

Challenges in Designing a Game for the Prevention of Intimate Partner Violence

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Abstract: In this report on our ongoing work, we present initial findings from the development of a serious game to support primary prevention of intimate partner violence (IPV). We discuss educational goals and game mechanics ideas to address specific challenges that arise from conflicting implications for design of this issue.

Keywords: Serious game design, Intimate partner violence, Awareness game, Games for social change

1. Introduction

This contribution reports on our ongoing development of a serious game to support primary prevention of intimate partner violence (IPV). The work presented concerns specific aspects of game design within an interdisciplinary project with experts on IPV. There is a strong taboo and many misconceptions about this critical social issue, and the learning objectives of the game are to reduce these through education and empathy. During the design process we were challenged by the sometimes conflicting goals associated with this specific, complex issue. A balance had to be found between abstracting the subject to ensure playability and risking oversimplification that could lead to unintended messages. Below we outline these challenges and our approach to addressing them, and present the resulting mechanics and narrative structure of the game.

2. Related Work

Games on IPV are rare, mostly from academia, with a focus on sensitising players to recognise forms of gender-based violence, or on evoking empathy with victims of sexist, controlling or violent behaviour (Yañez et al. 2023). Unlike the majority of these games that deal with harassment or dating violence, e.g. *None in Three* (2023); *Jennifer Ann's Group* (2023); *Cabrera-González & Florido* (2020); *ETC* (2015), we focus on lasting cycles of abuse (Fisher & Lab 2010) in long-term adult relationships. Our own approach to the game is to have adult players explore ways to support victims of violence, overcoming intertwined relationships of a village community that protect the perpetrator (Müller et al. 2022). The game "Jesse" by *None in Three* (Boduszek et al. 2019) comes closest to this goal so far by depicting encounters between contacts of a family with a violent father. Beyond, games that address the adult world with its interdependencies are hard to find, one older example being the project "4Uman" (Perincioli 2023) with a clickable short story that encourages male abusers to seek violence counselling. Furthermore, discussions of issue-specific design challenges and strategies are also scarce, e.g. by Pearson et al. (2020). In our report, we therefore take the point of view of game mechanics development and focus on selected design dilemmas that arose after the necessary content research had progressed sufficiently.

3. Game Development

Our game is a single-player, point-and-click narrative adventure aimed at all adults who condemn domestic violence but are unaware of their own role as bystanders and their potential for change. According to German offender-victim statistics (BKA 2023), around 80 percent of perpetrators are male, so we decided that the constellation in our game narrative features a female victim and a male perpetrator.

3.1 Educational Goals and Vision

The game educates about circumstances of long-term abusive relationships with the structures that make it difficult for victims to find their way out of the cycle of abuse (Müller et al. 2022). It informs about the various subtle or obvious signs of abusive relationships at all stages of the cycle and addresses the obstacles that bystanders have in interpreting the signs, knowing what to do or eventually taking action. The main educational objectives are to enable players to become aware of their own role in the environment and to reflect how they can combat IPV. The game shall provide knowledge about different forms of violence (physical, psychological, social, sexual, economic, etc.), take a stand against all forms of violence, and provide information about institutional and informal offers of help. It is important to develop empathy for the situation of the victims and

the fact that it is not the victims but the perpetrators who are responsible for the acts of violence. Players should develop a positive idea of a supportive environment against violence and realise that even small offers of help are worthwhile, even if as a helper there is sometimes no direct positive or even negative feedback.

3.2 Design Challenges

As some of these objectives contain contradictions, we faced challenges in developing the game mechanics, which are explained below. The subject matter experts involved in our project warned that there are already widespread misconceptions among the public that could be confirmed by careless simplifications.

3.2.1 Challenges

“Ways out” vs. “no-way-out”. On the one hand, we want to create empathy with regard to the desperate situation of the victim, and must avoid game mechanics that imply that there is an easy or predictable way to leave the abusive relationship, as this could reinforce potential victim blaming (“Why doesn’t she just leave?”). On the other hand, we need to demonstrate “ways out” and encourage players to consider action.

Responsibility vs. blame. One of the goals is to highlight bystander opportunities in supporting victims and feeling responsible for an environment in which abusive behaviour is less likely to persist. At the same time, bystanders must not be held accountable for the violence, which is the full responsibility of the perpetrator. The narrative should not be limited to heroic “rescues” from violence.

Potential game breakers. Players who want to sabotage the game or simply test its boundaries must be reckoned with. The possibility that player decisions could lead to the death of the victim was considered a “no-go”. Conversely, the problem of IPV should not be trivialised by harmless options or consequences, as in fact, every three days a woman dies as a result of intimate partner violence (BKA 2023).

3.2.2 Solution strategies

The project's design team first developed the core mechanics of the game, taking into account many aspects of the problem field, following a systems mapping approach (Macklin 2020) to grasp structural dependencies within the complex subject matter (Müller et al. 2022). While these basic mechanical building blocks alone would have led to overly abstract stimulus-response dynamics, it became clear that extensive narratives were needed to represent and explain different contingencies as individual variations in decisions and outcomes.

We have introduced a backward narrative (see 3.3) that begins with the worst-case scenario of the victim's death, as an unequivocal act of the perpetrator that can no longer be the result of player decisions. The players can only improve the situation afterwards by travelling back in time, and if they wanted to try out the most negative consequences for fun, the disastrous initial situation remains. This backward-looking approach should also encourage players to imagine and focus on improvements rather than oppressive prospects.

The players' task in the game is to build up a network of supporters, which in its entirety determines at the end of the game what new situation for better violence prevention in the village will be achieved. However, players need to realise that they do not have full control over the story. The success of any good or bad decision depends on situational conditions, e.g. to what extent other potential supporters can also be convinced, and is partly subject to chance. This mechanic serves two purposes. First, it avoids promoting an ideal simple action as a direct way out of a violent relationship, acknowledging that each individual's circumstances are unique. Second, it emphasises the importance of the environment as a whole without blaming any one person.

Even though our game framework mitigates the aforementioned dilemmas, we still need to keep them in mind with each narrative scene we add. Our approach involves constant testing and iteration to find the right balance in representing these complex issues in a simplified, abstract way.

3.3 Synopsis of the Game’s Narrative Framework

The game tells the story of a toy village in which a murder has happened. A well renowned and popular man has mortally wounded his wife whom he has been abusing for years. Other villagers noticed signs, but there was a strong, long-established web of relationships, loyalties, and dependencies among villagers that kept them from interfering to instead maintain the taboo. Now everyone is at the funeral, desperately asking if there was anything they could have done to prevent it (Fig. 1). They ask the player to create a new reality for them.

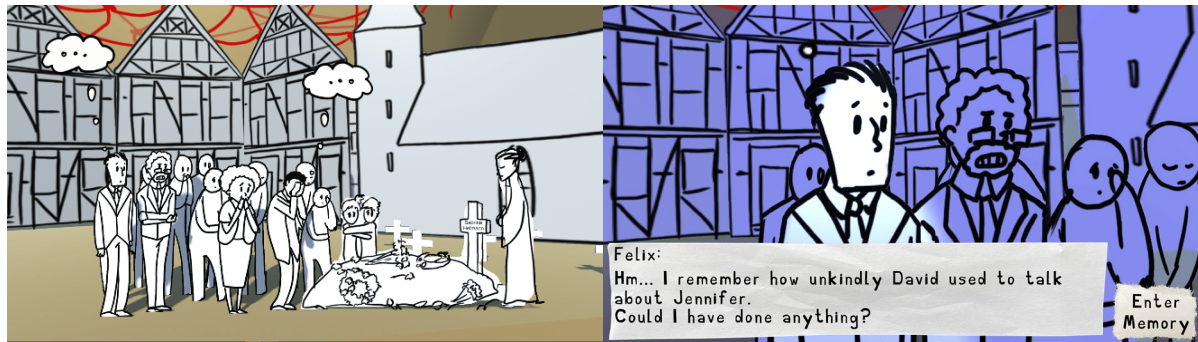


Figure 1: Screenshots: Villagers contemplating at the victim's grave

The player's task is to discover and destroy the old network that protected the perpetrator and thus facilitated the violence, and instead build a new network that counteracts IPV. This can be done by delving into the villagers' memories, revisiting for them the choices they made earlier, choosing between alternatives, and whispering in new choices (Fig. 2, left). After clicking on thought bubbles at the grave, short narrative scenes with remembered incidents are displayed as comic strips. This includes the characters' reflection about the situation, their options to act and doubts they had about them (e.g., concerns, loyalty, uncertainty, fear for themselves or the victim), and how the former situation unfolded. Then, players can decide anew. Each option leads to either positive or negative reactions from other characters, influencing the degree of network formation. Each decision's outcome is only partially predetermined and is combined with a certain luck factor. As in reality, the success of different actions is uncertain to varying degrees, such as the unequal probability of success following a player's decision shown in the wheel of fortune in Fig. 2, right. Even if the player causes a character to oppose violence, the short- and long-term success depends on the reactions of the other characters, which could depend on their mood, relationships or mindsets.

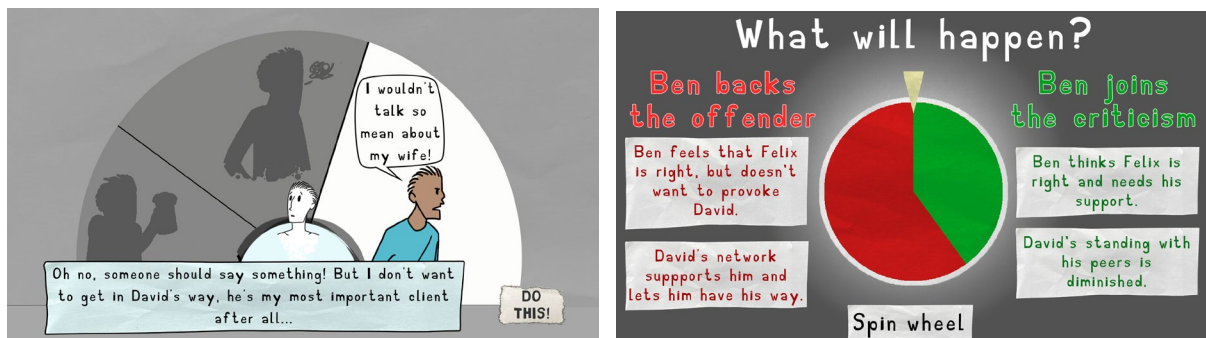


Figure 2: Screenshots: Left: Considering alternative actions for Felix. Right: After Felix contradicts the offender, the outcome of this situation also depends on how other bystanders (Ben in this case) react

After each action, feedback is given for the player's decision, including an explanation of why the resulting, partially coincidental situation occurred in the story. In cases where simply bad luck stood in the way of a successful outcome of an otherwise recommendable action, this needs to be particularly debriefed. It is emphasised that every little help is important, even if there is no direct success in every situation. It is to be expected that players will feel frustration in these cases. Since this corresponds to real-life experiences, encouraging explanations must take this into account.

After magically changing the remembered choices of the social environment, this affects the existing networks. At the end, one of several possible epilogues is unlocked through the game's actions, which describes a possible alternative future for the village in its support for potential victims.

3.4 Game Prototyping and Testing

The still ongoing game development follows iterative cycles, with first Adobe XD prototypes and transfer to the Unity game engine. We regularly adjust our design based on player feedback, which we have received so far from four formative test runs of the game with one or two memory scenes. The numbers of participants were 3, 7, 14 (each qualitative) and 47 (quantitative). Initial improvement steps concern details of the onboarding process and the user interface. In particular, it was felt necessary to include more narrative explanations as

feedback on game actions so that the indirect consequences of player decisions could be understood more instantly. The results of the fortune wheel were sometimes mistaken as “right” or “wrong” decisions, which indicates that the rationale behind these coincidental parts needs explanation. We received positive general assessments about the effectiveness of the game idea in terms of lowering barriers to thinking and talking about IPV, recognising the relevance of the topic for oneself in the role of the environment, and promoting a helpful, attentive attitude.

4. Conclusion

In this work-in-progress report on the development of a game to prevent intimate partner violence, we described the design challenges posed by specific conflicting demands and how ideas for resolving these have led to the current structure of the game experience. In the next steps, we will expand the scene pool of possible game decisions that may alter the remorseful memories of the fictional villagers. In these narrated memories, further incidents and signs relevant for partner violence will be presented, contributed by the IPV experts involved in the project based on their empirical findings. Preliminary feedback from prototype evaluations suggests that the narrative frame and mechanics of our game effectively avoid the aforementioned concerns about unintended messages. Nevertheless, we need to keep these concerns in mind as we continue to create and curate memories. To this end, we develop scene templates to speed up our iterative workflow and experiment with different configurations of scenes and outcomes to find an optimal balance.

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