always was fighting, battle, competitions and confrontation with each other. Winner took all and this is deeply rooted in their “bones”. So when they faced threats or crisis, their survivability criteria was “win-lose” or “life-death”. Compared with men, women always took responsibilities to take care of the kids or gather food which men hunted. Nowadays, the world is changed, however, the ancient habits remain and reveal in games rewards part. For instance, the boys like to kill enemies, while girls don’t like punishment, for example, the character died and started at the beginning. They prefer to start the game again at the same place where they failed.

In characters chapter, the main problem is why the girls don’t like previous female avatars in games. Ray used a model called “Pyramid of Power (In Figure 3)” to show the root of this question.

![Figure 3: Pyramid of Power (Ray, S.G., 2003)](image)

According to Ray’s study, for the most part, males are on the upper levels in this pyramid and most females are in the lower levels. In this structure of power theory, it demonstrates if the girls use male characters in games, which means they come to a higher level than their real power. It makes girls feel uncomfortable while playing. On the other hand, there is no problem for boys, which are already on the higher level to control lower level characters, eg. female avatars in games.
Learning is also very important part in games. It not only means in early years the games of educational themes always suited to girls, but also relates to learn how to play the games. At the beginning of playing a new game, whether the game is easy to be mastered belongs to learning. Another kind of learning is consoling various game machines.

About the genres, Puzzle games are emphasized in the book, because they gain favor from girl players. Also online social games and wireless games (the games in mobile phones, for example iPod) play important roles for girls’ game industry.

There is a chapter showing several details which are useful for managers in game companies, such as why it is necessary to hire girls in game companies, what standards should be checked so that to know whether the company environment is suitable for girls, how to attract female employees or designers, how to train and support them, what should be paid attention to avoid offending the female staff, and how to face harassments during working time.

After briefly introducing about those two books, the summary model can be shown as below in Figure 4:

![Figure 4: Gender Conflict-Resolution Model](image)

The basic structure of model used in this thesis is “conflict-conflict resolution style” from book 2, chapter 3. Because the theme, characters and stories in a game is designed by game companies before releasing. In other words, it can be viewed as designers decide which conflict will be put inside a game when they are working for the game. Hence “genres” and “avatars” are included by Conflicts part. Certainly, the players’ likes-and-dislikes tastes can influence what kind of game it will be, what kind of characters will be put inside the game during designing. For instance, if the task is only to face boys, a new game might be sport game, fighting game or war game etc. And the characters inside can be males: what kind of person a boy would like to be, maybe a muscular hero who can save the world; females: always be sexual objects with all aspects a sexy girl should have and which the boys expect she has; non-human beings may be robots or aliens, etc. On the other side, if the game is designed for the girls, some of the factors mentioned above should be taken into account.
In “Solution” part, the process of players playing games can be viewed as conflict resolution. It is significant to know what expectations the players have. As what is introduced in our test book “Consumer behavior”, the players’ behaviors also guide directions in game market (Solomon, M.R. et al., 2007). Machines, such as computer are an old topic in game area. A lot of experiments are relative to different opinions to view technology and using computers between boys and girls. As the example in Scene 2, a female sale who made a test aim to know what the players like several years ago. She thought it was a simple question and easy to be answered. But the results were unpredicted. When she asked the boys what kind of games they want, she got the answers related to details, such as “I like to play fighting games” “Barbie Fashion Designer can’t be called a computer game.” etc. When she asked the girls, she only got complaints showing girls did not play games at all.

Both designers and players consist of men and women, gender differences exist in both parts of this model. As we know, at the beginning, “game world” was the same as “boys’ world”. Depending on this special characteristic in game area, all the studies pay particular attention at girls’ mentality, behaviors and so on. Without exceptions, this model also focuses on girls more than boys. What’s more, the arrow on the top shows interrelation between conflicts and solutions.
Chapter 3. Methodology

3.1 Methodological Considerations

According to some experiments, interviews and surveys included in those two books, I tried to do some similar attempts but small-scale ones. The three methods used in this thesis are a simple experiment, questionnaire and interview. The details can be found separately in 3.2, 3.3 and Chapter 4.

3.2 A simple experiment

According to an experiment which was made by Professor Bryson and Castell in 1996, I designed a simple one using the same topic as their previous study among primary school students both in Sweden and China. The purpose of this test is to find out what the differences are to view computers in children’s perspectives.

Professor Bryson and Castell chose 500 high school students as an experiment who were from Grade 8 to Grade 12. The task was drawing two pictures of people, one of them was a computer expert, so-called “computer whiz”. The students also needed to show the name, age and gender of that whiz. The other one is a person who just could not learn to use computer. That person would be named “computer whizn’t”. The students also needed to draw the images of whizn’t and give the name, age and gender.

As the result, there were significant differences between girls and boys. Although two-third of the students indicated that “boys and girls are equally to use the school’s computer”, the pictures which were drew by them reflected another side of their statements. The results of the pictures were as below: the guy on the left hand side is one of the examples of whiz, at the same time, the nice girl at the right is the “silly” of computers. (Bryson and de Castell 1996)

(Bryson and de Castell 1996)

Because of the limitation of my study, I cannot do such big-scale experiment as above mentioned. My experiment will be simplified as below:

Due to popularization of computers, equality of using computer in family or at school is not an issue any more. Almost everyone, no matter girl or boy has his or her own private computer now, especially in Sweden and in the big cities of China.
So I turned my attention from high school students to primary school students in both regions. The test results will tell us what is the respective of the indispensable digital machine: computers in kids’ eyes.

In Sweden, the test has been done in a primary school called Lyckåkerskolan in Visby 3rd grade class. After showing the article written by Professor Bryson and Castell, the teacher decided to explain what the kids need to do in Swedish and then collected the results for me.

Their counterparts are in China, a school called Kunming Street Primary School which is located in Tianjin. Fortunately, one of the teachers supported me and did the similar test in class, where the kids are also around 10 years old. However, because of the heavy pressure of classes in China, so it is even more simplified so that it would not take long time to finish it. I changed drawing picture into answering questions (Table 1):

Table 1: A simple Experiment in Chinese Primary School

<table>
<thead>
<tr>
<th>The gender of student: (____)</th>
<th>Gender</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>The computer whiz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The computer whiz’n’t</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results suppose to reveal three main points: First of all, we need to find out the answer for “Is there some different views of computer between genders in kids’ perspective?” Second, trying to compare the differences from the previous experiment made by Professor Bryson and Csastell about 15 years ago and the new one I did. Thirdly, one result should be the regional differences.
3.3 Questionnaire

3.3.1 The Respondents Groups

There were two main groups (Swedish Group and Chinese Group) and 4 information sources (Respondents in Uppcon, international students, game-design students and my Chinese classmates and friends) I used to collect data in terms of my questionnaire. All the details can be seen in Table 2.

**Group 1 Swedish Group**

The name of this group in the test is Swedish Group, however not every responder is Swede. Compared with the counterpart Chinese Group, about 90% people in this group are in Sweden now. So write more neutral the Swedish Group was named SG. Depending on different respondent sources, this group was divided into two sub-groups.

One of the sub-groups called Fans-Group (short for FG), consists of the feedbacks from participants in Uppcon and game students in Gotland University. 60 email addresses were collected during Uppcon. Unfortunately, at last I only got 25 feedbacks from those 60 people. Additionally, thanks to the help of game students in Gotland University, who not only helped me improve my questionnaires and translated them into Swedish to suit Swedish young people, but also helped me collect 17 answers in their class. (Fans Group: 18 girls, 9 boys from Uppcon; 5 girls and 12 boys from game class, total 34 participants)

The other sub-group is International Group (short for IG). It makes up by the international students in my class and the friends on Facebook. (International Group: Boy 18, girl 33, and the answers from Google docs list, total 51 participants)

Three ways were used to send out the questionnaires. One is the hard copies, only 6 paper copies were used in Uppcon as “beta version”, the results are also included in Fans-Group. 17 copies were used in Game class. The second way is sending the questionnaires in soft version in both English and Swedish. I got 29 copies by emails. Most of them came from Uppcon, and few were sent by international classmates.

The third way is: Facebook and Google docs. The questionnaire can be designed on Google website, called Google docs, responders can click the answers on internet and Google will records every feedback for me after responding. And Facebook is a good place to announce questionnaire and getting more results. The link as below:

“http://spreadsheets.google.com/viewform?formkey=dHFmbTN1X05iQUVORHZmc1pHc0dtVHe6MQ&the...me=0AX42CRMsmRFbUy0xMGZIZDFhYS1kNWZILTQ2YjQtYjMzZi0xNjZlMzYyNDViMDY&ifq”

And the Facebook respondents are not random. As we know, there are many Facebook games online, such as Farmville, PetVille and so on. The players of those games establish numbers of groups on Facebook. I chose all those group pages to publish my questionnaires, including Uppcon group page on Facebook. This link also was sent to my classmates too. It means that international students have two options to fill in my questionnaires. Because international
students and Facebook friends are mixed together in Google docs, I will not separate them. The International Group can be viewed as general results, and 44 answers are listed in Google docs. Totally, there are 85 feedbacks in Swedish group, including 39 boys and 56 girls.

**Group 2 Chinese group**

It is interesting to compare the results between Swedish young people and Chinese counterparts. I used only one way to collect data from China: Renren website + QQ software + Chinese Questionnaire Website.

*Renren.com* is a website which is similar as Facebook. And *QQ software* is similar as MSN messenger or Skype. I also used QQ to contact the Chinese game fans and manga fans, which similar as what I did in Uppcon. The Chinese Questionnaire Website called *Zhijizhibi.com* not only has the same functions as Google docs, but also can analyzing the results directly. The link of my questionnaire in Chinese version is as below:

http://www.zhijizhibi.com/questionnaire/226940420/feedback?scroll=2

At last, I got 108 copies of feedback in this group, including 50 boys and 58 girls. The most responders in this group are students and are about 23 to 25 years old. Indeed, some of them are gamers and manga fans, too. However, I did not go to some special activities to collect data in China, so the results are more generalized than Swedish Group. Due to all the responders in this group are Chinese young people, I named it Chinese Group (short for CG).

**Table 2: Composition of Groups**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Sub-Groups</th>
<th>Sources</th>
<th>Boys</th>
<th>Girls</th>
<th>Ways</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swedish Group (SG)</td>
<td>Fans-Group (FG)</td>
<td>Uppcon</td>
<td>9</td>
<td>18</td>
<td>Paper copies + Email + Google docs</td>
</tr>
<tr>
<td></td>
<td>Game students</td>
<td></td>
<td>12</td>
<td>5</td>
<td>Paper copies</td>
</tr>
<tr>
<td></td>
<td>International Group (IG)</td>
<td>International students</td>
<td>18</td>
<td>33</td>
<td>Email + Google docs</td>
</tr>
<tr>
<td></td>
<td>Facbook</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td></td>
<td></td>
<td>39</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Chinese Group (CG)</td>
<td>None</td>
<td>Classmates and Friends</td>
<td>50</td>
<td>58</td>
<td>Renren+ QQ + Zhijizhibi.com</td>
</tr>
</tbody>
</table>

3.3.2 The Structure of the questionnaire

The structure of this questionnaire was designed as a game. As the Conflicts Theory shows the conflict in the “questionnaire game” is the author is troubled by her study. And the responder is viewed as a hero, whose task is to fill in all the questions in order to save the author. During probationary period (6 paper copies tried in Uppcon), this structure got favorable comments which seemed enjoyment and readability.

There are four parts in it, which use game levels design as “Basic Level”, “Advanced Level”, “Final Level” and “Bonus Round”. Especially, considered about the privacy issue, “Bonus Round” was designed in indirect and polite tone.
3.3.3 The Contents of the questionnaire.

The explanations can clarify the relationship between the questionnaire and Two-book model. Three versions of questionnaires (English, Swedish and Chinese versions) and result list can be found separately in Appendix. The word “Question” is used frequently, sometimes short for Q.

**Explanation 1:** in “Basic Level”, some basic information is mentioned. Question 1 is the main category and determinant in this paper ---- genders. Question 2 (age) and 3 (attitudes of games) can be used to categorize respondents. Questions 4 to 6 are associated with “Machine”. Q4 can show us when the respondents entered game area. Both Q5 and Q6 are talking about how the responders view the computers. Question 5 is “How do you view your computer?” Question 6 stresses on functions of computers.

**Explanation 2:** Most questions in “Advanced Level” are inspired by Book 1. Depending on several interviews in book 1, most answers in this level have already been given by previous designers. And the correctness of some issues was demonstrated at that time by the success of “Barbie Fashion Designer”, for example, question 4 is about color-selecting (do girls really like pink color?). In “Barbie Fashion Designer”, the main color is pink. And when the game software was on the shelves, it was used to pink packaging for girls. So girls’ playwares gained a label as “Pink Software” which is mentioned in Question 3 (do the young people know “Pink Software”?).

Questions 1 to 5 and 9 are all related to “Gender Differences”. Q2 (players’ opinions for the main topic), Q5 (players’ opinions for gender-specific target designs) and Q9 (stereotype: more boys like games than girls do) directly ask about the opinions from player’s views of “Gender differences”. Q1, Q3 and Q4 are about “Girls’ Game Movement” which started in USA in earlier years. Due to the strong influence from America, whether there were some similar movements in Europe, or more exactly, maybe there were some activities in Sweden? If there were not some movements, “Girls Game Movement” might be known among players. Compared with developed countries, such as America, Japan and Sweden, game industry in China is still quite young. Are there any young people who know this movement, especially the ones who set themselves up as gamers? Those 3 questions aim to check the impact of “Girls Game Movement” in Sweden and China.

Q2, 5, 9 can be viewed as compensations, if the young people do not know about Q1, 3, 4. The expectation of those 6 questions is making senses for respondents about “Gender differences in game industry”. At least after doing this questionnaire, they can know about “Girls’ Game Movement”.

Question 6 (fighting games) and 7 (war games) are about the hot “Genre”, violent games. It suppose to reveal what reactions are from post girls. Question 8 and 10 are related to Periphery part in “Core/Periphery Model”. After joining Uppcon, Q8 (Otaku) and 10 (Cosplay) were considered necessary to put in this questionnaire. At least over 3000 thousand young people who took part in Uppcon know about “Cosplay” and “Otaku”. Most Chinese youths know about it. In order to check whether they becomes pervasive terms or not, Q8 and Q10 were established. Question 11 (play alone or cooperate?) can be put in “Socialization”, because the general opinions claim that girls are good at socializing. When they play games, they would like to play with some friends, there is an example from Book 1, one girl is playing the game, other girls are watching
around her and discussing about the game. Another example in book 2 shows girls prefer online games or cell-phone games, because they can play games together in digital world.

**Explanation 3:** In “Final Level” some more details are included, such as Question 1 (Why do you like violent games?) tries to find out the reasons for war games being popular, which should be categorized as “Genre”. Question 2 is which “Genre” will be chosen. Question 3 (what machines do you have?) and 4 (How many machines do you have?) are related to “Machine” which can also reflects the abilities to buy the machines in those two different regions. Questions 5 to 7 are associated to “Avatar”, in other words, which character will be chosen by players. Especially, Lolita sub-culture and Boys’ Love sub-culture are put inside the options. Question 8 (how many hours do you surf on Facebook?) is related to social network, which belongs to “Socialization”.

**Explanation 4:** There are 3 questions in Bonus Round, which are used to check how many young people disposed to pay for the games and how much money they are ready to spend for games industry. It could say that almost all the young people like to play games more or less, but most young people in China play only free games. Considering the necessity to expand game market and that there are few people who would like to buy game software in China, it still means failure.

**Explanation 5:** the Limitation of this questionnaire. One disadvantage is not all the details are included in it. Considering about respondents’ sentiments, if the questionnaire is too long, it will make them bored and effected the results. Second drawback is that the questionnaire was designed by me alone. Although it was improved by game design students, they had not read the books, and we have different mother tongue. There might be some potential mistakes.
Chapter 4. Analysis

4.1 Analysis of Experiment

From Lyckåkerskolan I got total 25 feedbacks. One of them can’t be used in this case, because the people in that picture are too small to be understood. After removing that extremely small picture from a boy, there are 24 pictures left (14 feedbacks from boys and 10 from girls).

The teacher asked those kids to imagine and draw “Computer expert” and “Computer Silly” separately. Because there were no more prompts, several standards of classifications are shown in their feedbacks, including age differences, diversities of characters and gender differences. Some of them have two or three features at the same time. The details of results are summerized in the table as below in Table 3:

### Table 3: Results of Experiment in Sweden

<table>
<thead>
<tr>
<th>Results</th>
<th>Computer Expert</th>
<th>Computer Silly</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age Differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An old man</td>
<td>None</td>
<td>3 boys + 1 girl</td>
</tr>
<tr>
<td>An old woman</td>
<td>None</td>
<td>1 boys + 2 girls</td>
</tr>
<tr>
<td>A young man</td>
<td>14 boys + 9 girls</td>
<td>8 boys (2 babies) + 2 girls</td>
</tr>
<tr>
<td>A young woman</td>
<td>1 girl</td>
<td>2 boys + 5 girls</td>
</tr>
<tr>
<td><strong>Characters</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nerdy boys</td>
<td>7 boys + 2 girls</td>
<td>None</td>
</tr>
<tr>
<td>Non-nerdy Boys</td>
<td>None</td>
<td>5 boys + 2 girls</td>
</tr>
<tr>
<td>Others</td>
<td>7 boys + 8 girls</td>
<td>9 boys + 8 girls</td>
</tr>
</tbody>
</table>

From the results, it is obvious that without one girl, 23 kids in total 24 agree with the so called “Computer Expert” should be a young man, some of the kids also gave the exact ages are around 25-30 years old. 11 boys and 5 girls imagine experts wearing a pair of glasses, 7 boys and 2 girls put freckles on their faces, and using some other ways to show their “Nerdy” Characters, such as sticking the pencil on the ear, no bothering about small matters, peart and clever with a little bit prissy (Picture 7).
Compared with “Computer Expert”, “Computer Silly” seems more irregular. Most boys don’t care about gender issues as the same degree of girls. 10 boys among total 14 suppose their computer sillies are also male. The differences between experts and sillies focus on age (2 old men and 2 babies) and characters. It is a little bit difficult to recognize the common character for those male computer sillies. The only thing I can be sure in that is they are not nerdy guys. On the other side, the girls pay more attention on gender issue, 70% of girls think sillies are women (in Picture 8). Moreover, the female sillies are not good at computer not because of their old ages (only 2 girls among them think old ladies are bad at computers.)

The results reveal that even though computers went inside every family and became indispensable digital machines in modern world, girls are still impacted by the old stereotype —— “girls are not good at computer skills”. Only one of them in my test shows her confidence and put an image of a young girl in “Computer Expert” part. Compared with the girls, boys ignore gender differences which may also be explained by “Pyramid of Power” Model. Similar as male players choose female characters will not cause uncomfortable feeling, because males are in upper power levels and females are in lower power levels. It seems that boys in my test don’t consider so much about gender differences because it never makes senses for them. However, it is not difficult to imagine the girls who feel uncomfortable and sensitive when comparing computer skills.

How about their Chinese counterparts in Kunming Street Primary School? There are 45 students in that class, the proportion of girls and boys are 22:23. Due to some subjective and objective causes, the simple questionnaire which was used in Chinese class was different from the one I designed in Chapter 3. However, we still gained some relative results which are able to illustrate some facts as well. The results can be found in the Table 4 as below. For the sake of clarification and comparison, the Swedish results are also put in the same table.

**Table 4: Results of Experiment in Chinese**

<table>
<thead>
<tr>
<th>Results</th>
<th>Chinese Boys</th>
<th>Chinese Girls</th>
<th>Swedish Boys</th>
<th>Swedish Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>22</td>
<td>13</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>9</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Middle and old ages</td>
<td>7</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Young people</td>
<td>16</td>
<td>12</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

Actually, they did two smaller tests. One was “what do you think about the gender of computer expert”, the other was “In your opinion, how old are computer experts?” It is easy for me to understand the data inside this table. In Gender columns, the results are influenced by two aspects. Firstly, one of the Chinese cultures ---- Men higher social positions than women in hierarchical society. The thinking of male chauvinism remains its influences which are deeply in boys’ bone. Adding another aspect ---- the stereotype of viewing computers, it is not difficult to understand only one boy in 22 thinks a girl can become a computer expert. The girls also are impacted with those two aspects. That is why 4 men are supposed to be experts more than women. However, girls become increasingly confident and require equality between genders, which might be the reason for 9 girls believe computer experts can be female.
Since age differences are not main topic in this thesis, in brief, hierarchy system still plays important roles in most companies in China. Certainly, it is also impact the thinking of young people. The image of an expert is always a man in white uniform, middle aged or even older, skillful, practiced, experienced and higher educated. So the certain percent of kids suppose experts should be old guys are reasonable.

Although, those two tests in Sweden and China were not exactly the same, it is obvious to see the regional differences for gender issue in technology world. In Sweden, freedom and equality between the sexes are the main features of society, the results simply reflect the kids views to the “Machine” ---- computer. Thanks to popularity rate of computers are higher than early years, the results in my test show subtle differences as what Professor Bryson and Castell did. Although Computer Expert is still a young man who gains land-slide victory in the test, the Computer Sillies are not only young girls anymore, especially in boys’ point of view.

However, in china, because the test are not exact the same as those two professor did, there are no comparability between those data. However, the issue “how to view the computer” is decided by integrated factors. The results still show that some girls insist female can play important role in computer industry, although most boys don’t agree with them.
4.2 Analysis of Questionnaires

According to Q2 in Basic Level, most respondents are around 16-25 years old (Option B). They are young people who have high education and well-off lives. In Sweden, there is no need to clarify this point, but in China, compared to their parents’ generation, those young people have much better lives, higher education and much more pressure. Certainly, the average standard of life in China is lower compared to Sweden. Due to globalization and internet, the mental level and desires of entertainment became similarity all around the world. Analysis of the results indicates that there are gender and other differences among groups.

Inside Swedish Group, the analysis is comparing two sub-groups: Fans Group (FG) and International Group (IG). FG consists of Uppcon (Uc) and Game students (Gs). The comparison between Uc and Gs is also shown in this part. However, there are only 5 girls in Gs and 9 boys in Uc. So it is not easy to find tendencies.

4.2.1 Basic Level

Chart 1 Swedish Group (Left: Girls 56; Right: boys 39)

Chart 2 Chinese Group (Left: Girls 58; Right: boys 50)

In Q3 (“Do you like computer games?”), no matter boys or girls, the biggest part is “sometimes, depends. (Option B)”. The female “Crazy gamers (Option A)” are fewer than males. Both male and female data in SG is higher than their counterparts. The highest percentage is SG boys. In CG, there is high percentage of girls who don’t have interest in games at all. One of the reasons can be found in Question 4 (“When did you start to play games?”). The time when Chinese girls got in touch with game is the latest among four parts. Most boys in Sweden started playing games before 10 years old, and the girls’ situations in SG are similar as the Chinese boys.
As mentioned before, Q5 and Q6 are related to “Machine” factor in the model. Most Chinese respondents, no matter genders, choose Option A: computer is a tool for studying and working (around 44% of all the Chinese respondents). Relatively, more boys (26%) than girls view their computers as “a game machine (Option B)”, while more girls (34.5%) use their PCs (private computers) as “multi-media players (Option C)”. Going to their counterparts’ group, lower percentage of girls use their computers as studying and working tools, but a certain rate (40%) of them also use it as multi-media players. It is amazing to know 12.5% of the girls use their computers as “a game machine”. The rate almost equals to the boys’ (12.8%) in SG. However no matter the region and genders, there are certain proportions of them fill in their comments in option D, most of the comments are “all the above” or “two of above”. (Chart 1 and 2)

Q6 aims to check preferences of computer functions. It is obvious that boys prefer the functions for playing games (such as speed) rather than more flexible. The results of Q4 & Q5 are similar as in the experiment made by Cornelia Brunner (1994) in Book 1 as below (Picture 9):

Picture 9: Cornelia Brunner, Dorothy Bennett and Margaret Honey

When the boys were asked about how to view their computers, it seems that most of them claim the computer is used in study and work more than playing games. On the contrary, the data shows the girls are “enjoying” their computers more than working on them. However, when it comes to flexibility or speediness, the results show some similarity as in the previous study.

Additionally, it is interesting to know, in Swedish group, almost every respondent who views himself or herself as “crazy gamer” in Q3, chose “game machine” option in Q4 and functions benefiting for playing games option in Q5, too.
There is a statement which was mentioned in Book 1 as: “the computer is really a product masculine intent and masculine desire. (Cassell, J. & Jenkins, H., 2000, Page 160)”. It seems that this statement is not absolutely correct currently. Girls also use computer as much as boys do. Maybe in game area boys still have overwhelming advantage, but mastering computer is no longer a problem for girls.

Chart 3: Girls in Uc and Gs (Uc 18, Gs 5)

Chart 4: Boys in Uc and Gs (Uc 9, Gs 12)

Inside FG, more boys who took part in Uppcon viewed themselves as crazy gamers (Option B in Q3). All of participants seem to enter in game area earlier in their lives, before 10 years old (Option A in Q4). More game students view computer as a tool for study and job (Option A in Q5). It is quite true for them in their future jobs. More girls in Uppcon and more boys in game class hope to have more speedy new computers, so that it will be smooth when they are playing games. (Chart 3 and 4)
Between FG and IG, more people in IG claim that they play games only sometimes (Option B in Q3). It is obvious that, the people in IG started to play game later than game fans (Option B in Q4). In FG, most girls require their computers multi-roles (Q5), not only game machines and multi-media players, but also a tool for studying and working. So they leave comments in Option D as “All above” or two of them. And more girls in general group IG view their computers as multi-media players. They also hope their computers can be multi-functional. 50% of girls in FG focus on function and another half on speed. Compared with girls, in both groups, more boys care about the speed of their computers. (Chart 5 and 6)

4.2.2 Advanced Level

This graph shows the results of all the “Yes” options, since all the questions in this part are Yes/No questions.

Chart 7: All “Yes” in SG and CG

As the explanation in Chapter 3, Q1, Q3 and Q4 are related to a popular movement called “Girls’ Game Movement” which happened several years ago in the USA. According to results of Q1, seldom young people know about it. Comparatively speaking, more people in SG know about it than their Chinese counterparts. And in SG more girls know it (probably because feminism is more popular in Western world). In contrast, more boys than girls in China know about it (maybe because they focus on game area). Coming to Q3, more people know “Pink Software” than “Girls Game Movement”. They may know of the game “Barbie Fashion Designer” and “Pink Software”, but they do not notice the relationship between them and “Girls’ Game Movement”. Q4 shows color stereotype of “pink”. Pink is viewed as girlish color in game industry in Book 1. More people in SG disagree to this. More boys and girls still agree with it in CG. Some Chinese girls showed their reasons as “Most girls may still like pink, so I agree with it, but I don’t like it.” “It seems that girls like warm colors, but there are some exceptions.” And the voices from Chinese boys is “Maybe girls like pink, but I don’t like dark colors”

Q2, Q5 Q9 directly ask the opinions of gender differences. Both in two regions, more young people accept the gender differences about selecting games. The 76.9% of SG are the boys and 75% are girls and in CG 88% and 84% respectively. The topic of Q5 is if it is necessary to design games according to gender factor. In SG less than half of the respondents care about this issue. And in CG, more than half of them show their agreement to develop special games for girls.
Majority of Chinese girls (87.9%) have desires to girl-oriented games. The proportions in Q9 reflect even more people in SG than Q5 agree that more boys play games than girls do. In CG, more boys agree to Q9 (fact that more boys play games) than in Q5 (necessity of gender factors in games). The number of girls that agree with Q9 is less than that in Q5. It also probably shows Chinese girls’ demand of games. The great majority of the answers are “yes”.

Q6 and Q7 are about “Genre”: violent games. In SG and in CG, the share of boys who like to play fighting games is 82.1% and 74% respectively, and who like to play war games are 92.3% and 86% respectively. The boys in SG have more passion than their Chinese counterparts. On the other hand, Chinese girls have bad impressions of this “genre”. The proportion of girls who like to play violent games among the ones that dislike it is 1:4 only. Their counterparts show a little bit more favor in war games (41.1%) and enthusiasm about fighting games (64.3%). It seems that the girls in SG also like fighting games, but they still can’t catch up the boys.

Q8 and Q10 are associated to peripheral sub-cultures: “cosplay” and “otaku”. Only around 30.8% of the boys in SG know about Otaku sub-culture, each of other three parts is around 70%. And about Q10, some respondents stated that they did not know what cosplay was. In order to be convenient for analyzing, all the unknown answers were put in “No”. Therefore, there is no change in “Yes” part, which also can indicate how many people in both countries know this activity. More people in Swedish group know about cosplay than otuka, and fewer people in Chinese group. About whether girls prefer this “real life RPG” activity more than boys, all the groups show approximately fifty-fifty results.

Q11 is related to the example in Book 1 which described the girls like to play games with friends, because girls are good at socializing. However the result of this questionnaire is totally opposite: in both regions more boys show that they prefer to cooperate. However, some of them made comments as “it is boring to play with computer controlled characters. I really like to challenge real players on internet.” Online games offer the stage for the boys to show one of their natural features: competition. Girls also complained “If there is someone beside me when I am playing games, it is difficult to be concentrating.” (Chart 7)

**Chart 8: All “Yes” in Uc and Gs**

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<table>
<thead>
<tr>
<th></th>
<th>Uc Boys (9)</th>
<th>Uc Girls(18)</th>
<th>Gs Boys(12)</th>
<th>Gs Girls(5)</th>
</tr>
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<tr>
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<td>Q11</td>
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Inside FG, it is significant that, only one girl in game class knows about “Girls’ Game Movement”, while in Uc group, more girls know it than boys do (In Q1 and Q3). The girls in Uc stand out for girls strongly: 10 in 18 insist that there is no differences between girls and boys when they chose games (Q2) and when the games are designed (Q5). The girls in Gs claim that when they are designing games, pink is not the main color used for girls, because no girl said “yes” to
Q4. Similar as Q4, one girl in five agree with the necessity of designing games by gender (Q5). However come to Q9 “Do you think more boys play games than girls?” All the game girls agree with it. Relatively, more girls in those two groups like violent games (Q6 and Q7). Related to Otaku (Q8), there is no boys know it in game class. However, a certain number of people know it in Uppcon, who also oppose that more girls play cosplay than boys in Q10. Compared with them, game students do not know about cosplay clearly. And it is really interesting to know all the male game students do not want to play alone. The other parts do not as strong will as game boys to play together. (Chart 8)

Chart 9: All “Yes” in FG and IG

Between FG and IG (Chart 9), in Q1 and Q3, more girls in each group compared to boys knew about “Girls’ Game Movement” and “Pink Software”. Compared to girls, more boys know about “Pink Software” than “Girls’ Game Movement”. In IG, all the people state (Q9) that in fact girls play games not as much as boys. And when talking about whether girls like pink in Q4, more boys think it is true. But not every girl agrees with boys. Almost half boys and girls in IG suppose that there is necessity for designing games for different genders. However, their counterparts don’t think so (Q5). Data indicates that boys like violent games: almost all the male respondents say they like it in Q6 and Q7. However, lower percentage of girls in IG like it than girls in FG. It is unpredictable, more girls in two groups know Otaku than boys, because there are more male otaku in Japan. It seems that boys know cosplay more than otaku. Around 50% of boys insist that not only girls like cosplay. Few girls in FG think boys don’t like playing cosplay, while more than 50% girls in IG think that girls like it more than boys (Q10).
4.2.3 Final Level

Chart 10: Q1, Q2 and Q8 in SG and CG

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<th>SG</th>
<th>CG</th>
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<td>Q8</td>
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</table>

Girl (in Swedish Group, SG: 56; in Chinese Group, CG: 58)

Boy (in Swedish Group, SG: 39; in Chinese Group, CG: 50)

Q1 tried to find out the motivation of playing violent games. The people who agree with “just for fun (Option A)” occupy the huge share in the results. Many message spaces for Q1 (Option C) were filled by girls with messages like “I have told you I don’t like violent games.” However boys always put some other reasons.

Q2 aims at “Genres”. It is amazing that both boys and girls think they are best at Strategy games such as RPG or Puzzle, except the girls in China who show they prefer social network games such as Facebook applications.

Q8 is about Facebook application games. It exactly shows that more girls like to play in Facebook than boys, especially the Chinese girls in this case. (The Chinese people use Renren.com instead of Facebook, which almost have the same functions). Girls spend more time than boys in staying on those social network websites. (Chart 10)

Chart 11: Q4 in SG and CG

<table>
<thead>
<tr>
<th></th>
<th>SG boy</th>
<th>SG girl</th>
<th>CG boy</th>
<th>CG girl</th>
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</thead>
<tbody>
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<td>A</td>
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These two questions examine two aspects: one is girls versus game machines (such as Xbox, wii, PSP, etc) and the other briefly describes the gender differences in game market. Most people have 1-2 machines (Option A), and one of them suppose to be computer. In SG, the rate of girls, who have 3-5 machines (Option B) is higher than boys’ (25% and 23.1%). Moreover, there are 15.4% of boys and 8.9% of girls who have more than 5 machines. However in China, few young people have their game machines. Only 5 in 45 of boys have more than 2 kinds of machines and only 1 girl in 58. (Chart 11)

These three questions are about “Avatar”. What kind of characters do the boys and girls like to use in games? Both those two books claim that, girls prefer to use female characters, because they feel uncomfortable to use male ones. Inversely, there is no trouble for boys to use female characters. Moreover according to Book 1, girls were supposed to prefer animal avatar or some other cute images. The rule seems true: most girls chose “girls (option A)”, and most boys chose “boys (Option B)”. But in SG, more girls prefer non-human avatars (girls: 17.9%, boys 12.8%). The option D should be highlighted: a certain number of information was filled in option D. Girls in SG claimed that they like the “coolest one”, the same as some boys said in option D. In CG, the number of boys who prefer to use non-human beings is twice more than number of girls.

In Q6 and Q7 boys in SG insist “I don’t care about the characters, I focus on the theme. (Option D)”. It shows that good genres are more important factors than characters. It can be inferred from the responses of the girls that in case they were boys they would like to take hot girl avatars. The same effect exists among Chinese boys.

When the girls choose male avatars, the top choices are “nice-looking” boys. A girl from SG told me “The nice-looking boys in anime are the best.” Divergence appears in second choices: girls in SG prefer strong and muscular boys in their games. However, the Chinese girls do not like muscular guys. (Chart 12)
Chart 14: Girls in Uc and Gs

Inside FG, the option B in Q1 (“decreasing pressure”) seems not to be the main reason for the responders playing violent games. Social games are ignored by boys. The highest was the response of game boys’ for fighting games (Option A in Q2). It seems like in game class, boys prefer to control male avatars. In other parts, people left messages to show their expectations for avatars. In Q6 and Q7, boys show the gender of avatar is not important for them. Game students are probably influenced by designs they studied: more boys select Option A “Sexy girls”. Certainly, it is difficult to escape from “Eye’s candy”, so a certain number of girls also pick up “nice-looking boys”. However, game girls may also have the stereotype to like muscle male characters appearing in their previous studies. It can be concluded from Q8 that people use Facebook more or less. (Chart 13 and 14)

Chart 15: Girls in FG and IG

Chart 16: Boys in FG and IG

Between FG and IG, boys in IG state that they play violent games just for fun. And it is obvious more girls show they play violent games for declining pressure. Girls prefer to play strategy games like boys do (Option B of Q2). About avatar, the results are similar as general
comparison above. Only the girls in IG are attracted to play games more due to handsome opposite sex characters. IG girls show their interests in Facebook more than FG girls. On the other hand, the game boys seem more like social network than usual boys (Q8). (Chart 15 and 16)

About Q3 and Q4 in Final level: “what kind of machines do you have and how many do you have?” It shows the extreme cases that if the girls love games, they can have all the items mentioned in the options. By contrast, the girls who don’t have interests of games at all claim that they have no machine. I suppose they may not see PC in Option C. So a certain number of respondents filled in “none” or 0 at that question.

4.2.4 Bonus Round

**Chart 17: Bonus Round in SG and CG**

Bonus Round is about game market. The number of the male respondents from China is twice as their counterparts who like to download free games, and around two in three of their counterparts (SG) choose to pay for their favorite computer games. And the fanatic gamers who collect almost every game in SG are 5 times as the Chinese ones (10% and 2%). In girls’ group there is almost same trend as boys’. (Chart 17)

But in FG, the data shows girls have the same desires to collect games and play it, especially in game class. In Uppcon, some girls claim that they would like to borrow games instead of paying for them.
4.3 Results of Interviews

4.3.1 Interview with Professor Joyce Goggin

One interview was done with Dr. Joyce Goggin, the Associate Professor (UHD), University of Amsterdam. The brief background of interview with Dr Joyce Goggin’s is presented as below:

She got her Bachelor’s Degree at Université de Montréal in 1984, which is about German Literature. Following by MA in Comparative Literature at the University of Georgia in 1988, PhD was in Comparative Literature (Littérature comparée) at the Université de Montréal in 1997 and Postdoctoral Fellowship in Amsterdam in 1998. Dr Goggin’s interests are literature, film, new media, games, game theory, history of money and gambling & speculation. (http://home.medewerker.uva.nl/j.goggin/, May 12, 2010)

Questions:

1. Do you think it is necessary to design computer games (video games) especially for the girls? Because some designers claimed that if the game was good, anyway it would be popular. The others stated that it was better to cater to the girls’ interests, because a lot of female gamers did not like violent games. And do you think girls are fundamentally different from boys?

**Answer:** It depends on the specific goal of the game – if the game is meant to entertain, then it probably is a good idea to design games that are gender-specific, especially if the company wants to make money. A serious or educational game, if it serves the pedagogical goal in the game, shouldn’t have to be modified to cater to gender.

At the current time, I believe that girls are acculturated and gendered by various media and cultural practices, to be fundamentally different from boys. How much of this is nature and how much is nurture remains an important and largely unanswerable question. I think as much should be done as possible to de-emphasis these constructed differences (i.e. by not marketing all girls’ products in pink, or by having more game and narrative outcomes available to girls than just “finding a good husband”, or “finding Prince Charming”. The Dora games have more going on than that, and Lara Croft also supplies an alternative to traditional female characters, albeit by incorporating large elements of Barbie and other gendered stereo-types.

2. Do you consider yourself a feminist?

**Answer:** Yes

3. Do you think there is a “revolution” in the games industry which reflects the equality between males and females? Or is it only for expanding market?

**Answer:** If there is or has been a revolution in the games industry that seeks to support the notion of equality between men and women, I am not familiar with it. I would certainly be a vital step towards expanding the video game market.

4. As we know, the game “Barbie Fashion Designer” can be viewed as the milestone of “girls’ game movement”? What do you think about this game? Do you think post-girls still like the
...pink color and dressing up the dolls?

**Answer:** I think it was quite predictable that the “Barbie Fashion Designer” would be popular given the long and aggressive period of marketing that has promoted Barbie since 1959. Moreover, because this particular image of womanhood, along with other stereo-typical trappings of femininity are so deeply entrenched in both western and non-western culture and society, it will be along time before any of this changes and change will be difficult if not impossible to measure.

5. Please offer your opinion on the two sub-cultures “Boys’ love” and “Otaku”

**Answer:** No opinion really (of “Boy’s love”): I’m not familiar with the games, but it isn’t a surprise that they exist. Otaku: It’s a lifestyle.

4.3.2 Interview with a Chinese girl

Another one has been done by a Chinese girl by QQ software. As we all know, game industry in China can be viewed as infant industry. It is difficult for me to interview some experts especially when I am not in China. That girl is working in an anime design company, who graduated from Tianjin Academy of Fine Arts. Since she is also a senior manga and game fan, it should be valuable to hear her voices.

1. Do you think it is necessary to design computer games (video games) especially for the girls? Because some designers claimed that if the game was good, anyway it would be popular. The others stated that it was better to cater to the girls’ interests, because a lot of female gamers did not like violent games. And do you think girls are fundamentally different from boys?

**Answer:** In my opinion, it is necessary to do it. There are not only fundamentally different physiological differences between boys and girls, they also have different hobbies and interests. If the games can be designed by genders, they might be able to cater to both of them.

2. Do you consider yourself a feminist?

**Answer:** No, I am not. I am influenced by traditional Chinese culture so that it might be better to view me as a male chauvinist. However, I support equality between male and female.

3. Do you think the “revolution” in game industry reflects an equality between males and females? Or is it only for expanding market?

**Answer:** My individual opinion, the purpose of this kind of “revolution” is only for profit-making motivation. I can’t generalize, saying that all game companies started to pay attention on girls’ games only aiming to earn money. But in China, the game industry is still an infant industry. It is not easy to give exact answer or make comments for this question, due to I am designing characters for anime and not for games.

4. As we know, the game “Barbie Fashion Designer” can be viewed as the milestone of “Girls’ Game Movement”? What do you think about this game? Do you think post-girls still like the pink color and dressing up the dolls?

**Answer:** If you mention about Barbie, it was my ideal gift for birthday when I was a little girl. But at that time the price of Barbie doll in Chinese market was relatively higher than other domestic
toys. What a pity that I could not have a Barbie doll when I was a kid! However, mum still remembered my dream. I got a Barbie two years ago when I had already not been attracted by it after growing up. But both for my mum and me, Barbie dolls are valuable memories in our lives.

I don’t like “Barbie Fashion Designer”. Comparing dressing up a doll in the computer game, playing with a real doll should be a real dream for little girls. However, maybe I am wrong. Nowadays, there are a large number of people who pay for Tencent Company (the company produces QQ software) in order to dress up their QQ image every day.

5. Please offer your opinion on the two sub-cultures “Boys’ love” and “Otaku”

**Answer:** I respect the strong spirits of otaku, which are used to go in for their interests. Although the ways otaku uses are a little bit extreme, as result, they are able to master all the so-called “academic” knowledge in the areas of manga, game, etc.

However, the disadvantages of them are only staying at home, no socialization, paying huge amount of money, even all the money for their hobbies. This kind of behaviors might increase the pressure of their own families, even influencing the society.

There are huge differences between those two answers from Dr Goggin and the Chinese girl. Undoubtedly, it is reasonable. One thing is clarified after reading their answers, in Western world, feminism gets particular attention. As one of the successful precursors, Dr Goggin’s answers show us a tendency in game area.

4.4 The Summary of Analysis

After analyzing all the studies for the thesis, gender differences indeed exist in game industry. Although both males and females can master computer skills nowadays, the results of my study still maintain similarities as the previous studies. Summary of differences suppose to be concluded in this part.

First of all, general opinions still state that more boys play computer games than girls. Some against voices can be heard from both young boys and girls. Girls will never be viewed as Computer sillies as before. Even in primary students’ opinion, gender is not a very important factor to evaluate a person’s computer skills. The contemporary girls also can master computers, not only for studying and working, but also for playing. Actually, girls view themselves enjoying computers more than boys.

Secondly, although some stereotypy still influences the young people, it is not as strong as before. The youth are more open-minded than before. For example, previous designers supposed that girls like warm colors, which does not suit every girl today. Even some boys claim that they like pinks more than dark colors. Another example indicates that more girls like violent games. The basic motivation is “just for fun”. Characters-choosing: although people still choose same sex avatars, increasing number of them show that gender doesn’t matter. The “coolest one” is the best. The genre factor is more significant than avatar factor, especially in Swedish group.

Due to convenience of internet, increasing number of girls and boys prefer to play together online. It reflects that nowadays boys also are interested in socializing during games. However, it is still a long way for the game designers who want to expand game market from girls’ side. More people would like to play free games online, especially girls. Few girls buy game software, most of them choose to borrow the software from their friends. Game machines are not
so well pervading. Some people have them in developed western counties, such as Sweden. However, in China, one can seldom see someone having more than 2 game machines, except computers. At the same time, some peripheral market can be developed, such as figurines from popular games or products for cosplay: the high percentage of respondents who knows about these sub-cultures, reveal the potential attractions towards girls. A girl told me “before I paid 300kr to 500kr for games every month. Now I have a new hobby, as you known, it is cosplay. So no more money is spent on games.”

There is another girl that wrote in the questionnaire at the last question: “(‘Final Fantasy’ is) such an awesome game, I am ready to pay 500kr for it.” However, the price on Amozon.com is only $30, which equals to about 300kr.

All in all, today, girls do like computer games. Maybe the number of these girls is not as much as boys’, and the money they contribute to game is not as much as boys do. If there is a game which has really good genre with nice-looking characters and easy to be controlled, on the shelves in the shop, it also can attract girls. In my own opinion, the tendency of game industry is designing the games for both boys and girls. So all the factors inside should be considered for two genders. For example, a good genre is the most important part. Then all kinds of characters suppose to appear in the game avoiding conveying girls as sexual objects. After playing, girls may have chance to play cosplay from their favorite characters inside the games. And male otaku can pay for figurines made from game characters, too. It suppose to be a special way of publicity for the games.
Chapter 5. Conclusion

“Boobs shall bounce and thou shall enjoy watching.” It is the intent of Japanese game designer team called Ninja, who is famous for the game “Dead or Alive (DOA)”. The sexy avatars in Japanese games, from Chun-li’s spinning bird kick in Street Fighter to DOA at the beach, are certainly welcomed by the boys. Indeed, you can say, DOAX is the game especially designed for the boys. Although the theme of it is “sport game”, “Portable debut is all about the love...again it has very little to do with volleyball-it is all about the girls and their ferociously bouncy breasts. (Anon, 2010, Page 2)” said by the designer in Ninja team.

In the game, of course you should be able to play volleyball with the girls in bikini, and you can buy new clothes for them, after you upgrading or collecting enough money. Additionally, you can take photos when they are wearing bikini bought by you or taking pictures of their breasts. In my opinion, this boy-trend game has some factors similar as “Barbie Fashion Designer”, such as buying the clothes for the female characters and dressing up them. However, in Barbie, the little girls are innocent to play with dolls in computer games, which is different from the boys who play DOAX. (Picture 10 and 11)

![Picture 10 and 11: DOAX (from Baidu.com)](image-url)

If you think there are some games as DOAX with sexual factors in order to cater the male players in Japan, because the influence of male chauvinism, it is not exactly right. There are also a certain number of games for female players, which are designed by Japanese companies. For instance, “Princess Maker”, a game was made by Gaina, in which you can arrange the schedule for the main character: a little girl, to train and educate her in order to have different ending of her life: such as the becoming a princess or a homeless poor girl. There are also some Boys’ Love games which are especially for girls, too. At least, in my opinion, common and normal boys don’t like it. For example, “Apocripha”, the main character is a prince, when you play the game you can choose different options in order to get different endings, too.
From those examples, we can see that the relatively new games which are designed during last several years are still remaining the main features as mentioned in the book 1. For example, the game designed for boys, the themes are always about fighting and sports, while the ones for girls are about love stories or RPG. But, there are some changes, the colors in both boys’ and girls’ games are light, warm and vivid, and some dressing up factors added into boys’ game while some card fighting factors emerged into girls’ games. Two kinds of game start to merge together and influence each other.

On one hand, as what mentioned in book 2, more and more designers (especially female ones) and companies insist that a good game should have the ability to catch both boys’ and girls’ eyes. It may be the main tendency in game industry in the near future. On the other hand, there are still some games designed especially for a certain gender, but not only focus on boys these days, such as Boys’ Love games for girls.
Appendix

Appendix 1: Questionnaire (English Version)

Questionnaires: Gender Differences in Computer Game/Video Game Industry

“Now you are a hero! Don’t look around, it’s you! Your task is answering the questions below to save the poor writer who was fighting for thesis. The poor writer is almost mad, and locked in terrible thesis nightmares. ‘Help……!’”

—— Jingjing

### Basic Level (Single Selection)

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<th>Questions</th>
<th>Answers</th>
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</tr>
<tr>
<td>4. When did you start to play it?</td>
<td></td>
</tr>
<tr>
<td>A. 1-10</td>
<td></td>
</tr>
<tr>
<td>B. 11-15</td>
<td></td>
</tr>
<tr>
<td>C. 16-20</td>
<td></td>
</tr>
<tr>
<td>D. Or (_____________________)</td>
<td></td>
</tr>
<tr>
<td>5. How do you view your computer?</td>
<td></td>
</tr>
<tr>
<td>A. A tool for study and work</td>
<td></td>
</tr>
<tr>
<td>B. Game machine</td>
<td></td>
</tr>
<tr>
<td>C. Multi-media Player</td>
<td></td>
</tr>
<tr>
<td>D. Or (_____________________)</td>
<td></td>
</tr>
<tr>
<td>6. If you can have a new computer, which one do you prefer?</td>
<td></td>
</tr>
<tr>
<td>A. More functions and flexible</td>
<td></td>
</tr>
<tr>
<td>B. More speedy and good for playing games</td>
<td></td>
</tr>
<tr>
<td>C. Or (_____________________)</td>
<td></td>
</tr>
</tbody>
</table>

### Advanced Level (Please give some brief reasons)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Answers</th>
<th>Brief Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you know the “Girls’ Game Movement” about computer games in USA?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>2. Do you agree there are some differences between girls and boys when they choose games?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>3. Have you ever heard about “Pink Software”(games designed for girls)</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>4. Do you agree that girls prefer pink while boys prefer blue in the games?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>5. Is it necessary to design games depending on genders?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>6. Do you like violent fighting games (such as Street Fighter, Tekken)</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>
and Super Smash Bros)?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Do you like war games?</td>
<td>Y N</td>
</tr>
<tr>
<td>8.</td>
<td>Do you know the meaning of Otaku?</td>
<td>Y N</td>
</tr>
<tr>
<td>9.</td>
<td>Do you agree more boys play games than girls?</td>
<td>Y N</td>
</tr>
<tr>
<td>10.</td>
<td>Do you think more girls like to play cosplay than boys?</td>
<td>Y N</td>
</tr>
<tr>
<td>11.</td>
<td>Do you prefer to play alone more than play with friends? (Single player or Multi-players)</td>
<td>Y N</td>
</tr>
</tbody>
</table>

**Final Round**

1. If you like violent themes in game, please give me the reason.
   A. Just for entertainment
   B. Decreasing the pressure, be relaxed
   C. Or (____________________)

2. Which genre do you prefer or are you good at?
   A. Fighting games
   B. Strategy games (Role-playing, Puzzle)
   C. Social games
   D. Or (________________________)

3. Do you have the game machines?
   A. Nitendo (Gamecube, Gameboy and wii)
   B. Play Station (ps2, ps3, psp)
   C. Xbox (360), PC
   D. Or (________________________)

4. How many machines do you have?
   A. 1-2
   B. 3-5
   C. 5+
   D. Or (________________________)

5. When you are playing the game, which characters do you always choose
   A. Girls
   B. Boys
   C. Not human-beings
   D. Or (________________________)

6. If you are a boy, what kind of girl characters do you want to see in the games?
   A. Hot and sexy girls with big boobs
   B. Common girls as in daily life
   C. Lolita (Age from 12 to 15, cute and undergrown)
   D. I don’t care about the characters, I focus on the theme
   E. Or (________________________)

7. If you are a girl, which kind of boy characters you expect to see in games?
   A. Sexy boys (Nice-looking boys in “Boy’s Love” games)
   B. Strong and muscular
   C. Common boys as in daily life
   D. I don’t care about the characters, I focus on the theme
E. Or (____________________)

8. How many hours do you play online communities per day? (Such as Facebook)
   A. Less than 1 hour
   B. 1-3 hours
   C. More than 3 hours
   D. I am always online, but not physically there

Bonus Round
1. Would you mind estimating how much money you pay for games average per month?
   A. I never buy the games, only download or play free games online
   B. Not too much, but I buy the classical games
   C. I almost collect every game I have seen
   D. Game is my life, I use all pocket money for games.
   E. Or (_______________)

2. Would you mind telling relatively exact expense for game every month?
   A. Less than 100kr
   B. 100kr-500kr
   C. 500kr+
   D. Or (_______________)

3. The price of Final Fantasy XIII is around $50 (around 300kr) on Amazon.com (2010.4.15)
   If you can decide the price for FF XIII, how much money do you like to pay for it?
   Answer: (_______________________)

“Congratulations! You did it! Thanks to your help, the writer gets some valuable suggestions now. Thank you very much for your time and attention. Best wishes for you.”

——Jingjing
Appendix 2: Questionnaire (Swedish Version)

Frågeformulär: Könsskillnader i Datorspel / Video spel industri

"Nu är du en hjälte! Titta inte runt, det är du! Din uppgift är att svara på frågorna nedan för att rädda den stackars författaren som kämpade för denna avhandling. Den stackars författaren är nästan galen och fast i hemska uppsattsmdrömmar.. ‘Hjälp ……!’ “

—— Jingjing

Grundläggande nivå (enskild markering)

<table>
<thead>
<tr>
<th>1. Kän:</th>
<th>2. Ålder</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Pojke</td>
<td>A. 1-15</td>
</tr>
<tr>
<td>B. Flicka</td>
<td>B. 16-25</td>
</tr>
<tr>
<td></td>
<td>C. 26-3</td>
</tr>
</tbody>
</table>
|                             | D. Eller (_________________)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Galen spelare</td>
<td>A. 1-10</td>
</tr>
<tr>
<td>B. Iblad, det beror på</td>
<td>B. 11-15</td>
</tr>
<tr>
<td>C. Inget intresse</td>
<td>C. 16-20</td>
</tr>
</tbody>
</table>
| D. Eller (_________________)| D. Eller (_________________)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Ett verktyg för studier och arbete</td>
<td>A. Fler funktioner och flexibel</td>
</tr>
<tr>
<td>B. Spel maskin</td>
<td>B. Snabbare och bra för spel</td>
</tr>
</tbody>
</table>
| C. Multi-media spelare     | C. Eller (_________________)
| D. Eller (_________________)|

Avancerad nivå (ange några korta skäl)

<table>
<thead>
<tr>
<th>Frågor</th>
<th>Svar</th>
<th>Kort motivering</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Känner du till &quot;Girls Game Movement&quot; om dataspel i USA?</td>
<td>Ja</td>
<td>Nej</td>
</tr>
<tr>
<td>2. Tycker du det finns några skillnader mellan flickor och pojkarn när de väljer spel?</td>
<td>Ja</td>
<td>Nej</td>
</tr>
<tr>
<td>3. Har du någonsin hört talas om &quot;Pink Software&quot; (spel för flickor)?</td>
<td>Ja</td>
<td>Nej</td>
</tr>
<tr>
<td>4. Håller du med om att flickor föredrar rosa medan pojkarn föredrar blå i spelen?</td>
<td>Ja</td>
<td>Nej</td>
</tr>
<tr>
<td>5. Ar det nödvändigt att utforma spel beroende på könen?</td>
<td>Ja</td>
<td>Nej</td>
</tr>
<tr>
<td>6. Gillar du våldsamma fighting-spel (som Street Fighter, Tekken och Super Smash Bros)</td>
<td>Ja</td>
<td>Nej</td>
</tr>
<tr>
<td>7. Gillar du krigsspel?</td>
<td>Ja</td>
<td>Nej</td>
</tr>
<tr>
<td>8. Vet du innebörden av ordet Otaku?</td>
<td>Ja</td>
<td>Nej</td>
</tr>
<tr>
<td>9. Håller du med om att fler pojkarn spelar spel än flickor?</td>
<td>Ja</td>
<td>Nej</td>
</tr>
<tr>
<td>10. Tror du att fler flickor gillar att spela cosplay än pojkarn?</td>
<td>Ja</td>
<td>Nej</td>
</tr>
<tr>
<td>11. Föredrar du att spela ensam mer än att spela med vänner? (Single player eller Multi-player)</td>
<td>Ja</td>
<td>Nej</td>
</tr>
</tbody>
</table>
Sista omgången
1. Om du gillar våldsamma teman i spel, ge mig några anledningar.
   A. Underhållning
   B. Minskar trycket, avslappnande
   C. Eller (____________________)
2. Vilken genre föredrar du, eller är bra på?
   A. Fighting-spel
   B. Strategi-spel (Rollspel, Pussel)
   C. Sociala spel
   D. Eller (_____________________________)
3. Vilka spelmaskiner har du?
   A. Nintendo (Gamecube, Gameboy och wii)
   B. Play Station (ps2, ps3, psp)
   C. Xbox (360), PC
   D. Eller (_____________________________)
4. Hur många maskiner har du?
   A. 1-2
   B. 3-5
   C. 5+
   D. Eller (_____________________________)
5. När du spelar spelet, vilka karaktärer väljer du alltid att spela?
   A. Flickor
   B. Pojkar
   C. Inga mänskliga varelser
   D. Eller (_____________________________)
6. Om du är en pojke; vilken typ av kvinnliga karaktärer vill du se i spelen?
   A. Heta och sexiga tjejer med stora bröst
   B. Vanliga tjejer som i det dagliga livet
   C. Lolita (Älder från 12 till 15, söt och småväxt)
   D. Jag bryr mig inte om karaktärerna, jag fokuserar på temat
   E. Eller (_____________________________)
7. Om du är en flicka; vilken typ av manliga karaktärer vill du se i spelen?
   A. Sexiga killar (Snygga pojkar i “Boy’s Love” spel)
   B. Stark och muskulös
   C. Vanliga pojkar som i det dagliga livet
   D. Jag bryr mig inte om karaktärerna, jag fokuserar på temat
   E. Eller (_____________________________)
8. Hur många timmar spelar du online per dag? (Som Facebook)
   A. Mindre än 1 timme
   B. 1-3 timmar
   C. Mer än 3 timmar
   D. Jag är alltid online, men inte fysiskt där
**Bonusomgång**

1. Kan du uppskatta hur mycket pengar du betalar för spel i genomsnitt per månad?
   A. Jag köper aldrig spel, bara laddar ner eller spelar gratis online
   B. Inte så mycket, men jag köper klassiska spel
   C. Jag köper nästan alla spel jag ser
   D. Spel är mitt liv, jag använder alla fickpengar för spel.
   E. Eller (__________________)

2. Har du något emot att berätta hur mycket pengar du lägger ner på spel varje månad?
   A. Mindre än 100kr
   B. 100kr-500kr
   C. 500kr+
   D. Eller (__________________)

3. Priset för Final Fantasy XIII är ungefär $50 (ca 300kr) på Amazon.com (2010.4.15)
   Om du kunde bestämma priset för FF XIII, hur mycket pengar skulle du vilja betala för det?
   Svar: (_______________________)

   “Grattis! du klarade det! Tack vare din hjälp har författaren några värdefulla förslag nu. Tack så mycket för din tid och uppmärksamhet. Bästa hälsningar till dig.”

   —— Jingjing
Appendix 3: Questionnaire (Chinese version)

电脑游戏领域的性别差异

“现在，你成为一个英雄！不要东张西望，没错，没错，说的就是你。你的任务是：完成这份问卷，解救因毕业论文而疯狂的作者。可怜的作者每晚被噩梦所困扰着，救命呀…！”

——晶晶

第一关 基本信息：（单选）

<table>
<thead>
<tr>
<th>问题</th>
<th>选项</th>
<th>问题</th>
<th>选项</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 性别:</td>
<td>A. 男</td>
<td>2. 年龄</td>
<td>A. 1-15</td>
</tr>
<tr>
<td></td>
<td>B. 女</td>
<td></td>
<td>B. 16-25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C. 26-30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D. 其它（_____________）</td>
</tr>
<tr>
<td>3. 你喜欢电脑游戏的程度？</td>
<td>A. 疯狂爱好者</td>
<td>4. 你从几岁开始玩游戏的？</td>
<td>A. 1-10</td>
</tr>
<tr>
<td></td>
<td>B. 偶尔玩玩啦</td>
<td></td>
<td>B. 11-15</td>
</tr>
<tr>
<td></td>
<td>C. 游戏白痴，基本不玩</td>
<td></td>
<td>C. 16-20</td>
</tr>
<tr>
<td></td>
<td>D. 其它（__________）</td>
<td></td>
<td>D. 其它（_____________）</td>
</tr>
<tr>
<td>5. 你怎么看待你的电脑？</td>
<td>A. 工作学习的辅助设备</td>
<td>6. 如果你将得到一台新电脑，你想要以下哪种？</td>
<td>A. 更多功能且易上手</td>
</tr>
<tr>
<td></td>
<td>B. 多功能游戏机</td>
<td></td>
<td>B. 更快，有利于玩游戏</td>
</tr>
<tr>
<td></td>
<td>C. 功能强大的多媒体播放器</td>
<td></td>
<td>C. 其它（_____________）</td>
</tr>
<tr>
<td></td>
<td>D. 其它（B、C 数据颠倒）</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

第二关 Yes/No（请给出简单的解释）：

<table>
<thead>
<tr>
<th>问题</th>
<th>答案</th>
<th>简单的解释</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 你知道美国曾经有一个“女孩游戏运动”吗？（Girls Game Movement）</td>
<td>Yes No</td>
<td></td>
</tr>
<tr>
<td>2. 男孩女孩选游戏的时候，有啥米区别吗？</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>3. 你听说过“Pink Software”没？（指所谓的专门为女孩设计的游戏）</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>4. 在游戏中，你认为女孩喜欢粉色等暖色系，而男孩喜欢暗色系吗？</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>5. 你认为有必要根据性别而设计游戏吗？</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>6. 你喜欢血腥暴力的打斗类型游戏吗？比如街霸，铁拳和任天堂明星大乱斗</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>7. 你喜欢战争类游戏吗？</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>8. 你知道“御宅族（Otaku）”是啥米意思吗？</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>9. 相比起女孩来说，更多男孩玩游戏，并且更多男孩喜欢玩游戏？</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>10. 比起男孩来说，更多女孩喜欢玩cosplay（动漫游戏角色扮演）</td>
<td>Y N</td>
<td></td>
</tr>
<tr>
<td>11. 相比起和别人合作一起玩，我更喜欢自己一个人玩。（比如有两个手柄，或者网络游戏的情况下）</td>
<td>Y N</td>
<td></td>
</tr>
</tbody>
</table>
最终关：

1. 如果你喜欢血腥暴力类游戏，那么为啥呢？
   A. 单纯因为搞笑+娱乐
   B. 发泄下，我压力大呀！
   C. 其他（______________）

2. 你擅长玩哪种游戏？
   A. 格斗类（如拳皇）
   B. 战略类（RPG，解谜）
   C. 社交类（如人人网）
   D. 其他（__________）

3. 你有以下哪种游戏机？
   A. 任天堂（Gameboy，wii）
   B. 索尼Play Station（psp，ps2，ps3）
   C. Xbox 360，电脑
   D. 其他（__________）

4. 你一共有几台游戏机呢？
   A. 1-2
   B. 3-5
   C. 6+

5. 你玩游戏时，喜欢用（或者多用）以下哪种角色
   A. 男性角色
   B. 女性角色
   C. 非人类（动物，机器等）
   D. 其他（__________）

6. 如果你是个男孩（或者可以把自己想象成男孩），你希望在游戏中看到什么样的女性角色？
   A. 妖艳，身材火辣，要胸有胸，要臀有臀，就是传说中的超级性感女郎
   B. 普通女孩，写实版
   C. 平胸萝莉
   D. 其他（__________）

7. 如果你是个女孩（或者可以把自己想象成女孩），你希望什么样的男性角色出现在游戏中呢？
   A. 帅锅呀，比如耽美里的那些没少年，或者牛郎型
   B. 筋肉男，健美型
   C. 普通男孩，写实版
   D. （__________）

8. 每天你会花多长时间在人人网上玩
   A. 少于1小时
   B. 1-3小时
   C. 多于3小时
   D. 经常挂机，但是不在电脑前
隐藏关：

1. 你每个月在游戏上花多少钱？
   A. 只在网上玩免费的，休想从我身上榨取一分钱
   B. 只买经典的收藏，其他的玩免费的
   C. 尽其所能买齐各种游戏
   D. 有多少零花钱花多少，游戏就是我的生命
   E. 骨灰级的游戏迷，不仅尝遍天下游戏，还买齐各类周边

2. 那么，请估计下，大约一个月在游戏上花的钱数。
   A. 少于 100 元
   B. 100-500 元
   C. 多于 500 元
   D. 其他（____________）

3. 最终幻想 13，在亚马逊美国网站上的售价是 50 美金。如果你可以规定价格，你愿意出多少钱买正版的最终幻想 13？
   答：（__________________）

“恭喜恭喜！闯关成功~。在您的大力支持与帮助之下，作者得到了宝贵的数据信息。非常感谢各位了！鞠躬ing~。”

——晶晶
### Appendix 4: Results of Questionnaire

#### Table 5

<table>
<thead>
<tr>
<th>Levels</th>
<th>Questions</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>SG</th>
<th>CG</th>
<th>SG</th>
<th>CG</th>
<th>SG</th>
<th>CG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Level</td>
<td>Gender</td>
<td>♂</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>39</td>
<td>50</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>♂</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>31</td>
<td>37</td>
<td>6</td>
<td>12</td>
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<tr>
<td></td>
<td></td>
<td>♂</td>
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<td>何much money you pay for games average per month</td>
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**Table 6**

**Results of Questionnaire**

(σG: boys 39, girls 56; CG: boys 50, girls 58)

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<td>Do you know the “Girls’ Game Movement” about computer games in USA?</td>
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<td>Do you agree there are some differences between girls and boys when they choose games?</td>
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<td>Have you ever heard about “Pink Software” (games designed for girls)</td>
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<td>Do you agree that girls prefer pink while boys prefer blue in the games?</td>
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<td>Is it necessary to design games depending on genders?</td>
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<td>♀ 23</td>
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<td>Do you like violent fighting games (such as Street Fighter, Tekken and Super Smash Bros)?</td>
<td>♀ 32</td>
<td>37 7</td>
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<td>♀ 36</td>
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<td>Do you like war games?</td>
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<td>Do you know the meaning of Otaku?</td>
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<td>Do you agree more boys play games than girls?</td>
<td>♀ 33</td>
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<td>♀ 44</td>
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<td>Do you think more girls like to play cosplay than boys?</td>
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<td>♀ 25</td>
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<td>Do you prefer to play alone more than play with friends? (Single player or Multi-players)</td>
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References


Anon, 2010, Dead or Alive - japan's sexiest fighter, *Neo Magazine*, issue 70, page 1-5


Sanday, P.R., 1981. *Female power and male dominance: on the origins of sexual inequality*, Cambridge University Press.


Vintetjärn, B., 2008. Video Games – a Source of Knowledge? - an investigation amongst youths about their thoughts on their video gaming habits. Available at: http://www.essays.se/about/Bj%C3%B6rn+Vintetj%C3%A4rn/.


The references of pictures:


Picture 2: Super Mario, This photo was taken in Uppcon, Apirl 9-11, 2010

Picture 3: Lolita, This photo was taken in Uppcon, Apirl 9-11, 2010

Picture 4: Hatsune, This photo was taken in Uppcon, Apirl 9-11, 2010


Picture 7: Nerdy or not, This photo was taken on May 10, 2010.

Picture 8: Gender differences, This photo was taken on May 10, 2010.


Picture 10: Doax, [electronic print] Available at: http://img.article.pchome.net/game/00/04/84/19/pic_lib/wm/03.jpg From home: http://article.pchome.net/content-233471-6.html?interval=6#topView [Accessed 30 May 2010]


The references of figures:


Figure 2: The Core/Periphery Model, Lauwaert, M., 2009. The Place of Play: Toys and Digital Cultures, Amsterdam University Press. Page 12

Figure 3: Pyramid of Power, Ray, S.G., 2004. Gender inclusive game design: expanding the market, Cengage Learning. Page 69

Figure 4: Gender Conflict-Resolution Model, Conflict-Resolution Model comes from Ray, S.G., 2004. Gender inclusive game design: expanding the market, Cengage Learning. Page 37-50. Gender Conflict-Resolution Model was made by the author.