Storytelling in Higher Education: A Strategy to Understand Bullying and Cyberbullying

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Abstract

Storytelling is defined as a captivating narrative that recounts events with a final message aimed at conveying a lesson or concept. This technique stands out as a key tool for addressing complex issues such as bullying and cyberbullying, which have severe emotional, psychological, and social impacts on victims. In this study, conducted at the University of Córdoba, Colombia, a storytelling platform was designed to collect and highlight the experiences of university students affected by these problems. The proposal included the development of a software application that presents the vision of cyberbullying through digital narratives created by the young participants themselves. The methodology combined the principles of applied research with evolutionary software development models. Additionally, an epistemological approach centered on the "knowing subject" was adopted, along with a qualitative perspective, using techniques such as digital narratives, focus groups, and interviews for data collection. Data analysis was carried out through content analysis techniques. The expected impact lies in the consolidation of a robust and scalable software system capable of managing multiple digital formats and enabling young people to share their experiences with cyberbullying. This development addresses the regional need to implement innovative strategies for generating, optimizing, and applying knowledge, contributing to the transformation of educational.

Keywords: storytelling, higher education, bullying

Introduction

Digital storytelling has emerged as a powerful pedagogical strategy in higher education to approach sensitive and complex topics. Among these, bullying and cyberbullying stand out as practices with serious emotional, psychological, and social consequences for their victims. These forms of digital aggression are becoming increasingly prevalent due to the widespread and often unregulated use of social media, messaging apps, and other virtual communication tools. Cyberbullying, in particular, refers to the use of digital technologies to intimidate, harass, or harm others through repeated aggressive behavior in online environments (López et al., 2019).

In Latin America, scientific research on cyberbullying and related phenomena remains limited and often lacks methodological rigor. Existing studies suggest that Colombia is one of the countries with the highest rates of bullying. According to Zych et al. (2015), 63% of Colombian students report being involved in bullying, a figure that exceeds the Latin American average of 51.1% and is significantly higher than the 29.2% reported across Europe and the United States. Furthermore, data from the international NGO Bullying Without Borders reported 78 confirmed bullying cases in Monteria, Córdoba alone (Miglino, 2021).

In this context, the present study proposes the design and implementation of a digital storytelling platform aimed at understanding the impact of bullying and cyberbullying among university students. By collecting and showcasing digital narratives authored by the students themselves, the project seeks to provide insights into how young people experience and interpret technology-mediated aggression. This research is guided by the following question: How does a software system allow for understanding the perspectives on cyberbullying through the digital narratives of students at the University of Córdoba?

Theoretical Framework

Storytelling refers to the act of telling a story, an essential human activity through which individuals give meaning to their experiences, connect with others, and project themselves into the future (Davis, 2004; Walsh, 2010). In educational settings, storytelling has gained importance not only as a pedagogical technique but also as a form of inquiry that enables the exploration of social realities from the perspective of those who live them.

Digital storytelling, in particular, allows young people to express themselves using their own language and preferred media. As Greenhalgh and Koehler (2021) and Hu et al. (2023) affirm, digital narratives offer youth the opportunity to create and share content that reflects their identities, concerns, and social contexts. This aligns with broader trends in digital culture, where young users are not merely consumers but also active producers of content, including photos, videos, blogs, wikis, and social media (O'Reilly, 2005; Prensky, 2001).

In the context of bullying and cyberbullying, storytelling serves as a transformative practice that enables the expression of trauma and the construction of meaning from painful experiences. The digital format, furthermore, introduces opportunities for visibility, community support, and reflexive engagement. Storytelling thus becomes both a strategy for personal empowerment and a means of generating knowledge grounded in lived experience.

Methodology

This study adopted an applied research approach aimed at solving problems related to the production, circulation, and use of digital educational tools, particularly those addressing technology-mediated violence among university students (Doyle et al., 2016). To achieve this, the project combined qualitative research techniques with software development strategies, creating an interdisciplinary methodological design.

The software platform was developed following an evolutionary software development model, which enabled the construction of iterative prototypes. Each prototype was tested and validated, allowing for incremental improvements and the integration of functional features throughout the development cycle. This process ensured the alignment of the technological solution with the real needs and experiences of the student participants.

From a qualitative perspective, the study aimed to explore and understand how students perceive and experience bullying and cyberbullying within digital environments. This approach allowed the researchers to examine cultural patterns, behaviors, and the symbolic meanings students assigned to their experiences (Londoño et al., 2018).

The data collection techniques included semi-structured interviews, focus groups, and digital storytelling, enabling participants to narrate their experiences using their own voice and preferred digital formats. As Greenhalgh and Koehler (2021) suggest, digital narratives provide youth with the means to express themselves creatively and critically, often using media formats that resonate with their everyday communication practices. Today's youth are active producers of digital content—photos, videos, blogs, social media posts—making storytelling a powerful, native form of expression (O'Reilly, 2005; Prensky, 2001).

To interpret the digital stories and interview material, content analysis was employed as the principal analytical strategy. This method allowed for the identification of patterns, emerging categories, and thematic clusters that reveal how students understand and make sense of cyberbullying and related phenomena (López et al., 2019).

Results

The Digital Platform

The digital platform designed in this project was developed under a client-server architecture using specialized frameworks for each layer. On the client side, Nuxt.js was used to create a dynamic interface that allows users to explore different formats—video, podcast, and infographic—related to bullying and cyberbullying. The structure is organized into four main components: Layouts (which define the visual structure for each content type), Components (which dynamically render multimedia resources), Pages (which route and display specific sections), and Store (which manages local client data, including user session information).

Upon logging in, users can access thematic content categorized under bullying and cyberbullying. Each topic is available in three multimedia formats to support different user preferences and promote accessibility. When a user selects a content type, the system makes a JSON request to the server, which responds with the appropriate resources.

The homepage of the platform features a vibrant, user-friendly design. At the top, a colorful navigation menu allows quick access to content categories. A central illustration depicts a young person affected by digital harassment, accompanied by icons and emotion symbols to reinforce the thematic focus. This visual storytelling approach is combined with a brief descriptive overlay, helping to immediately communicate the site's educational objective (**see Figure 1**).

Figure 1
Home Page of the Site

Each content category—bullying or cyberbullying—presents its information through video, podcast, and infographic, enhancing multimodal access and facilitating engagement for users with varied preferences (**see Figure 2**).

Figure 2
Presentation Formats for Cyberbullying Cases
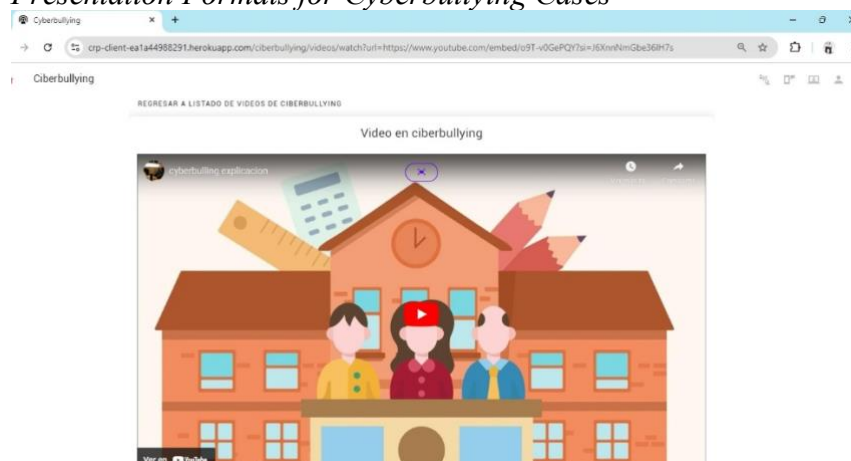
Student Narratives

The qualitative analysis of student narratives revealed nuanced insights into how university students understand and experience cyberbullying. These were grouped into key categories and subcategories that emerged from recurring patterns and thematic analysis.

Table 1
Cyberbullying Categories

Category	Subcategory
Cyberbullying	What is cyberbullying?
	Characteristics
	Means of execution
	Psychological impact
	Video games
	Role of the observer
	Platform of execution

Source. Own elaboration

Conceptualization of Cyberbullying

Students often defined cyberbullying as a form of aggression that takes place through digital channels such as social networks, chats, or mobile apps. One participant explained: "Cyberbullying is a kind of harassment that happens online through offensive messages, posting unauthorized images, or spreading lies about someone" (Narrative HIVJR). This aligns with definitions found in the literature, which describe cyberbullying as a continuous form of digital aggression intended to cause harm (Hinduja & Patchin, 2019; López et al., 2019).

Cyberbullying tends to be persistent and invasive, often targeting personal traits and exploiting the anonymity of the digital space. Students also described how it differs from traditional bullying due to its extended reach and the permanence of shared content (Souza et al., 2022).

Means of Execution

Participants identified multiple digital channels used to execute cyberbullying, including social media platforms, messaging apps, and online games. One student shared: "When I started using social networks, strangers would take my profile photos to compare and make hurtful comments" (Interview MIXAE). This highlights how cyberbullying leverages accessible digital tools to harass victims in both public and private spaces (Álvarez-Quiroz et al., 2023; Kowalski et al., 2014).

Psychological Impact

Emotional and psychological consequences were recurrent themes. One student recalled: "Because of my teeth, people would give me nicknames and share it on WhatsApp. That made me really insecure and anxious" (Narrative MIXSP). Another shared: "I experienced cyberbullying. It was awful. I felt constantly down and didn't want to be around others"

(Narrative MXLL). These accounts align with findings that cyberbullying can lead to depression, anxiety, suicidal ideation, and social withdrawal (Hu et al., 2023; Wade & Beran, 2018).

Cyberbullying in Video Games

Gaming environments were described as frequent scenarios for online harassment. Students described toxic behavior through chat features, targeting of players based on gender or identity, and hostile competitiveness. One student observed: "I've seen lots of harassment online, especially towards women or in games where competition is high" (Narrative HIIIMA). Research supports that such interactions can have lasting psychological effects and alter the gaming experience (Kowert et al., 2019; Reitman et al., 2020).

Role of the Observer

Witnesses to cyberbullying play a complex role. A student shared: "Back in school, I saw how classmates bullied one of our peers, both online and physically" (Narrative HXYM). Another recounted: "In my school, classmates planned through Facebook to target a peer with nasty comments" (Narrative MVLT). The way observers respond—by acting, ignoring, or supporting—can shape the outcome for the victim and either perpetuate or reduce harm (Bastiaensens et al., 2019; Macaulay et al., 2022).

Observers reported encountering cyberbullying on platforms like Facebook, WhatsApp, and gaming spaces. Some mentioned feeling helpless or unsure of how to intervene. These findings suggest the need to address digital citizenship and empower witnesses with strategies for safe and ethical response (Troll et al., 2021).

These narratives reveal the pervasiveness of cyberbullying in students' lives and the emotional weight it carries. They emphasize the value of digital storytelling not only as a method of expression but as a pedagogical tool to reflect, educate, and propose institutional action grounded in lived experience.

Conclusion

The findings of this study demonstrate the significant psychological and social toll that cyberbullying has on university students. Manifested primarily through social media and other digital platforms, cyberbullying causes emotional distress, including anxiety, depression, and diminished self-esteem.

The use of digital storytelling proved to be a powerful tool not only for collecting narratives but also for encouraging reflection and agency among students. The multimodal nature of the platform allowed participants to express their experiences through various formats—video, podcast, and infographics—enhancing both accessibility and emotional resonance.

The observations made by bystanders in cyberbullying cases reveal their essential role in either perpetuating or mitigating the impact of digital aggression. Empowering observers to take active, supportive roles could significantly change the dynamics of such incidents.

Additionally, the results underscore the importance of implementing proactive institutional policies that address digital violence in higher education settings. This includes strengthening

educational programs that promote responsible technology use, developing clear protocols for reporting and supporting victims, and fostering a culture of respect and empathy online.

The study advocates for continued exploration of digital storytelling as a transformative educational methodology. Future research could further evaluate its effectiveness in behavior change and in fostering resilience and emotional literacy among students.

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