

GIRL GAMES – THE FIRST 15 YEARS

“A girl game is one that has been specifically created for and marketed to girls.”

Top 5 turning points

- 1. Barbie Fashion Designer released (1996)*
- 2. Mobile and Internet more common (~1999)*
- 3. Games sold in supermarkets instead of computer shops*
- 4. The Sims released (2000)*
- 5. Nintendo Wii (2006)*



“Secondary household gamer is populated with more female gamers – 37.2% of all secondary gamers are female!

- *41.7% of secondary GameCube users*
- *43% of secondary PS2 users.”*

[Schelley Olhava GDC05]

Girl games have been topical for the last 15 years. Girls played some games in the 1980s but the term “girl games” was coined in the mid of 1990s. The real kick off took place in 1996 when Barbie Fashion Designer hit the markets. That was the time when multimedia PC’s were becoming everyday tools and CD-ROMs were still enjoying relative success and high hopes. The game industry had been growing steadily for some years. For a long time the market was divided into two: computer gaming for adults and console gaming for kids. In 1995 Sony brought fresh approach with their novel marketing strategy for Playstation. Sony Playstation console was marketed as consumer electronics and trendy past time hobby instead of a computer. That made it ok for adults to buy a game console for themselves. That was remarkable change but still games were often sold in separate computer shops and traded amongst friends and the whole gaming culture was still somewhat a computer hobby.

But then what happened? Did the first successful girl game remain to be the last successful girl game? This article will discuss of the first 15 years of girl games from my viewpoint¹ focusing more heavily on the US and European markets.

1980s “Target group? What do you mean? They are all just geeks!”
1990s “Boys and their toys”
1996 “Where are all the girls? There’s a huge growth potential!”
2000 “Social leisure and party gaming online and offline”
2005 “Broad range of digital fun and games for different user groups
2008 I can easily beat the boys at WoW and I also can do exercise with Fit (Wii)”

1980-1993

“I worked at Atari from 1979 to 1982 and Pacman was certainly one of the most popular games with girls even in those days. And it took something to play Pacman as a female to enter a very gendered male arcade-space. To play the game was a non trivial challenge, especially to younger girls.”

[Brenda Laurel, Doors of Perception: Play 1998]

Before home computers, video games were played at video arcades. The early forms of fortunate telling and pinball machines were put out in the 1930s. The penny arcades led to the creation of video arcades in the 1970s. By the late-1980s, the arcade video game craze was beginning to fade due to the reputation of arcades as being seedy, unsafe places as well as the advances in home video game console technology².

¹ I did my thesis in design theory and games designed for girls in 2000. Before and after that I have worked as a researcher focusing strongly on youth and digital media –especially digital games. My studies have focused on games for the last 10 years. I have also run girls game clubs where the idea is that everyone can make games. Currently I work as in the game industry and as a researcher. I am also IGDA Finland chapter coordinator. I have also collected girl games for the last 10 years. Sonja Kangas: sonja.kangas@souplala.net.

² Wikipedia: Video arcades.



Pc gaming took a significant share of the markets in Europe. As personal computers or computers used for playing games (Commodore, Sinclair, and Amiga) were not that common the computer was usually owned by a boy and kept in his own room. Some families also had a game console (such as Atari VCS 2600, Vectrex and Nintendo Entertainment System -NES) which was connected to a television. The first video games superstar Pacman became available for the Atari 2600 and Intellivision in 1981. PacMan - which according to a designer Toru Iwatani was inspired by a pizza slice³ - was a general hit with no clear male-bias in it. Soon PacMan appeared on high heels. Ms. Pac-Man was conceived as a bootlegged hack of Pac-Man called Crazy Otto⁴. Another video game super

star Mario was born around the same time.

The game consoles were often placed in the living rooms because families had just one television. When Commodore 64, Sinclair Spectrum and Amiga1000 hit the markets the gaming turned to be more common hobby for boys. Computer hobby and programming was related with miniature model making and construction hobbies which were boyish hobbies. The transition from dolls and girls' culture would have been much bigger. Also the fact that these gaming devices were personal computers placed in boys' rooms they remained as 'girls not allowed' devices. Early computers had games such as New Zealand Story and Bubble Bobble which gained some popularity amongst girls as well. Still girls' culture was not matching well with computer hobbies of that time.

1994-1996

"Men design games for themselves because they understand what they know is fun. They don't understand what women find fun." - John Romero

So what do you think a date with John Romero is like? Bass fishing? A couple of hours at the shooting range? A case of beer and ESPN?"

[Nikki Douglas Grrgamer.com, 1997]

The industry of digital games was in turbulence. The market had been growing steadily after the slump of the mid of 1980s. The next flash of hope was given by PC-game Doom which sold 2.9 million copies between 1994 and 1999⁵. Another hit of that time was Myst with the sales of 6 million. Myst was a breakthrough game with adult

³ Susan Lammers: *Programmers at work. Interviews with 19 Programmers Who Shaped the Computer Industry* (1989).

⁴ Wikipedia: Ms Pacman

⁵ <http://doom.wikia.com/wiki/Sales>.

females. It also started to challenge game genres which had stayed almost intact since the 1980s. Hybrid genres and totally new genres had significant effect on games. Myst brought forward that digital games can be something other than simple racing, fighting or sports action.

Together with new type of games media artists and researchers got interested in girl games. Australian cyberfeminist artist collective VNS Matrix (1991-1997) developed a computer game "All New Gen". According to Media Art Net; *"The cybersluts or anarchic cyber-terrorists infiltrate cyberspace and hack into the controls and databanks of Big Daddy Mainframe, the oedipal man. The aim of the game is to sow the seeds of the New World disorder to the databanks and in this way to end the rule of phallic power. All New Gen refers to both new generations and genders. VNS Matrix plays with different sexualities and gendered roles, quotes from popular culture and cultural theory. Cyber-sluts resemble female action-dolls, and their well-designed interfaces acknowledge the role of gender technologies and made-up femininities."*

Top 5 Girl game companies:

1. *Girl Games Inc.*
2. *Purple Moon*
3. *Rhinestone Publishing*
4. *Her Interactive*
5. *GirlTech*

Besides media artists' academic researchers started getting interested in girl games as well. Researchers discussed about masculine cultures of technology and women's invisibility in the history of technology and computing⁶. Women were operators and typewriters whereas men with their white lab jackets were the lords of the machines. They created and controlled the machines where as women were merely "printers" or operators using the hardware and software created by men. Another central theme at that time was

digital divide. Educators were starting to worry that the difference between girls and boys will develop further due to the fact that boys had anxiously started utilizing personal computers for programming, communication (BBSs) and gaming. Girls' culture did not include machines, computers or other forms of technology. At the Muu Media 1996 (Other media) festival in Helsinki Finnish media culture researcher Heidi Tikka raised a question of femininity being an invalidity in the age of digital computing.

Women's studies got into the topic of gendered technology from historical, activity and subject/object viewpoints. Pioneer women were looked after when trying to identify who would have been subjects at the time when the white jacket engineers were mainly male. The first female programmers started out as "Computers" during the Second World War. The Army named a group of over 80 women as Computers who worked at the University of Pennsylvania calculating ballistics trajectories - complex differential equations - by hand. When the Army agreed to fund an experimental project, the first all-electronic digital computer, six "Computers" were selected in 1945 to be its first programmers. They were Kathleen McNulty Mauchly Antonelli, Jean Jennings Bartik,

⁶ *The War of Desire and Technology at the Close of the Mechanical Age* (Cambridge 1996: MIT Press), <http://info.uah.edu/womensstudies/inventor.html>, <http://cs-www.cs.yale.edu/homes/tap/past-women-cs.html>, *Feminism Confronts technology* (Judy Wajcman), *Mechanical Brides* (Ellen Lupton).

Frances Snyder Holberton, Marlyn Wescoff Meltzer, Frances Bilas Spence and Ruth Lichterman Teitelbaum⁷.

Subject / object discussion started to rise together with the technical development of the digital games. When the technology enabled richer visuals the researchers started noticing the bias in games. Girls were usually presented as wallpapers or objects in the games. Male protagonists saved weak princesses or just passed by bikini babes without even noticing them. The discussion on both visual style as well as female roles in games was under discussion. Games provided the strongest dichotomies in computing due to its audiovisual nature. Female characters were active characters in video game classics such as Mortal Kombat and Final Fantasy but independent female protagonist did not really appear until 1996. In 1996 Barbie Fashion Designer was released for Christmas. Soon it hit the headlines for beating Quake during the Christmas season. After all Quake was the best selling game at that time. That was something! 1996 was also the year when gamers first met Ms. Lara Croft. Lara is considered to be an idol for girls representing active protagonist character in video games – something gamers had not experienced earlier.

“In its first two months of sales, Mattel’s digital incarnation of the oft-denigrated but remarkably enduring role model sold more than 500,000 copies, outstripping even popular titles such as Quake - and leaving the rest of the industry wondering how to cash in on this newfound wellspring.”

[G. Beato Wired Magazine 1997]

Top 5 girly things in games:

1. *Pink or pastel colors*
2. *Friendship*
3. *Dress-up*
4. *Non-violent*
5. *Point and click interaction*

The success of Barbie Fashion Designer was followed by e.g. Barbie Nail Designer but it couldn’t repeat the success pattern. But Barbie Fashion Designer did elevate the first wave of girl games. GirlGames Inc, GirlTech, RhineStone, HerInteractive and other game companies focusing on girls were founded in the USA around that time. European game developers were not following the trend that much of at all. Asian gaming superpower Japan already had very visually oriented

culture and “gaming lifestyle”. Games were a part of everyday life for boys and girls, children and adults. It was normal for a group of girls or teens on a date to go to gaming arcades to spend some time. For adults Pachinko halls were a place to spend time.

“Women’s culture has existed for centuries in Japan. Today, it extensively shapes Japan’s popular culture - even its game industry. Gender-blending, androgyny and the challenging of gender roles lay at the core of specific game genres produced by and for females in Japan⁸.”

[Philip Tan 1997]

Business was one of the main drivers of the discussion. Companies got excited with the promise of becoming billionaires if succeeding in making a kick-ass girl game. The web site visits of e.g. Purple Moon give some idea how hot the topic was back then. According to Brenda Laurel; *“The PurpleMoon.com website was the leader in the*

⁷ <http://www.witi.com/center/witimuseum/halloffame/1997/eniac.php>.

⁸ http://gambit.mit.edu/updates/2007/03/girlsgamesjapan_why_it_is_diff_1.php.

category. We had 200.000 registered users and we served about 12 million pages a month”.

Besides business also issues like equality, masculine technology and the history of technology, gender specific roles in computing, boy or girl cultures, gender specific content vs. gender neutral content, interaction as well as motivational factors were under discussion. MIT held a one day symposium on women and games which turned into a book titled *From Barbie to Mortal Kombat* (1998), edited by Henry Jenkins. There were also some researchers writing their thesis around the topic. Some of the first doctoral dissertations on girl games phenomena were done by Leyla Ozcivalek⁹, Sara McNamee¹⁰ and Janese Swanson¹¹. Also Joan Lawry and her team¹² made research around the topic as early as in 1994.

Besides Lara Croft and Barbie, Tamagotchi-boom is worth mentioning. In 1996 Tamagotchi toy hit the market in Japan and soon after in other countries as well. Electronic virtual pet was a game-like toy which became a super-hit in Japan, in Europe and the US. Tamagotchi was not a game as such even though the virtual pet toy was playful in many ways. It was anyhow both an electronic device and interactive entertainment for girls.

1997-1999

“Game Developers Conference has sessions focused on women gamers. This year, when a staffer pinned a “session full” sign outside the final panel on “What Do Female Game Players Really Want?” a riot nearly broke out. The trouble started with a Microsoft man proclaiming, loudly, that he was being denied access to the only session that mattered -- the only session geared at opening up a new market. Then the 30 or so shut-outs stormed the conference room”

“The moderator wrote on the white board: “Female players want games that are social, games without gratuitous human violence, games that make them feel.” The vets skewered her maxims as offensively neat. A woman in the back corner raised her hand. “Excuse me, but I’m a woman and I’m antisocial.” “

[Elizabeth Weil, Salon Magazine 1997]

Wired! Columnist G. Beato¹³ estimated there were over 200 girl game titles coming out in 1997. Girl Game Inc, Purple Moon, Girl Tech and Her Interactive and others were putting out a number of games and tech-toys targeted to girls. Majority of girl games were not exported outside the States which is one reason why Europe remained so out of the picture for a long time. The themes of the games ranged from charity

⁹ Leyla Ozcivalek: *Representation and women: Construction of gender-roles in computer games*. Bilkent University 1996.

¹⁰ Sara McNamee: *Questioning video game use: an exploration of the spatial and gender aspects of children's leisure*. University of Hull 1998.

¹¹ Janese Swanson: *Perceived elements of gender preference in video games played by second grade elementary school children*. UCLA 1996.

¹² Lawry, Uptis, Klawe, Anderson, Inkpen, Ndunda, Hsu, Leroux and Sedighian: *Exploring common conceptions about boys and electronic games*. Technical Report 1/1994. Univeristy of British Columbia.

¹³ http://www.wired.com/wired/archive/5.04/es_girlgames.html?topic=multimedia&topic_set=newmedia

work to figure ice skating and friendship adventures. Girl games remained closer to clickable multimedia than actual games. Many games were overly girlish and/or even childish. According to the designers, the games were just as girls liked them to be. At that time the focus was heavily on the PC market. Despite the lower prices of girl games' titles people were not into buying pink girl games and Barbie Fashion Designer remained to be the best seller of girl games for a long time.

At the end of 1990s the Internet was starting to become common at schools which influenced girl games in a new way. Netscape Navigator and Internet Explorer were improving their search engines but too often a search term "girl + game" returned just screen full of porn sites. Girl gamers tried to promote grrlgames-term instead of girl game but these two terms remained parallel for a long time. Later the terms diluted when more girls were getting into gaming. One reason for the fade down of these terms was an attempt not to further dualities anymore. Developers discussed if "girl games" would be an opposite of "normal games". Is it a division between good and bad design or inept gamers (later the term casual gamer has sometimes been used with similar meaning) vs. hardcore gamers. Some girls emphasized their interest and experience in FPSs (First Person Shooters) which are as far from the stereotypic image of girl games as possible. Mainstream girls found level jumping games more entertaining. All in all it was clear that gaming was becoming more acceptable hobby and past time activity for girls as well.

After the buzz and hype of the mid of 1990s had slightly faded, something happened which culturally changed the whole game industry. In 1998 Will Wright was promoting his new game at conferences and industry exhibitions. I had a chance to see him in Amsterdam at Doors of Perception.

"I found doll houses very interesting to watch kids play with. Because doll houses are really I think much more of a toy than a model. And again there's this kind of a dimension where with the models as you go from the simple models to the complex models, you have a lot of 'play' on the simple side and they are very easy to build, and as you get to the very detailed models, there's much less play and they're much more rigid, less pliable.

So in this game part of the 'building', there the essence of the game play should be that the user is forced into this decision between the materialistic side of the game and the social side of the game. You have little people here and you have to force them to work to earn money, to buy things, including their paying for walls and doors. So part of what you're doing here is you're binding all the different aspects in life and you're trying to maximize their happiness. That is the ostensible goal of the game. The stated goal. The essence of the game play should be that the user is forced into this decision between the materialistic side of the game and the social side of the game. "

[Will Wright, DoP: Play 1998.]

The new product was The Sims which was something quite different from other game types of that time despite the fact it was a follow-up of the Sim-series.

2000- 2004

At the beginning of the new millennium the first wave of girl games was long gone. Many girl games companies went to bankrupt. Purple Moon was bought by Mattel and GirlGames Inc. switched from game developer to market research Girls Intelligence Force¹⁴. There were also a few companies such as Her Interactive which survived and have been putting out a long series of Nancy Drew games.

Free (ad-funded or sponsored) online mini games were riding the second wave of girl games. Earlier the access to computers as well as pricey game consoles were considered to be problems of getting girls into gaming but many schools, homes and libraries started to have networked computers. The worries of digital divide faded because gaming or programming were no longer single entry points to the world of computing. Girls found it fun to chat online, join virtual worlds such as Alpha World and Habbo which had just opened. Game portals such as Netbaby World¹⁵ and Shocwave.com were attracting girls as well with their humoristic comic style and diverse set of games.

Internet had a remarkable effect in introducing girls into gaming. That heated up that girl games discussion again. ESA and market study companies claimed that ~50% of online gamers were women of their 40s and 50s! A couple of year ago girls – more precisely teenagers– represented some 5-15% of the gamers but suddenly adult women were into games? Most likely that wasn't exactly the case but still more girls and women got involved in digital games. Those percentages and sales expectations were remarkable enough to put up the hype once again.

Internet did similar image lifting to games what Playstation did in a slightly smaller scale in 1995. The generalization of the Internet had already done a lot for the gender division. The computers were no longer for nerds-only, they were for all – an open playground where it was easy to search for information, spend time or for example pretend to be someone else. One could jump into gaming without paying anything and or date with variety of people at the online communities. The Sims together with online communities introduced playful social interaction into gaming. When I did a study together with Kaisa Coogan on “Youth communication acrobats” (1999-2001) girls explained how excellent Snake-mobile game¹⁶ was or how they had got hooked in online mini games. Or how they played game classic Doom and stayed up all night because they were too afraid to go to bed. Girls were excited but also somewhat proud that they could potentially beat the boys at their ground.

Finnish Aypaa.com web site was offering “Who wants to be a millionaire” type of quiz games. In 2005 they reported that 60% of the customers were 20 to 30 year old women. Mobile gaming was also starting to gain more recognition. In 2001 Finnish company Meetfactory created a Pumpui game combining mobile SMS game with 3D-online world. The focus on girls was clear but SMS-games were not gaining enough

¹⁴ <http://www.girlsintelligenceagency.com/sbox.htm>

¹⁵ <http://www.netbabyworld.com/>

¹⁶ *In 1998 Snake was introduced in Nokia 5110 mobile phones which add more hopes to the girls as gamers and aided the second wave of girl games to take off. Technology, the devices or access to a computer were no longer a central issue.*

popularity and Pumpui soon ceased to exist. Also Belgian Minifizz¹⁷ was putting up their first mobile games for girls in 2002 and they are still running the service. Minifizz focuses on trends and adventure.



Pumpui virtual pets by Meefactory.

In the beginning of 2000 the girls were also gaining more visibility as active, skilled gamers. Girl teams were put up. Some of the most well known ones are PMS Clan¹⁸ and Ubisoft's Frag Dolls¹⁹. In comparison with the earlier situation, now the focus is not on these few well-known clans but in the fact that there are a rising number of all-women and mixed-gender clans playing online in various MMOGs. Girls as gamers were not marginal anymore. Many all-women clans such as Team-Temptation Ladies or Girlz of Destruction play FPS games nowadays.

Besides FPSs also fantasy multiplayer games were gaining popularity. South Korean Lineage was one of the early successes of MMOGs before WoW came into being in 2004. In the US and Europe Ultima Online and Everquest had some girls playing the game but WoW finally blow up the bank. Girls started playing with their boyfriends or learned social gaming with their friends.

Ariel Wetzel made a survey on women of WoW in 2005. Here are some excerpts from that.

"I was once in an all-female WoW guild and found out that most of the members were male, which surprised me. WoW and UO are the only online RPGs that I have played extensively, and UO does not seem to have the amount of gender-crossing that WoW does. (If it does, it is more subtle, and I missed it.)"

"A lot of the time (unless someone's making it issues by saying women play bad or hitting on girls or something) I don't think all this "girl gamer" stuff should matter as much as it does. Why is it such a huge deal? Everyone likes to do fun things; games are fun. It's when people flip out and act like it's something completely out of the ordinary that it starts to get separated from "I'm having fun" to "I'm a girl gamer, and that's unusual." Sure we're a minority, but it feels like focusing on it isolates us more. Maybe that's just me ;)"

The understanding of new player groups as a way to advance the industry and broaden the target groups was finally taking place in games.

¹⁷ <http://www.minifizz.com/>.

¹⁸ <http://pmsclan.com/>.

¹⁹ <http://www.fragdolls.com/>.

2006-

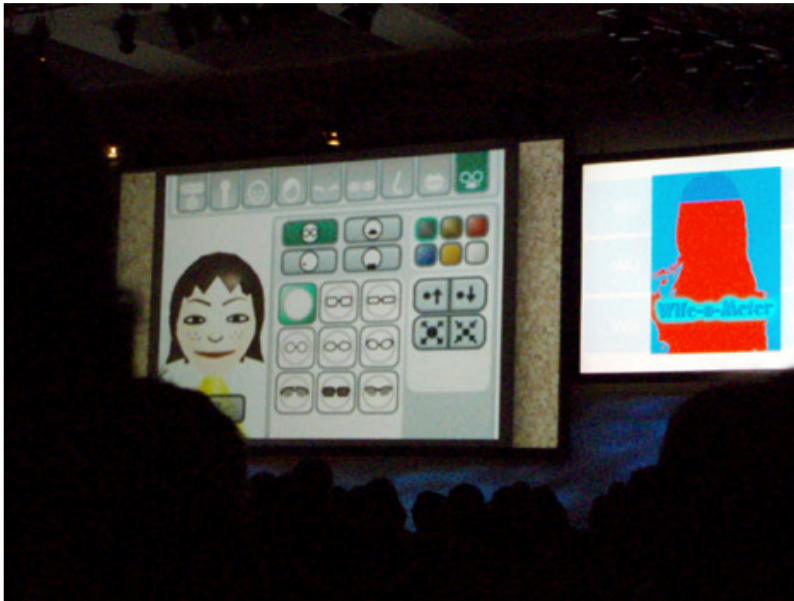
“Male character #359812: Are you a real girl?”

Me: Yes.

Male character #359812: Need help?”

[Didi Cardoso, grrgamer.com, 2007]

The third wave of girl games more or less blended into the development of digital gaming in general. Social games, casual games, advergaming, online games, mobile games and Facebook games were all parallel trends switching the focus from one user group – girls – into bigger change in gaming as a whole. Shigeru Miyamoto talked about Wife-o-meter²⁰ in Nintendo’s keynote at GDC07. He said that he tends to test new game ideas with his wife. Whereas DS-game Nintendogs bounded off the pointer of Wife-o-meter, Wii games made the Wife-o-meter to turn to maximum. Then he knew he was on the right track.



Miyamoto-san talking about Wife-O-Meter at the GDC07.

Mobile gaming (mainly Brew and Java) games were gaining bigger popularity and wider user groups. Finnish Ironstar Helsinki put out MoiPal mobile game/service in 2007. Currently their biggest user group is teenage girls who play mini games inside the MoiPal world and personalize their home and the character. Internet has brought a range of games to players’ reach. Japanese Bishojo games, Neopets virtual pet community, Webdings toys are just few examples of the process. There are also some virtual communities for girls such as Barbiegirls.com and be-bratz.com. Stardoll utilizes paper dolls in a virtual form.

The increase of women gamers and developers has affected the founding of gaming initiatives such as IGDA Women, Women Gamers and Swedish SuperMarit which all have done a lot to bring women together.

²⁰ <http://squarehaven.com/news/2007/03/08/Miyamoto-Wife-o-Meter-rating-at-all-time-high/>

IN A NUTSHELL

Thanks to Playstation, gaming was starting to be trendy and normal leisure activity in the 1990s and thanks to the Internet for lowering the entry barrier to computer at the end of the decade. Later the development was pushed forward with social gaming products such as EyeToy, SingStar and Buzz. Lastly Nintendo Wii, World of Warcraft, casual games and all-women clans have diminished the division between girls and boys. Still some girl games exist such as Starshine Legacy series and Nancy Drew – games.

Nevertheless everyone is more or less playing games on computers there is a clear qualitative difference still. On average girls and boys prefer different types of games. According to questionnaire on digital games (TT research company, N=1489, Finland 2006) 69% of teenage boys and 20% teenage girls played digital games daily or almost daily. 58% of girls play games weekly. Games are already hobby for young girls but there are still clear qualitative differences. Even though girls are playing more and the difference from boys is decreasing; the type of games and girls' connection with gaming is different from boys'. Boys have whole sub-culture generated around the gaming where as girls merely just play alone or party games and chat about the games but do not for example trade the games, read articles or do modding. Lately Nintendo Wii Fit, online minigames and Massively Multiplayer Online games have changed the case and most likely the change will continue.

Further reading:

Game characters:

<http://www.top100woman.com/www.grrlgamer.com.html>

http://www.tomsgames.com/us/2007/02/20/the_50_greatest_female_characters_in_the_history_of_video_games/

<http://listverse.com/entertainment/top-10-video-game-characters-that-are-not-white-males/>

Organizations, associations, groups:

Top 5: Classic girl games (series):

1. *Barbie Fashion Designer*
2. *Mimi Smartypants*
3. *Nancy Drew –series*
4. *Rockett's –series*
5. *Hawaii High*

<http://www.igda.org/women/>

<http://www.womeningames.com/>

<http://www.grrlgamer.com/>

<http://www.gamegirladvance.com/>

<http://ladygamers.com/>

Conference:

<http://www.womeningames.com/>

Research and magazine or journal articles:

* Aphra Kerr:

<http://www.rcss.ed.ac.uk/sigis/public/display>

oc/full/D05_2.08_DCU3

A few famous scenes (involving female characters)

1. *Indian girl tied up in a cactus (Custer's Revenge)*
2. *The girls get caught (Night Trap)*
3. *GTA San Andreas "Hot Coffee" (GTA)*
4. *Donkey Kong takes the princess to the top of the stairs (Donkey Kong)*
5. *Bikini babes on the beach (Dear or Alive Extreme Beach Volley Ball)*

* Carrie Heeter: commtechlab.msu.edu/publications/files/ica_spring_survey.pdf

* Melissa Chaika: <http://www.acm.org/crossroads/xrds3-2/girlgame.html>

* Lisa Pickoff-White: Gender in 64 bits:

http://www.american.edu/academic.depts/honors/Honors%20Activities/Lisa_Pickoff-White.pdf

* Rebecca Eisenberg: <http://www.omino.com/~dom/clips/barbiesyndrome.html>

* Barbara Lippe: "Game Boys for Play Girls!" (Phd thesis)

* Elspa: Chicks and joystics:

http://www.elspa.com/assets/files/c/chicksandjoysticksanexplorationofwomenandgaming_176.pdf

* Carly Schuler: D is for Digital:

<http://www.joanganzcooneycenter.org/pdf/DisforDigital.pdf>

* Laura Groppe: Teen Girl Gaming: The New Paradigm:

<http://culturalpolicy.uchicago.edu/conf2001/papers/groppe.html>

* Girl Scouts: The Girl Difference: Short Circuiting the Myth of the Technophobic girl: http://www.girlscouts.org/research/pdf/girl_difference.pdf

* GirlSite! Network: <http://www.girlsite.org/may03/toystory.html>

* Sarah Hepola: Girl, Upgraded. How Women Are Changing the Face of Computer Games: http://weeklywire.com/ww/12-20-99/austin_screens_feature.html

Girls and Games literature review:

http://spacepioneers.msu.edu/girls_and_games_lit_review.htm

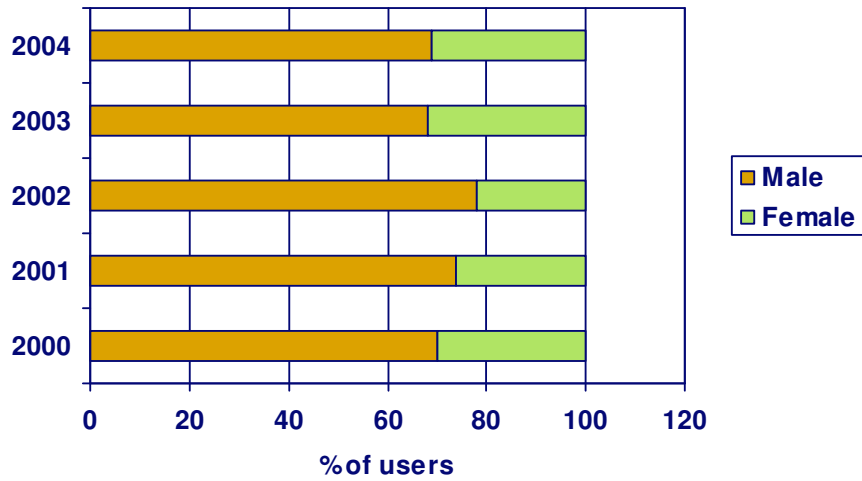
After school and summer program for girls:

http://www2.edc.org/itestlrc/projects/youthbased/gcg_ca.asp

http://www.souplala.net/show/article_gameclubs.pdf

"Girls have been playing games since computer games were invented, just not very many of us. Throughout the years until about 1995 the statistics were about ten to fifteen percent female players. Most of those players were sisters of boys who owned computer game machines, or children of parents who owned personal computers."

[Brenda Laurel: Doors of Perception: Play 1998]



Source: *Tales of the Gamer*, IDC's 2004 Videogamer Survey (September 2004, IDC #31760); N=350

:: Digital Women Critiques

Name	Game	Score
Tira	Soul Calibur 3	5.75
Cecilia Adlehyde	Wild ARMs	9.0
Alita	Heretic Kingdoms	7.2
Jennifer Tate	Primal	9.2
Isabella "Ivy" Valentine	Soul Calibur 2	5.3
Mariko "Spirit" Tanaka	Wing Commander	7.7
Taki	Soul Calibur 2	8.4
Chris	Suikoden III	10.0
Harle	ChronoCross	8.0
SHODAN	System Shock Series	9.0
Kasumi	Dead or Alive	8.14
Maya	Septerra Core	8.1
Rinoa Heartilly	Final Fantasy V	8.0
Lara Croft	Tomb Raider	6.5
Yuffie Kisaragi	Final Fantasy VII	7.0
Aeris Gainsborough	Final Fantasy VII	7.0
Tifa Lockheart	Final Fantasy VII	7.5

Source: <http://www.womengamers.com/articles/digital-women/>.