Preventing Dating Violence: The GoodVibes Project

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Abstract: Dating violence is a public health problem that affects young people (ages 13 to 20). It is usually defined as an intention to engage in physical, sexual or psychological/emotional violence in a relationship between young people. Recently, online violence has been included in the category of dating violence since it is increasingly prevalent among young people (Niolon et al., 2019; Taquette, S., Monteiro, D., 2019; Fernández-González et al., 2018; Peterson et al., 2018). Due to the severity of this problem among young people, there are worldwide efforts to implement strategies to prevent dating violence (Lee, C., Wong, J. S., 2020). Most implemented strategies focus on promoting healthy relationships and helping young people to recognize violent and abusive behavior (Lee, C., Wong, J. S., 2020). The paper aims to present the GoodVibes project and its results. The project is part of the Sol do Ave Association. This association has contributed to the development of the Vale do Ave region (Northern Portugal) through very diversified interventions. The project started by engaging teenagers aged 15 to 18 years, from two schools in Guimarães (Portugal), in the project activities. Students were asked to develop game scenarios in a specific game engine, GDeveloper. The objective was to involve students in the co-creation of the games and motivate them to learn the concepts and healthy behaviors associated with their scenarios. As a result of the co-creation process, three games were developed. The paper describes the co-creation process and the plans for validating the games and the online platform where they will be placed together with other technical and pedagogical resources.

Keywords: dating violence, game-based learning, prevention

1. Introduction

Gender-based violence is a social problem that is difficult to eradicate in developed countries and requires multidisciplinary attention to mitigate its impacts on young people and adults. Domestic violence results in a very high number of deaths and preventable severe sequelae. This scourge begins in adolescence, in the context of the first love relationships. The difficulty in recognizing abusive behaviors and adopting effective conflict resolution strategies can take root in attitudes and behaviors perpetuated throughout life, both as a victim or as an aggressor.

This paper describes a project – GoodVibes - defined to address the problem of dating violence. It focuses on the role that digital games can play in preventing violence. The project engaged several dozen high school students in co-creating and developing games that help teenagers learn concepts and develop healthy behaviors in a love relationship. The paper describes the dynamics implemented and the first results obtained. It also presents the strategy for validating the games and other pedagogical resources to use in the classroom or family activities.

2. The concept of dating violence among teenagers

Dating violence is a public health problem that also affects young people (ages 13 to 20). It is usually defined as an intention to engage in physical, sexual or psychological/emotional violence in a relationship between young people. Recently, online violence has been included in the category of dating violence since it is increasingly prevalent among young people (Niolon et al., 2019; Taquette,S., Monteiro, D., 2019; Fernández-González et al., 2018; Peterson et al., 2018).

Online violence is still a little underexplored field (Sánchez-Jiménez, V., et al.,2018). With the increased use of technologies and social media, this phenomenon has evolved. Teenagers use their social media to control their partners' posts, who they talk to and even blackmail them by posting embarrassing/private photos or texts (Stonard, K. E., 2018).

The aggressions (physical, emotional, sexual or online) are manifested through different behaviors/actions (Rubio-Garay, F., et al., 2017; Rue, L., et al., 2021). The Center for Disease Control and Prevention (2016) includes in dating violence the following behaviors:

- *Psychological violence*: threats or damage to the partner's self-esteem by calling names, humiliating, embarrassing or trying to separate the partner from his/her family and friends;
- *Physical violence*: attitudes such as pinching, pushing, hitting, kicking or clicking;
- *Sexual violence*: using force, threats or pressure to try to involve the partner in unwanted sexual activities;
- *Online violence*: stalking through technologies (social media), posting photos without the partner's consent, control through messages and social media.

Dating violence has long-term consequences, such as poor academic performance, depression, attempted suicide, substance use disorders, eating disorders and tendency to become a victim of violent relationships in adulthood (Niolon, P., et al., 2019; Taquette, S., Monteiro, D., 2019; Helm, S., et al., 2017; Rue, L., et al., 2017; Peterson, K., et al., 2018; Lee, C., Wong, J., 2020).

In Portugal, a study conducted in 2020 by the Union of Women, Alternative and Response (UMAR), concluded that 58% of a total of 4598 teens reported having suffered at least one form of violence by the current or former partner; and 67% of the studied population considered some of the violent behaviors as natural to relationships. The study also observed a high prevalence and legitimization of specific forms of violence such as psychological violence, online violence or control attitudes towards clothing and socializing habits (Comissão para a Cidadania e a Igualdade de Género, CIG., 2020).

Due to the severity of this problem among young people, there are worldwide efforts to implement strategies to prevent dating violence (Lee, C., Wong, J. S., 2020). Many of those preventing strategies are implemented in schools because it is in this environment that teens spend a large part of their time and where they are educated (Rue, L., et al., 2017). It is also in the school context that young people interact with their peers and have their first loving relationships. Most implemented strategies focus on promoting healthy relationships and helping young people recognize violent and abusive behavior (Lee, C., & Wong, J. S., 2020). The dating violence initiatives usually aim to provide young people with the resources that empower them to report violent behavior, ask for help when they feel the need and communicate effectively to resolve conflicts (Lee, C., Wong, J. S., 2020). Digital games have recently been used as a tool for learning healthy dating behaviors.

3.The role of games in preventing dating violence

Since the target audience of dating violence prevention programs is young (15 to 20 years old), games can be an effective tool to capture their attention and help them understand the topic (Crecente, Jacobs, 2017; Haruna et al., 2018). Unlike session-based programs and lectures, games are more versed. They can be played on any technological device (tablet, mobile phone, computer) and at any time. Moreover, games make the learning experience more private and better adjusted to his/her own time and curiosity (Haruna et al., 2018). During the game, the teen can explore topics that s/he would be ashamed to explore with an adult. Although a game should not replace open

dialogue with adults, it can be an effective tool to prepare young people for such exchange. Moreover, parents, teachers, and the community itself can use games as a learning tool and as a tool to communicate with young people, making them feel comfortable talking about their issues.

There are some games already in the market about dating violence and gender violence. Studies conducted by Bonsignore et al. (2012) and Wideman et al. (2007) suggest that teenagers who play these games develop a better understanding of dating violence, how a healthy relationship looks like, and how abusive behaviors can manifest in a relationship (Crecente, Jacobs, 2017; Fornari., L., et al., 2019; Haruna, H., et al., 2018).

Table 1 includes three games developed by Jennifer Ann's Group, an association that develops new games about gender violence and dating violence every year. These are examples presented here to illustrate the aims and scope of such games.

Table 1: Summary information about the games

Game	Objective	Learned concepts and behaviors
Another Change	To develop the ability to analyze love relationships.	The player learns to differentiate between abusive and healthy behaviors.
Grace's Diary	To develop the ability to analyze love relationships.	The player learns to differentiate between abusive and healthy behaviors and ask for help when in an abusive relationship.
The Guardian	To develop the ability to protect someone who is suffering from dating violence.	The player learns how to recognize that a friend is in an abusive relationship together with adequate supporting approaches.

These games address two problems frequently identified in the younger population: the difficulty in realizing that they are in an abusive relationship and the lack of knowledge about helping friends in a violent relationship. Games can be used anywhere, anytime, as many times as the young person sees fit to reflect on the concepts and practices covered in the game.

Haruna, H. et al., (2018) conducted a study where they developed a game based on students' stories, experiences, and views on what they would like the game to be. Based on the students' answers, activities such as quizzes and exercises were created focusing on sexual education topics. Students were required to score at least 6 out of 10 points. If the student failed to achieve 6 points, the game was restarted from the beginning. The results show that students who play the game improved their knowledge about sexual education more effectively than the students who only accessed traditional learning methods.

In 2020, Barrera Yañez, A. G., et al., conducted a review on games to educate about gender equality. One of the games, IGUALA-T, was created by the Instituto Andaluz de la Mujer (Spain). The app presents multiple-choice questions of different difficulty levels to be answered by the player. The player has 45 seconds to answer and can repeat the question until s/he answers correctly. Again, the game helped assimilate concepts and practices related to gender equality.

"Freshman Year" 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. The game aims to create awareness about the dangers of an abusive relationship that may result from meeting a malicious person, for example, on social media (Barrera Yañez, A. G., et al., 2020). Unfortunately, we couldn't find any data about the game's effectiveness as a tool to teach about abusive behaviors and how to prevent them.

Games can cover several subject areas and studies indicate that teenagers learn more through games than through regular lectures (Fong, K., Jenson, J., Hebert, C., 2018). They also have the power to engage learners and facilitate learning because the games are intrinsically motivating (Chen, S. W., et al., 2019). However, it is also important that

the teenagers have a teacher or a reference figure to help them. This way, they complement their learning process more effectively. To better achieve the learning goal, the games must have a good design to be fun to play with and ensure the motivation to learn, especially among teenagers (Chen, S. W., et al., 2019).

Many of the existing games use the English language, decreasing its effectiveness with young people who are not fluent in English. This is the situation of most adolescents in Portugal, and it was one of the reasons for the implementation of the GoodVibes project described in this article.

4.The project GoodVibes: developing games to learn healthy behaviors

The GoodVibes project is part of the Sol do Ave Association. This association plays an important role in developing the Vale do Ave region (Northern Portugal) through very diversified activities, including entrepreneurship support in rural and urban contexts and social development projects for different types of population.

The GoodVibes project was defined to prevent and fight domestic and gender violence, with a particular focus on dating violence. Its intervention encompasses three fundamental dimensions: (1) raising awareness of the phenomena of dating violence and domestic violence; (2) promoting a culture of non-violence that promotes human rights, equality and non-discrimination; (3) developing technical-pedagogical resources to support the learning of healthy dating behaviors. The University of Minho joined the project to support the co-creation of technical and pedagogical resources.

The project started with the engagement of teenagers aged 15 to 20 years (total of 29 teenagers) from two schools in the city of Guimarães. The first interactions focused on raising awareness about dating violence, which enabled the project team to identify violence situations that the students witnessed or were directly involved in. These first interactions took place in two sessions of 2 hours and four sessions of 3 hours, completing 16 hours of interaction.

A victim support specialist, a researcher from the University of Minho and a Sol do Ave specialist and teachers from the three high schools involved in the project were responsible for the shared contents and dynamics, collaborating to create an engaging learning environment. The competence heterogeneity resulting from this collaboration enriched the debates. The people involved brought in various life experiences due to their different ages, knowledge, areas of specialization, life paths and functions in society. During the first phase of the interaction with the teenagers, the relevant concepts were presented and discussed. The first ideas for games emerged in these sessions; the strategy for the games' co-development was also outlined.

In a second phase involving 40 teenagers, participants were asked to develop game scenarios in a specific game engine, GDeveloper. The objective was to foster learning during the games' co-creation and motivate the participants to share their views openly. Teachers and social workers accompanied this process to help participating students deconstruct their assumptions and sophisticate their understandings.

The project started in June 2020, and due to the COVID-19 pandemic, the sessions that were initially scheduled to be in person ended up online. This situation caused some difficulties with using appropriate equipment and establishing proximity between the project team and the students. Nevertheless, the topic generated a lot of interest in the students who shared their doubts and experiences openly and spontaneously. From this dynamic, several game scenarios emerged, and three games are being developed. A professional designer was involved to ensure a user interaction closer to that of commercial games. Once the games are fully implemented, they will be available online, and their validation will begin with the target population.

The table below shows the games that were co-created briefly with the students. It is followed by two images from one of the games.

Table 2: Co-created games

Game	Objective	Learned concepts and behaviors
Quiz to healthy love	Learn about abusive behaviors	The player ponders his/her choices and reflects on behaviors that may not seem abusive to him/her.
Building a Healthy Relationship	To learn about abusive behaviors and their healthy alternatives.	The player will develop sensitivity to abusive behaviors in various situations and their short-term consequences on the victim. The player can experiment with alternative behaviors and consequences.
Relationship Escape room	To learn how to help a friend out of an abusive relationship.	The player learns about the most effective approaches to help a friend, according to the specific situation s/he is.

Figure 2: Building a Healthy Relationship Game

Three other games are being developed but not yet completed. These additional games will be part of the GoodVibes platform as well.

The project engaged the young participants in various activities beyond the development of games. One of the project's young participants is creating a comic related to dating violence to be made available on the platform. To celebrate women's day, Gustavo, another teenager, drew the image in Figure 2. The image portrays the difference between men and women in their career progression. The woman takes longer to make this progression because she is locked by domestic tasks and family care, still assumed by women in many families.

Figure 1: Gender difference

5.The next steps in the project

In the coming weeks, the games will be available on an online platform together with other materials that can be downloaded and printed to create learning dynamics in the classroom. The platform will include educational guidelines for using games and other materials effectively, both by teachers and parents. The games can be used independently by young people.

The project includes evaluation workshops to assess how effectively the developed games engage the target groups, young people, teachers and parents, in learning and discussing the various dimensions of dating violence. For this evaluation, a dynamic is being prepared to encourage the use of materials and collect information about the users' impressions (ease of use, perceived usefulness, quality of the learning experience, among other aspects) and level of awareness boosted by the resources regarding healthy dating behaviors.

Digital game-based learning has been widely adopted and tested by educators (Chen, S. W. et al., 2019), particularly in the STEM areas. Research has shown that games can improve learning by engaging users with complex concepts and behaviors in an enjoyable learning environment. Some researchers have shown that games do not always motivate learning or make it possible to achieve the learning objectives defined for their use (Whitton, 2007). Some people consider that the game is not a serious form of learning, and therefore, they are not motivated to use them. On the other hand, game users can become so involved in the game dynamics that they do not integrate moments of reflection on the game dynamics' meaning.

Assessing the effectiveness of digital game-based learning in learning healthy behaviors in loving relationships is much less explored. Therefore, our project will add knowledge in this area.

In the evaluation workshops that we will carry out, we will initially distribute a small questionnaire to survey participants' perspectives and attitudes towards dating violence. This questionnaire will be designed based on known scales, namely Attitudes Toward Dating Violence Scale (Price, E. L. et al., 1999) and Adolescent Dating

RelationshipInventory (Wolfe, D. A. et al., 2001). After a brief introduction to dating violence issues, participants will be asked to access the project's platform and select one of the games placed there. After some game time, participants will be asked to answer the questionnaire again. The workshop will end with a session to discuss teen dating violence and share the participants' perceptions about the games. These workshops will take place in several educational communities in Portugal. Given the long collaboration that the University of Minho has with Universities in Brazil and the possibility of conducting online workshops, our goal is to hold 1 or 2 workshops with high-school educational communities.

6. Conclusions

The GoodVibes project aims at raising awareness about dating violence. This awareness is achieved by engaging teenagers in the co-design of digital games and in playing them. These games aim is to support teenagers (1) learning about abusive behavior in dating relationships, (2) identifying violent behaviors, (3) helping others in abusive relationships, and (4) asking for professional help when needed. The project will also develop other technical and pedagogical material for teachers and parents who want to approach this topic with teenagers openly and constructively.

Our games are aligned with the goals of the games in the other studies. As mentioned before, our games will be used by teenagers and the aim is to teach them how to identify and avoid violent behaviors. The knowledge and behaviors that teenagers are developed by taking decisions and observing the results. The games also provide recommendations on de-escalating a conflict situation and help friends in an abusive relationship.

According to previous studies, the biggest challenge associated with using games as a learning tool is the lack of technological resources that some teenagers face. This will be taken into account in the evaluation phase of our study since we will provide the equipment necessary to play the games. Another challenge in evaluating the effectiveness of the games was the small sample of participants that some authors had to deal with. This will also be taken into account in our evaluation by establishing contacts in advance with secondary schools across the country, facilitated by the partner network of the entity that manages the project, Sol do Ave.

Globally, the activities carried out so far show that most participants do not seem to legitimize violence in romantic relationships. Concerning conflict resolution strategies, the participants reported positive and non-abusive strategies in their love relationships. Nevertheless, they recognized the problem and mentioned friends in abusive relationships. Therefore, they showed interest in developing their communication skills and enhancing their ability to support victims of abusive relationships.

Our project results are part of the international effort to develop effective resources to prevent and combat domestic violence and dating. Thus, our technical-pedagogical materials are yet another contribution to young people's well-being and a less violent future.

On the scientific front, the GoodVibes project will validate digital games' effectiveness in raising awareness of dating violence and learning healthy behaviors. Our goal is to develop a simplified scale that other researchers can use to carry out similar projects.

Acknowledgment

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