

Review of serious games to educate on gender equality

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ABSTRACT

Education on gender equality is an essential foundation to improve our society. Many of the current inequality or sexist situations have their roots at a very young age, when the mindset is constructed and stereotypes are created and fixed. At such young ages, education is essential. Also, in these ages, videogames are an interactive tool with a massive use that can provide benefits beyond entertainment. We consider that videogames can be effectively used for improving gender equality education. In this paper, we conduct a review of the videogames used with goals related to education on equality and raising awareness about inequality or gender violence aspects, and the limitations encountered on such works. To start covering the limitations found, we present two initiatives developed to foster education on equality and that can be used as a guideline for future research on this area.

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KEYWORDS

Serious Games, Educational Games, Gender Education

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1 Introduction

Gender inequality is present in everyday life in different aspects and has its roots in education and cultural stereotypes with serious consequences [1]. Probably, gender violence is the most visible part of that inequality. Some other inequality aspects

include: control behaviors in personal relationships, sexist behaviors, the different stereotypes of men and women, work-life balance, the work “glass ceiling”, etc. And they are all rooted issues in society. As mentioned before, most of these issues have their origin at very young ages, when children are educated and learn such inequalities [2]. The gender inequality has multiple sources, including their family, friends, cultural and social environments, and is a problem present all over the world [3]. All these sources make children absorb such inequalities as common and normal; later, when these children grow up, they carry on with such disparity. For all these reasons, education on equality takes on special importance [4], and different organisms such as UNESCO are starting initiatives to end gender-based violence in schools [5].

At these young ages, a present tool in children and adolescents’ lives are games and, in particular and increasingly more commonly, videogames [6]. Videogames allow players to experience a safe and interactive environment, where they can foster different abilities and, even without noticing it, learn. Game mechanics (i.e. game interactions) improve motivation, promoting desirable characteristics such as goal-oriented planning or collaboration, and breaking the kids usually short-time attention span (the so called ten-minute attention barrier). These features, that are present in general videogames, have promoted the application of videogames in other fields such as education [7].

Educational videogames, or more broadly, serious games, are a kind of videogames whose main goal is not to entertain, but to educate, raise awareness of a specific issue, or even change players’ behaviors [8]. Serious games have been successfully applied in several areas such as education, science, military, etc. [9]. In social issues, some serious games have tried to raise attention to some social causes, and create awareness of some neglected issues. One of such issues that can be targeted by serious games is education on equality.

Some previous studies have analyzed the relationship between gender and videogames. The study [10] reviews how previous research has focused on this relationship, starting with the study From Barbie to Mortal Kombat. Gender and Computer Games [11], which went over several aspects including how videogames design affect their gender use. Thenceforth, [10] points out the different branches of research that have appeared: the stereotypes of women constructed in videogames [12]; women as developers and players of videogames [13]; and the female identity

* Article Title Footnote needs to be captured as Title Note

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constructed by players [14]. In regard to the first of these branches, other studies have pointed out that some videogames do contain explicit incitements to gender-based violence [15] and that women representation in videogames is often hypersexualized, objectified and subordinated to the male main character, which contributes to the propensity of men to hold sexist behaviors in real life [16].

However, in this paper we aim to study the works that have been carried out regarding videogames to educate on equality and/or raise awareness of some of the gender inequality aspects (including consent, abusive relationships, and gender violence), identify their potential improvements, and present two initiatives that we have started to advance in this area.

The rest of this paper is structured as follows: Section 2 presents the review of videogames used to educate on equality, summarizing the characteristics and limitations of such works; Section 3 presents two initiatives we have developed to promote such videogames for equality education; finally, Section 4 summarizes the conclusions of our work.

2 Videogames to educate on equality

This section contains three parts explaining the process followed for the review of educational or serious games to educate about equality or address gender issues. In section 2.1, we detail the process of search and review of the educational or serious games found; in section 2.2, we present the review of the complete set of games found; finally, in section 2.3, we summarize their limitations and possible improvements.

2.1 Search of games

The search was performed on engines of general purpose (Google), academic search engines (Google Scholar), and games marketplaces (Google Play Store, Apple App Store and Steam, a video game digital distribution service by Valve).

The search terms included all relevant gender and equality terms: “gender”, “feminism”, “gender equality”, “sexism”, “consent”, “relationship violence”, “indie”, “LGBTQ+”. These terms were combined with “videogame”, “serious game” and “educational game”.

The search was performed by two of the authors independently. As the initial goal of the review was mainly exploratory, the search started on the general-purpose engine Google, obtaining many results that were then examined, and conducting a more specific search on the other platforms previously mentioned. Gradually, these results were reviewed, cataloged and filtered to ensure their relevance in the current study. For some of the games found, we encountered similar information (author, theme, developers, etc.) when classified. This allowed us to identify that these games were part of a bigger group of serious games created by an organization that aims to educate on issues of equality, gender, etc. Consequently, we explored such organizations to find further games that had not appeared in the searches carried out, and these games were added to the study.

The preliminary set of games obtained by each author was contrasted with the results of at least another author to verify that the game met the inclusion criteria: that the content of the game was within the scope of our review study, and that the game was in English or Spanish. The final set of games obtained was then analyzed, reading all available information and resources about the games, and played individually by two of the authors (except those games who were not available to be played). Results of the review were again contrasted and agreed upon at least two of the authors of the study.

2.2 Review of games

This section presents the review of the videogames found to educate on equality. The games have been grouped based on their producer, specific topics, or area of impact. The general characteristics of the games and their topics covered are described in the following paragraphs. Additionally, **Table 1a** and **Table 1b** provide further details about the games, such as the ages at which they are aimed to, or the platforms for which they are available.

The largest set of games found belongs to Jennifer Ann's Group (JAG), a nonprofit charity created by the father of Jennifer Ann Crecente, a high schooler killed by her ex-boyfriend. The charity organization has been producing games since 2008 to engage, educate and empower young people, with focus on preventing teen dating violence. The wide range of games produced by Jennifer Ann's Group can be divided based on their main topic: games about consent, teen dating violence games, healthy dating relationships, games about bystanders, and gaslighting games.

Regarding JAG's videogames about consent, in *ADRIFT* [17], you are placed in the position of a member of an interstellar crew who tries to help after receiving a distress signal. For that, you have to communicate with the AI system running the ship, follow the instructions given. *Crossing Boundaries* [18] presents three friends travelling through the world and learning about different cultures and consent. Depending on your choices in the different situations, you receive achievements to highlight the qualities that you have shown. A more explicit mini-game about consent is also included. *How to Blorrble-Blobberle* [19] deals with consent through a set of dance lessons that teach to first ask for explicit consent and not assuming, for instance, that your partner wants to dance. In the 8 chapters of *Stuck in a Dark Place* [20], you're placed as a woman in prison, that revisited some experiences in dreams that teach about consent. *Respect Dance* [21] is the English version of *Rispek Danis*, a videogame developed in collaboration with World Vision Vanuatu to teach young people in Vanuatu about consent through a several chapters story of two characters in which you have to explicitly ask for consent before dancing or hugging your partner.

Many games developed by JAG focus on teen dating violence. In the educational videogame *Grace's Diary* [22], you are placed in Grace's position, who's trying to understand the changes in her friend Natalie since she is in a relationship, and to help her. *Little Things* [23] is a narrative game that presents a fictional social network where players can get an insight into the protagonist and

her classmates' lives. *The Guardian: TDV Missions* [24] comprises three missions in which you have to help three young people (13, 16, and 20 years old) to recognize dangerous behaviors of their partners. By also learning yourself about such behaviors, you can advise them and encourage them to leave those abusive relationships. The focus of *Leaving* [25] is to illustrate the difficulty to leave an abusive dating relationship. In the 2D house presented in the game, your small avatar has to collect the things around to leave, while your partner is throwing abusive messages that weaken you and put you further from leaving. *The Room Beneath the Rafters* [26] is a role-playing game to prevent dating abuse in which we explore the protagonist's memories with her partner to highlight abusive behaviors and help her decide what to do. In *A Casual Chat* [27], you learn about abusive dating relationships talking in a chat with a new friend, Katie, who has a new boyfriend. As conversations developed, where you have 3 possible responses each time, you learn that their relationship is not as healthy as it first seemed, and you have the chance to advise her on what to do. The educational game *Another Chance* [28] was designed to educate students, parents, and teachers about teen dating violence by following Emily's journey in discovering what are healthy and unhealthy behaviors in dating relationships. *A Decision of Paramount Importance* [29] places you as a young woman, Josie, trying to decide if she should stay with her boyfriend or not. During the gameplay, you learn some facts about his behaviors and lifestyle that indicate a possible abusive behavior. In the end, you are given the decision of staying with him or leaving.

Other videogames produced by JAG focus on related topics. Such is the case of *Honeymoon* [30], a game about relationships that allows players to choose both their own and their partner's gender, to emphasize that dating violence can affect anyone regardless of gender or sexual orientation. As the story advances, you get involved in an abusive relationship and with the help of parents, friends and teachers in the game, you get to reflect about the behaviors your partner is having. Depending on your choices through the game, you reach one of the 4 possible endings to the story. Two games focus on the importance of bystanders in violence situations: in *Citizen Witch* [31], while you explore a city, you encounter violence situations in which different monsters are threatening or attacking people, and you can decide whether to intervene or do nothing; *Step Up* [32] is placed in a school environment, when you find that classmates having issues and can decide whether to help them or not. At the end of each game day, you learn about the topics encountered such as bullying or depression. The final set of games produced by *Jennifer Ann's Group* are gaslighting games. Gaslighting is a form of abuse in which the abuser continually manipulates the victim to eventually make her/him doubt their own memory or perception, therefore, becoming more dependent on the abuser. *Lamplight Hollow* [33] explores how dreams and the subconscious are a way to reflect about serious issues. In *LED Gaslight* [34], you interact with an AI and go through employees' logs in a company to determine what happened there; in the process, you find a gaslighting

situation. Two more games on gaslighting, *Last Shred of Reality* and *Gaslighting Under the Sea* are not available yet, but will be published in *Jennifer Ann's Group* webpage [35].

Other organizations have also developed their games and initiatives. *IGUALA-T* [36] is an app developed in 2018 by the Instituto Andaluz de la Mujer (Spain) to be used in classrooms, but it can also be played individually online. The app presents multiple-choice questions of different difficulty levels to be answered by the player, grouped around 4 major topics: feminism, inequality, violence and affective-sexual. The questions are presented in sets of 12 randomly selected questions (out of the total of 100 questions per topic available). For each question, players have 45 seconds to answer, until they get the right answer. Also in Spain, *Berolos* [37] is part of the The Island Network for Gender Equality "Tenerife Violeta", integrated by key agents that represent public and private entities, and that have signed an agreement with the Strategic Framework of Actions in Gender Equality Policies. This simple and fun game introduces some gender equality topics in a dynamic and simple way, with some history and fun facts for children. In the game, the main character is neutral, and it presents characters that portray diversity such as some people with disabilities or with racial profiles, showing the diversity of society.

Two projects, *Chuka: Rompe el Silencio* and *Tsiunas*, have been developed in Latin America to combat physical, sexual, psychological and gender violence. *Chuka: Rompe el Silencio* [38] is a videogame developed by The United Nations Office against Drugs and Crime (UNODC) in Mexico, with academics and students of the Master in Management of the Coexistence in the School, Violence, Human Rights and Culture of Peace of the National Pedagogical University of Mexico. The goal of the game is to teach children to identify and combat physical, sexual and psychological violence, as well as to value the actions instead of the physical appearance of a person, therefore supporting the No Discrimination culture. Chuka is a 13-year-old youtuber girl who has a nightmare in which several monsters appear representing different kinds of violence. During the game, the kid can talk about gender violence, bullying, sexual, physical and psychological violence, gender stereotypes, diversity, respect, tolerance, social networks and the Internet. *Tsiunas* [39] is a videogame created by UN WOMEN (the UN organization dedicated to gender equality and the empowerment of women), USAID (the US Agency for International Development), the University of Cauca, and REDEMUC (the Departmental Network of Women of Cauca) in Colombia, for the project "Overcoming Violence against Women". The videogame is oriented to increase sensitivity about gender-based violence, with the goal to teach children how to combat psychological and gender violence. For that, the player has to take care of a magic tree called "Mamá Tule", which delivers fruits that help those who are affected by gender-based violence in "new town". This project is being taken to several places in Colombia, using "Nómada" of Samsung, a digital portable classroom inspired in the dynamics of nomadic tribes.

Table 1a. Available videogames found about education on gender equality and related issues.

Videogame	Topic covered	Ages	Desktop	Mobile	Country	Year
ADRIFT	consent	teenagers	web	iOS	USA	2017
Crossing Boundaries	consent	teenagers	web	iOS	UK, USA	2017
How to Blorrbble Blobble	consent	teenagers	web	-	USA	2017
Stuck in a Dark Place	consent	teenagers	web	iOS, Android	USA	2017
Rispek Danis (Respect Dance)	consent	teenagers	web	Android	USA	2019
Grace's Diary	teen dating violence	teenagers	web	Android	USA	2010
Little Things	teen dating violence	teenagers	web	-	USA, Canada	2014
The Guardian	teen dating violence	teenagers	web	iOS, Android	USA, Argentina	2014
Leaving	teen dating violence	teenagers	web	Android	USA, UK	2016
The Room Beneath the Rafters	teen dating violence	teenagers	web	-	USA, Sweden, UK	2016
A Casual Chat	teen dating abuse	teenagers	web	-	USA	2016
Another Chance	teen dating violence	teenagers	web	Android	USA, Belgium	2015
A Decision of Paramount Importance	teen dating violence	teenagers	web	-	USA	2010
Honeymoon	dating relationships	teenagers	web	iOS, Android	USA, UK, Spain	2016
Citizen witch	bystanders	teenagers	web	-	USA	2018
Step Up	bystanders	teenagers	web	-	USA	2018
Lamplight Hollow	gaslighting	teenagers	web	-	USA, UK	2019
LED Gaslight	gaslighting	teenagers	web	-	USA	2019

Freshman Year and *No Stranger* are two narrative conversation games that deal with gender violence. These games aim to create awareness about the dangers of an abusive relationship, in which they include meeting someone on social media (or in any place) with bad intentions. *Freshman Year* [40] is an autobiographical videogame, created by the designer Nina Freeman based on her experience. The game deals with a first-year student who is invited to a local bar with some classmates, and the decisions taken by the character are very important to the story. *No Stranger* [41] is a conversational game based on players' choices. The game starts when you open the application and you receive a strange message that you should respond to.

The player has to make decisions using other applications such as the map, to solve some issues in the conversation. The game was created by Scott Mulligan and Matthew Ventures, and it is available in English and Spanish, among other languages. A similar style of game is present in *A Normal Lost Phone* [42], a narrative research game that starts when the player finds a phone. The player has to look in the applications and messages information about Sam's life, family, friends, relationships, that go up until the day he turns 18 years old and mysteriously disappears. The videogame deals with issues such as homosexuality and social pressure, and was developed by Accidental Queens, a French company founded by three women

Table 1b. Available videogames found about education on gender equality and related issues.

Videogame	Topic covered	Ages	Desktop	Mobile	Country	Year
IGUALA-T	gender equality	teenagers	web	-	Spain	2018
Berolos	gender equality	8 - 12	Windows, Mac	iOS, Android	Spain	2020
Chuka: Rompe el Silencio	gender violence	6 - 15	web, Windows	IOS, Android	México	2018
Tsiunas	gender equality	8 - 12	windows	Android	Colombia	2018
Freshman Year	gender violence	not specified	Windows	iOS	USA	2015
No Stranger	gender violence	not specified	-	iOS, Android	USA	2020
A Normal Lost Phone	LGBT	not specified	Windows, Linux, Mac	iOS, Android	France	2016
Wonder City	women empower	8 - 13	web	-	USA	2013
One night, hot springs	LGBT	all ages	Windows, Linux, Mac	Android	Japan	2018
Last day of spring	LGBT	all ages	Windows, Linux, Mac	Android	Japan	2019
Spring leaves no flowers	LGBT	all ages	Windows, Linux, Mac	Android	Japan	2019
Tampon Run	destigmatize menstruation	teenagers	web	iOS	USA	2014
Gender equality bingo	gender equality	not specified	-	Android	The Netherlands	2018
Missing	women trafficked	18+	-	iOS, Android	India	2014

of the game industry. The game has a sequel called *Another Lost Phone: Laura's Story* [43], in which you also find a girl's phone and you have to investigate her disappearance. The game deals with issues such as LGBT identity and domestic violence, and aims to create an environment of empathy with the characters which allows them to explore difficult issues and social problems. The videogame *Wonder City* [44] was developed as continuation of the documentary film *Wonder Women! The Untold Story of American Superheroines*, that aims to visualize the relationships between power and gender through popular culture, stimulating the interactive component of the audience (primarily 8- to 13-year-old girls) to help them identify their own heroic nature and strengthen their decisions. The adventure game puts players in the role of a high-school girl who controls Quanta, a scientific phenomenon that grants people superpowers. The game represents a realistic diversity in race, gender, and body image, and the decisions taken by players affect the story. The film and the game are available along a study guide to help teachers carry out lesson plans and activities to guide a discussion about the issues raised.

One night, hot springs [45] is the first of a series of three Japanese visual narrative videogames that deal with LGBT issues, on this case focusing on the problems that a transgender woman can face in Japan. The game has a duration of approximately 30 minutes and has seven different endings that depend on players' choices. The second videogame of the series is *Last day of spring* [46], a visual narrative game that aims to make visible the problems that a transgender woman can face. In the game, you play in the role of Erica, a university student that plans a spa day with her transgender friend. The game has a main ending and four alternative ones. The third and last part of the game is called *Spring leaves no flowers* [47], Manami is a girl that is talking with her boyfriend Tatsuya, when he asks her why she did not tell him that her two friends were dating. The game deals with sexual orientation, and has multiple endings based on in-game user choices. The three games have a warning ("this game discusses sexual/romantic orientation, which is a topic that can be sensitive and personal") before being downloaded, and are available in

English, Spanish, German, Japanese and Korean. The creators recommend playing the games in the order mentioned above.

Tampon Run [48] is a game based on a real situation, as it references a 2013 incident in which the police of Texas confiscated tampons and not weapons to the visitors trying to access the Texas State Capitol to observe the vote on abortion restrictions. Andrea Gonzales and Sophie Houser, two secondary students of New York, created the first prototype of *Tampon Run* in 2014 with the goal to destigmatize menstruation, in response to the feeling that they could not talk openly about it. The *Gender Equality Bingo* [49] is an application for Android mobile phones that aims to help to challenge sexism and exclusion in conferences and meetings everywhere. *Missing* [50] is a hard videogame part of the Project Missing Public Art, implemented with the goal to make a big issue visible, under the motto “Every 26 seconds a girl goes missing”. *Missing Game For A Cause* is a role game that aims to allow players experience what a missing person suffers when it is trafficked in the world of prostitution, in which thousands of girls are lost every year. The game is available in 6 languages.

Further information about the games previously described is shown in **Table 1a** and **Table 1b**. Columns show, for each videogame, the specific topics covered on it, the ages of the target players, the devices for which it is available (both for desktop and mobile), and the country and year of development.

Finally, we have encountered games within our interest scope that are simply mentioned in pieces of news or related publications, however, we have not found these games available to be played. Such games include: *City Watch* [51], a game against sexism promoted by the Community of Madrid (Spain) in 2018 to raise awareness to young people between 12 and 18 years old in high schools; *PR:EPARe (Positive Relationships: Eliminating Coercion and Pressure in Adolescent Relationships)* [52], a serious game to support relationship and sex education in educational settings based on a ‘game show’ concept involving a first ‘questions and answers’ round, and a second ‘role-playing’ round; *Half the Sky Movement: The Game* [53], a video game part of the global *Half the Sky Movement* that aims to turn oppression into opportunity for women worldwide, with the objective of reporting the different forms of oppression towards women in a major part of the world, distributed through Facebook in 2013 to reach new audiences and involve them actively; *VONA* [54], a videogame created as a virtual version of the Gender Museum (Ukraine), in collaboration with the Madrid studio Gamera Nest, to make it accessible to everyone with a computer or mobile device, to foster the reflection about identity, the role of women in the family, gender equality, and the role of the museum in the processes of social change.

2.3 Limitations

The games reviewed can contribute to educating and raising awareness about several gender equality issues, however, they have some limitations. First, some of the games that appeared in our search could not be found available, therefore, we have not been able to test them and, what’s more important, they cannot be

played anymore which prevents their wider impact. Regarding the games which are available, some of them are only available for some platforms, limiting their widespread application: the games which are only available for mobile platforms could be more difficult to play in classroom settings where computers are more likely to be present; on the contrary, games only available for desktop use could be used in class, but for certain age groups it could also be beneficial to have them on their mobile phones for individual use. As for the topics covered in the games, most of the games encountered focus on a single specific issue (e.g. consent, LGBT issues, gender violence). Although all these issues are clearly important, a higher impact on players may be reached by a game that deals with a broader variety of issues, highlighting the fact that inequalities and sexism have multiple facets, from daily and common issues, to more serious ones such as gender violence. Finally, in most of the cases, we have not found clear evidence about the impact of the games encountered, with respect to their possible large-scale applications in educational environments.

3 Contributions to foster games on equality

This section presents two initiatives developed to foster equality with serious games: first, a prototype of a serious game to educate on equality; and second, a project in a serious games’ bachelor course to involve female developers in the creation of such games. These contributions aim to cover some of the issues identified in the previous games review by covering a larger set of topics related with gender equality. Moreover, they are not intended to be standalone solutions, but to be used as elements to start a discussion in educational environments, providing a baseline of different issues to talk about, and promoting players’ reflection.

3.1 Prototype of a serious games to educate on equality

With the support of the Telefónica-Complutense Chair on Digital Education and Serious Games, we have developed a prototype of a serious game to educate on equality¹. The goal of the game is to raise awareness and educate on equality being a tool for reflection and awareness about sexist or unequal behaviors between men and women. The prototype is designed for players between 12 and 16 years old, and it is intended to be played in an educational setting, to promote a discussion led by the teacher or manager of the session after the gameplay.

The game is played in first person and all players are placed in the role of a woman. This way, we intend to increase empathy and awareness showing several everyday situations that can foster reflection. The situations present in the game occur in everyday scenarios (the main character’s house, her high school, and some outside places of social life) and include the interaction with other characters (family, friends, and boyfriend) that show different

¹ <https://www.e-ucm.es/es/portfolio-item/juego-igualdad/>

attitudes about equality, depicting sexist and feminist behaviors in both men and women.

The issues about gender inequalities to raise awareness that have included in this first prototype are: the differences between love and control, showing control behaviors between couples in different aspects such as the way of dressing, or jealousy; the relationship with the parents, showing different expectations and behaviors of the parents with their son and their daughter; the role of women in sports, showing the discrimination and less presence of women in them; the relationship between professions and gender, with special focus on the presence of women in stem careers; and stereotypes and social control, such as the criticism of women for the way they dress or for behaviors that are not socially accepted for women, but are perceived as perfectly acceptable for men.

The design and initial development of the prototype of the game was finalized in 2019 and presented in the educational fair SIMO Educación, in Madrid (Spain), in November of that year. The design was based on the findings of a previous research phase about the topics and issues of gender equality, and considering the comments and concerns of various high school teachers that were consulted for the specific age range considered for the game. Future steps include to contrast the current prototype with different stakeholders (teachers, psychologists, students) to further improve it, and then carry out validation experiments in educational settings to verify its validity as a tool to increase awareness.

3.2 Project in a serious game course involving female developers

The second initiative was carried out as part of a Serious Game bachelor course, an elective course on the Computer Science Degree in the Computer Science Faculty of the Complutense University of Madrid, Spain. The goal of this project was to involve female developers in the process of designing a serious game about education on equality. As the final project of the course, working groups had to develop a serious game about different topics, including gender equality.

One of the working groups, consisting of six female students, developed a serious game with the goal to encourage female students to enroll in scientific careers and, in particular, in computer science. The game, named *Apta*² (Spanish for competent, in feminine grammatical gender), also intends to create awareness about sexism in different environments of education and everyday life. For these purposes and to highlight the fact that sexism occurs at all ages, the game depicts different stages of the female main character's educational and personal life.

The story is divided in four chapters, each one focusing on a different aspect of sexism in a different stage of the female main character's life: as a child, during Christmas, the protagonist asks for presents socially associated with boys, and she receives

presents that are socially associated with girls; in school, she starts to be interested in computer science and deals with mean comments by classmates; finishing high school, she has to face a lot of criticism as she wants to study computer science, a career mostly considered for boys; in the final chapter, and based on the decisions taken during the game, the character will decide to study the degree of computer science as she wanted, despite criticism, or will choose to study a degree most commonly studied by women.

4 Conclusions

Current society is undergoing a continuous change process where gender equality continues to be an open issue. Many steps are being taken towards achieving real equality and combating the remaining aspects of sexism. Although relevant, many of these initiatives appear to come late, when adults already have fixed ideas derived from the education received, besides the cultural stereotypes. This highlights the importance of raising awareness about gender equality at a young age, when children can still be effectively educated in these topics. To better connect with children and adolescents, games can be a very useful instrument, as they are a commonly used tool by them, and provide an interactive and safe environment using a language that can be more comfortable for them.

Despite their possible advantages in raising awareness about gender equality for children and adolescents, serious games about equality and gender issues have not been widely explored in research. In this paper, we have conducted a search about the videogames and serious games that deal with some of these topics. From the review of the various works found in this area, we have encountered a set of very diverse games which focus on different aspects of the general problem, and that present different perspectives and mechanics. The limitations of these games have been pointed out, highlighting the fact that most of the available games focus on a single aspect of the problem, and the usual lack of evidence about their impact.

To start to promote games for equality, we have also presented our own initiatives: a prototype of a serious game to educate on equality, designed after a review process to cover a wider range of issues of the bigger problem, and aiming to raise awareness in adolescents, a particularly important age as some of the issues escalate in teen relationships; and a project in a bachelor course about serious game to involve female developers in the whole process of creating a serious game and, in particular, a game that deals with sexism and that encourages women to study scientific careers.

The videogames review carried out can serve to provide an overview of the current situations of the field, identifying the spots for possible improvement. With future works, including the two initiatives developed, we hope that the field advances towards more complete works that have impact in society and can help to increase gender equality.

² <https://github.com/Juegos-Serios/ProyectFinal>

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