


## PEACE JOURNEY: A GAME INSPIRED BY UNO FOR MITIGATING SCHOOL VIOLENCE

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### ABSTRACT

This study presents the methodological development and validation of the game "Journey of Peace: Building a World without Violence", an educational game based on the dynamics of UNO, aimed at adolescents aged 13 to 17 years. The objective was to create a playful tool capable of stimulating reflections on types of violence, prevention/mitigation strategies and reporting channels, strengthening pro-social behaviors. The development was structured in four phases: integrative literature review, construction of the theoretical framework, prototype development and validation with experts. Professionals from the areas of education, health and design participated in the process, who evaluated the game in terms of educational impact and user experience, based on the ARCS model and Bloom's Taxonomy. The results indicated positive acceptance, with suggestions incorporated to improve the clarity of the rules, inclusion of representative characters and improvement of interactivity. It is concluded that the "Journey of Peace" game is an innovative and effective tool to sensitize adolescents about violence and encourage preventive attitudes, becoming a promising resource in the school environment.

**Keywords:** Educational games. School violence. Prevention. Adolescents. Gamification.

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## INTRODUCTION

Violence in the school context is a complex and multifactorial phenomenon that affects the cognitive, social and emotional development of adolescents. According to the World Health Organization (WHO), violence is defined as the intentional use of physical force or power, real or threatened, against another person, resulting in injury, suffering, or even death (WHO, 2002). In the school environment, it manifests itself in various ways, such as bullying, physical aggression, psychological violence and cyberbullying, compromising the quality of interpersonal relationships and the school climate (ISOLAN, 2012). Adolescence, in turn, is a critical period in human development, characterized by biological, social and emotional transformations that make individuals more vulnerable to risky behaviors and traumatic experiences (BANDURA, 1977). Thus, effective and innovative educational strategies are needed to promote safer and more collaborative school environments.

Education, as an instrument of social transformation, plays a central role in mitigating violence. In this context, gamification has stood out as an innovative pedagogical approach, which uses game elements to engage students in the learning process (KAPP, 2012). By integrating playful activities into the educational environment, educational games promote the development of socio-emotional skills, such as empathy, cooperation, and conflict resolution, which are key to building a culture of peace. Bandura's (1977) Social Learning Theory suggests that behaviors can be modeled through observation and social interaction, which makes games an effective tool in the prevention and mitigation of violence, as they allow simulating real situations and proposing practical solutions.

In addition, the Flow Theory, proposed by Csikszentmihalyi (1990), emphasizes that challenging and immersive activities facilitate the internalization of knowledge and the motivation of the participants. This theory corroborates the effectiveness of educational games, as adolescents are inserted in an interactive and stimulating environment, in which learning occurs in a meaningful way. In addition, according to Habermas (1981), dialogue is an essential element in the transformation of social relations, being fundamental to promote critical reflections and the construction of consensus. Therefore, games that encourage communication and group decision-making create opportunities for strengthening interpersonal relationships and deconstructing violent behavior.

Based on this theoretical framework, educational games emerge as innovative and promising pedagogical tools in the approach to sensitive themes, such as school violence. Unlike traditional methods, which often fail to engage teenagers, games provide a hands-on and engaging experience, stimulating reflection and behavior change. According to Martins

and Oliveira (2021), educational games have the potential to transform the way adolescents perceive and face conflict situations, by developing skills such as assertive communication, peaceful problem solving, and respect for diversity.

Based on these assumptions, the present study developed and validated the game **"Journey of Peace: Building a World without Violence"**, inspired by the dynamics of UNO. The game was created with the aim of sensitizing adolescents about the different types of violence (physical, psychological, sexual and digital), promoting dialogue on prevention and coping strategies and encouraging the use of reporting channels. The proposal is to offer a playful and educational resource that integrates theoretical and practical content, facilitating the development of socio-emotional skills and the construction of a more peaceful and inclusive school environment.

The general objective of this study is to develop and validate the **"Journey of Peace" game** as an educational tool aimed at the prevention and mitigation of violence among adolescents in the school environment. The specific objectives include: (1) to elaborate the theoretical framework to support the creation of the game; (2) develop a prototype based on the principles of gamification and the theories of social learning and communication; (3) validate the content and mechanics of the game with experts in the fields of education, health and design; and (4) propose adjustments to the game based on the suggestions of the experts, aiming at its practical application and pedagogical effectiveness.

Thus, this study contributes to the development of innovative educational practices, which use gamification as a strategy to engage adolescents and promote critical reflection on school violence. By creating an interactive and collaborative environment, the **"Journey of Peace" game** seeks to encourage pro-social behaviors and the construction of a culture of peace, strengthening interpersonal relationships and the integral development of adolescents.

## METHODOLOGY

This study is characterized as a methodological development research, structured in sequential and integrated stages. First, an integrative literature review was carried out, which supported the theoretical and practical foundation of the educational game. Databases such as Scopus, PubMed, and Web of Science were consulted, using descriptors such as educational games, violence prevention, gamification, adolescents, and health education. The thematic analysis identified that the use of educational games in the

prevention of school violence contributes to the development of socio-emotional skills, such as empathy, self-control and conflict resolution (GEE, 2007; MARTINS; OLIVEIRA, 2021).

In the construction of the theoretical framework, the Theory of Social Learning (BANDURA, 1977), which highlights the role of observation and imitation in learning, and the Theory of Flow (CSIKSZENTMIHALYI, 1990), which emphasizes immersive engagement as a facilitator of the internalization of knowledge, were used as central references. Bloom's Taxonomy (1956) was also applied, focusing on the first three levels: knowledge, comprehension and application, guiding the pedagogical objectives of the game. Finally, the Theory of Communicative Action (HABERMAS, 1981) supported the creation of a tool that stimulates dialogue and critical reflection as means of social transformation.

The prototype development phase took place collaboratively, with the participation of experts in education, health and design. Meetings were held to define the game mechanics, the content covered and the necessary materials. The game was titled "Journey of Peace: Building a World without Violence", being inspired by the dynamics of UNO, but adapted to the theme of school violence.

In the validation with experts, 10 professionals with experience in education, psychology, health and game design participated, who evaluated the prototype through a structured questionnaire based on the ARCS model (KELLER, 2010) and user experience (UX). The Content Validity Index (CVI) was calculated to verify the agreement between the evaluators on the relevance of the game's content and mechanics. Values higher than 0.8 were considered satisfactory (ALEXANDER; COLUCCI, 2018). The main criteria evaluated included clarity of the rules, adequacy of the content, educational impact and potential engagement of adolescents.

The validation of the game **"Journey of Peace: Building a World without Violence"** was carried out with the participation of 10 experts, carefully selected to ensure an interdisciplinary and in-depth analysis. The group was composed of professionals from the areas of education, psychology, public health and game design. All had proven experience in the development of educational tools or in working with adolescents in school contexts.

The evaluation was conducted through a structured questionnaire, containing items that analyzed five main criteria: clarity of the rules, relevance of the content, engagement, educational impact and game design.

Finally, ethical aspects were respected in all stages of the research, ensuring the confidentiality and integrity of the participants involved, according to the guidelines of Resolution No. 466/2012 of the National Health Council.

## RESULTS

The game "**Journey of Peace: Building a World without Violence**" was developed with the aim of raising awareness among adolescents about different types of violence, stimulating critical dialogue and promoting preventive behaviors. The following are the detailed elements of the game:

- **Objective:** To sensitize adolescents about physical, psychological and digital violence, encourage the identification of signs of abuse and disseminate mitigation strategies and reporting channels.
- **Materials Needed:** A deck containing 108 cards, divided into four categories (Concept, Warning Sign, Positive Action and Denunciation), as well as an instruction manual with clear rules.

## GAME STAGES AND HOW TO PLAY

1. **Preparation:** The game is ideal for groups of 4 to 6 participants. Each player receives 7 cards at the beginning. The remaining cards are shuffled and placed in the center of the table.
2. **Rounds:** Each participant, in turn, must play a card corresponding to the color or category requested by the previous card. If the player does not have a valid card, they must draw one from the deck.
3. **Card Categories:**
  - **Concept:** Defines types of violence and their characteristics.
  - **Warning Sign:** Points out risk situations and signs of abuse.
  - **Positive Action:** Proposes preventive strategies and conflict resolution.
  - **Denunciation:** It presents support channels and services such as Dial 100.
4. **Scoring:** Each card played accumulates specific points. The winner is the one who reaches 100 points first or runs out of cards in his hand.

## EVALUATION BY THE EXPERTS

The experts pointed out that the game proved to be a promising tool for the prevention of violence in the school environment, with good acceptance in all the criteria evaluated. The **overall Content Validity Index (CVI)** was higher than 0.9, indicating high

agreement on the suitability of the game for the target audience and its pedagogical objectives.

Criteria Evaluated	IVC	Comments
Clarity of Rules	0,9	Need for simplification in the initial description.
Content Relevance	0,95	Adequate content aligned with pedagogical objectives.
Engagement and Accessibility	0,85	Effective playful proposal for teenagers.
Educational Impact	0,9	Ability to promote reflection and critical learning.
Design and User Experience	0,87	Suggestion of greater representation in visual charts.

### MAIN POSITIVE POINTS IDENTIFIED BY THE EXPERTS:

- **Thematic Relevance:** Experts praised the approach to the types of violence (physical, psychological, sexual and digital), considering it essential for adolescents.
- **Interactivity:** The game was recognized for promoting a collaborative environment, which encourages the exchange of ideas and dialogue between participants.
- **Stimulus to Critical Reflection:** The *Warning Sign* and *Denunciation* letters were highlighted as elements that help adolescents to identify risk situations and propose solutions.

### IMPROVEMENT SUGGESTIONS:

1. **Simplification of Rules:** Some experts have suggested tweaking the manual to make it more accessible to teenagers with different levels of understanding.
2. **Contextualized Examples:** They recommended the inclusion of practical examples in the *Positive Action* letters, to facilitate the understanding of the proposed coping strategies.
3. **Inclusion of Visual Representativeness:** They indicated the need to diversify the illustrations of the cards, with more inclusive representations related to the target audience.

Based on the feedback received, the following modifications have been implemented:

- Revision of the instruction manual to simplify technical terms and include a supporting glossary.
- Inclusion of practical examples in some letters, especially in the categories *Positive Action* and *Denunciation*.
- Updated the design of the cards, with greater cultural, racial and gender diversity in the illustrations, reflecting the heterogeneity of the target audience.

The results of the evaluation show that the game, even in its initial version, has great educational potential and positive impact to promote dialogue, active learning and the construction of prosocial behaviors among adolescents.

The experts highlighted the effectiveness of the game in engaging adolescents, with satisfactory scores in all the criteria evaluated. Specific adjustments were suggested, such as simplifying the manual and including more representative visual elements.

## DISCUSSION

The results of this study corroborate previous research that highlights the potential of educational games in promoting meaningful learning and engagement. According to Csikszentmihalyi (1990), the sensation of Flow, achieved during immersive activities, facilitates the absorption of complex content and stimulates the interest of the participants. In the case of "Jornada da Paz", the mechanics inspired by UNO provided a dynamic and collaborative environment, essential for social-emotional learning.

Bandura's Social Learning Theory (1977) maintains that adolescents learn through observation and interaction. By addressing practical situations and proposing positive actions, the game facilitates the internalization of preventive attitudes and the construction of new behavioral models.

In addition, Habermas' Theory of Communicative Action (1981) is evident in the game by stimulating dialogue among participants. The debate generated by the letters promotes critical reflections on violence and the forms of confrontation, transforming the playful space into an educational environment.

Validation with experts demonstrated that the game is an effective tool for the school context. According to Keller (2010), the ARCS model of motivation highlights that well-designed games, which align relevant content and engagement, have greater potential to impact the target audience.

Finally, the importance of gamification in health education is highlighted. As pointed out by Freire et al. (2019), educational games not only transmit knowledge, but also stimulate social skills, such as empathy and conflict resolution, which are fundamental in the prevention of violence.

## CONCLUSION

The study developed and validated the game "Journey of Peace: Building a World without Violence", highlighting its potential as an educational tool for adolescents. The



game promotes active learning, engagement and critical reflection, stimulating preventive attitudes in the face of school violence.

It is recommended to apply the game in educational contexts, with longitudinal studies to assess its long-term impact and continuous improvements in design and content.





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