

Vulvas at Play: Co-constructing Knowledge and Awareness about Pelvic-vulvar Pain

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ABSTRACT

This paper presents a case study of action research through the “V-Days project” (“Vulvar Dialogues about Youth and Sexuality”), a multidisciplinary initiative led by a team of the University of Turin. The project aimed to foster dialogue and raise awareness about vulvar and pelvic pain, engaging both the general adult population and students aged 17-20 through participatory and gamified educational activities.

The V-Days initiative is rooted in interdisciplinary collaboration, involving experts from sociology, molecular biology, linguistics, psychology, anthropology, geography and health sciences. The project team, supported by university student volunteers, designed and tested a series of board games, the “Vulva Games”, as interactive tools to promote knowledge and challenge taboos surrounding genital and sexual health. These games were first publicly tested during Unight, an international public engagement event, allowing researchers to assess their impact in fostering open discussions.

The paper explores the theoretical frameworks underlying the project, combining action research, citizen science, and gamification. It highlights how participatory methodologies can empower individuals by bridging expert and embodied knowledge, fostering a collective understanding of pelvic-vulvar pain conditions like vulvodynia and endometriosis.

By integrating bio-medical expertise with lived experiences and activism, V-Days contributes to breaking the stigma surrounding these topics. The results emphasize the role of play-based learning in engaging diverse audiences, demonstrating how gamification can facilitate discussions on sensitive topics and promote an inclusive approach to sexual health education.

Keywords: pelvic-vulvar pain; sexual health education; action-research; gamification; citizen science

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INTRODUCTION.

V-DAYS - VULVAR DIALOGUES ABOUT YOUTH AND SEXUALITY

This paper illustrates a case study of action-research characterized by an interdisciplinary collaboration and a multi-mixed method oriented toward participatory approaches addressing two main audiences: adult population and students aged between 17 and 20 years old.

The case study unfolds through a public dissemination project (V-Days) whose team is led by biologist Valentina Proserpio and coordinated by medical anthropologist Federica Manfredi. The V-Days project, short for “Vulvar Dialogues about Youth and Sexuality”, is a multidisciplinary initiative spearheaded by the University of Turin in 2024. Its primary aim is to foster dialogue, disseminate information, and raise awareness about vulvar and pelvic pain, with activities planned between April 2024 and December 2025.

This project brings together experts affiliated with five different departments of the University of Turin and from various fields – including sociology, molecular biology, linguistics, psychology, anthropology, geography, and medical-health specialties – who collaborate to develop educational resources on sexual health. Their collective expertise is further enriched by the contributions of a group of student volunteers who, as part of the project, were trained by the researchers, and integrated the project’s team. This collaborative effort has led to the creation of training initiatives designed for dissemination in Turin’s secondary schools and through community late-afternoon events known as “merende sinoire” aimed at the adult population. In Piedmont dialect and local culture, these are convivial moments where food and beverage are consumed. We choose this name to evoke a break from daily routine, dedicated to discussing taboo topics in a relaxed and approachable setting.

Partners of the project are health specialists from the Turin’s public clinic on sexual health (Centro Multidisciplinare per la Salute Sessuale - CeMuSS) and members of the advocacy patient groups “Comitato vulvodinia e neuropatia del pudendo” and “La voce di una è la voce di tutte”¹.

The overarching goal of V-Days is to co-construct knowledge and implement preventive measures against the normalization of vulvar and pelvic pain. To achieve

¹ To see more: <https://www.vulvodinianeuropatiapudendo.it>; <https://www.lavocedellendometriosi.it> (consulted on 18/01/2025).

this, the research group created a set of board games, the Vulva Games, illustrated more in detail in this article. The description will focus on the first public test of the games during the Unight, an international event taking place in many European cities, where university researchers propose various activities to share academic projects with the population. The games' description is anticipated by a state of the art and a presentation of the theoretical approaches used by the group in the design of the games, expected to actively involve the community in meaningful discussions about sexual health.

1. STATE OF THE ART

Pelvic and vulvar pain, particularly in the context of conditions such as vulvodynia and endometriosis, represents a multifaceted phenomenon at the intersection of biomedicine, socio-cultural discourse, and embodied experience. This state of the art explores the current understanding of pelvic and vulvar pain, highlighting its biomedical uncertainties, cultural invisibility, and the socio-political implications of its marginalization. It builds upon the premise that historical taboos surrounding female sexuality have contributed to the invisibility and delegitimization of women's sexual health concerns, including their right to pleasure (Bertone, Ferrero Camoletto & Torrioni, 2011; Tolman, 2005).

In Italy, sexual health education is scarcely institutionalized and highly fragmented, depending largely on regional initiatives and the discretion of individual schools (Lo Moro et al., 2023). This absence creates significant barriers to the dissemination of accurate and inclusive information, particularly regarding conditions such as vulvodynia, which only recently gained partial institutional recognition within the OMS (Ferritti, 2023). In this regard, the V-Days initiative not only addresses an educational gap but also contributes to a broader political agenda for the legitimization of female pain.

Endometriosis and vulvodynia, while differing in their historical and clinical trajectories, share common features: subjective and often invisible symptoms, centrality of pain, lack of known aetiology, and absence of definitive treatments. The variability in symptoms and the limited knowledge available to medical professionals exacerbate patients' experiences of uncertainty and frustration (Hawkey et al., 2022; Kaler, 2006). This resonates with earlier studies emphasizing how epistemological gaps in biomedicine foster the emergence of alternative, experience-based knowledge systems within patient communities (DeVecchio Good et al., 1992). Sociological and anthropological research underscores the role of embodied illness narratives in constructing collective identities among individuals with shared health struggles. Narratives originating from personal experiences often coalesce into collective discourses, creating a basis for alternative care practices and fostering a sense of epistemic legitimacy within these groups (Whelan, 2007). These dynamics frequently challenge the authority of biomedical institutions and can lead to non-compliance with prescribed treatments (Seear, 2009).

The experience and the diagnosis of chronic illnesses such as vulvodynia and endometriosis often represent a “biographical disruption” (Bury, 1982) in sufferers’ lives. Especially when symptoms are severe, the illness experience impacts at different levels, from education and work to social life, to relationships and sexuality (Marshall et al., 2021; Lindgren & Richardson, 2023). In relation to sexuality, social scientists have explored how socio-cultural frameworks shape the perception and lived experience of vulvar and pelvic pain. Normative heterosexual scripts, which prioritize penile-vaginal penetration as the central act of sexuality, impose significant constraints on individuals experiencing vulvar pain. These constraints often intersect with feelings of inadequacy in fulfilling gendered expectations of femininity and sexual performance (Kaler, 2006; Ayling & Usser, 2008). Research by McPhillips et al. (2001) and Sörensdotter (2017) demonstrates how these scripts influence self-perception and identity. Pain disrupts the alignment between gendered norms and embodied realities, creating spaces for negotiation and resistance (Manfredi, 2024). Such negotiations frequently involve reconfiguring sexual practices and redefining relationships with partners (Hinchliff et al., 2012). These findings highlight the interplay between dominant discourses on femininity and the lived experience of vulvar and pelvic pain, offering valuable insights into how individuals navigate the stigma and marginalization associated with their conditions.

Digital and non-digital activism has become a prominent avenue for contesting the medical and socio-political marginalization of pelvic and vulvar pain. Patient advocacy groups, for instance, have highlighted the exclusion of vulvodynia from the list of recognized diseases under national health systems, emphasizing the need for public funding for medications and specialist consultations (Ferritti, 2023). In the case of endometriosis, although the condition has been included in the list of guaranteed health care services (LEA) for the most severe stages (III and IV), the patients associations highlight the need for integration of dedicated diagnostic services and adequate protection and care also for the stages I and II, as the condition can be debilitating even in the early stages (A.L.I.C.E. ODV). These advocacy efforts underscore the intersection of personal narratives with broader political agendas, as evidenced by the visibility campaigns and media outreach initiated by these groups. Much work still needs to be done for the diagnostic delay to be reduced and for all people to have access to diagnosis and treatment of these diseases. By foregrounding the lived experiences of individuals with these conditions, this body of research

challenges dominant narratives and advocates for a more inclusive and empathetic approach to sexual health.

2. A HYBRID ANALYTICAL FRAMEWORK

The methodological approach used can be positioned at the intersection of different traditions. The first approach is action-research (AR) which emphasizes the value of resources, and recognizes the individual as an active participant, capable of meaningful involvement. As Reason and Bradbury (2008) stated,

Action research is a family of practices of living inquiry that aims, in a great variety of ways, to link practice and ideas in the service of human flourishing. It is not so much a methodology as an orientation to inquiry that seeks to create participative communities of inquiry in which qualities of engagement, curiosity and question posing are brought to bear on significant practical issues. (...) Action research does not start from a desire of changing others 'out there', although it may eventually have that result, rather it starts from an orientation of change with others (p. 1).

The term action research was coined by Lewin in the 1940s to describe the integration of two domains previously considered distinct and opposing: research, an activity centered on reflection and analysis, and action, which involves concrete efforts to bring about change. Lewin (1946) used the term to describe a research process in which theory is developed and tested through practical action, with action and reflection mutually informing each other. AR thus establishes a strong connection between research and practice, bridging cognitive and applied dimensions. This approach reflects a shift in the conceptualization, design, and execution of research in the human sciences, embracing the complexity of the phenomena under study rather than simplifying them.

A fundamental tenet of action research, and one central to this work, is the belief that understanding phenomena necessitates a dialogue between expert knowledge – held by academic/professional researchers – and lay knowledge, which emerges from the representations, perceptions, experiences, resources, and challenges of individuals, groups, and organizations situated in the contexts where action research unfolds. This is particularly relevant when dealing with health issues, where medical (expert) knowledge, entitled to define diagnosis and treatment of a pathology, needs to interact with embodied (lay) knowledge, conveying the experience of illness lived by people. Another key element of our work is the central role of the group, which aligns consistently with the AR approach. From this perspective, the group acts as the psychosocial context where individuals shape their actions and serves as catalysts for

facilitating change processes. The use of groups aims to foster participant engagement and enables the development of rigorous and practical knowledge for the effective management of actions. This is possible because such knowledge is socially and contextually constructed, emerging from the group's dialogue, exchange, and reflective processes – transforming the group into a 'collective researcher' (Kaneclin, 2010). The ensuing discussions promote dialogue and exchange, which facilitate the deconstruction of ineffective behaviours, attitudes, implicit theories, and representations that previously hindered the identification of solutions to emerging problems (Procentese and Marta, 2021).

In line with an approach in which the target groups of the intervention are also the actors of the intervention, a working method based on a horizontal communication model was therefore adopted. This model reflects a simultaneous process of education and learning and draws upon the principles of peer education (PE). As is well known, PE initiates an educational process characterized by a symmetrical relationship between the target group and the expert. The expert is a young person of the same age who shares significant characteristics with other group members (such as age, culture, lifestyle, digital literacy, origin, etc.). After receiving appropriate training, this individual facilitates discussions and debates on topics introduced by researchers/professionals. In our case, we focused on a mix of ignorance and experience: both the category of students involved (university students and high-school students), shared a relative ignorance about the topic of the activity (pelvic and vulvar pain) and a diverse sexual experience to which the main topic could be rooted to elicit the discussion.

The second, more recent, tradition we relied on is the so-called Citizen science (CS), an approach to research that actively involves the public in scientific inquiry. This approach not only democratizes the research process but also fosters public engagement with science, encouraging broader societal participation in the construction of knowledge. Therefore, citizen science reflects the growing trend toward inclusivity and collaboration in research, challenging traditional hierarchies between professional scientists and the public.

At its core, citizen science involves non-experts—referred to as "citizen scientists"—participating in data collection, analysis, and even the formulation of research questions. This participatory model is particularly prominent in fields such as environmental monitoring, astronomy, and health research. In a sociological context, citizen science can be understood as part of a broader movement toward the

democratization of knowledge, where the expertise of lay individuals is recognized alongside that of trained scientists. By involving the public in scientific processes, citizen science challenges the assumption that scientific knowledge is exclusively produced by highly specialized professionals.

One of the key sociological implications of citizen science is the shifting power dynamics between experts and non-experts. Historically, scientific research has been conducted within a hierarchical framework, with professional researchers at the top and the public occupying a passive role. Citizen science disrupts this model by encouraging collaboration and knowledge-sharing between scientists and participants. This shift aligns with broader trends in the sociology of science, where there is increasing recognition of the value of local, experiential knowledge. For example, in environmental research, local community members often possess insights into ecological changes that may not be captured by traditional scientific methods (Brossard et al., 2005).

Furthermore, citizen science contributes to the sociology of science by highlighting the importance of science communication and public engagement. By involving citizens in research, it fosters a greater understanding of scientific processes and encourages critical thinking. In turn, this engagement can influence public perceptions of science, making it more accessible and less alienating. This is particularly important in an era where science and technology are often seen as distant from everyday life. Citizen science thus serves as a bridge between scientific communities and the broader public, contributing to a more inclusive and participatory model of knowledge production (Eitzel et al., 2017).

The growing prominence of citizen science also speaks to broader societal trends in the digital age. With the advent of technologies such as smartphones and online platforms, the barriers to participation in scientific research have decreased significantly. Citizens can now engage in data collection and analysis through apps, websites, and social media, making scientific research more accessible than ever before (Cohn, 2008). This technological shift has profound implications for the future of research, as it opens new opportunities for collaboration and crowdsourcing in a variety of fields.

The last research tradition we included in our hybrid framework is the gamification approach (GA), which implies the integration of game elements and mechanics into non-game contexts, such as educational research and practice. The GA offers

valuable insights into the intersections between technology, social interaction, and education, highlighting the ways in which game-like structures can transform the learning experience (Christopoulos and Mystakidis, 2023).

At its core, gamification in education aims to foster motivation, increase student participation, and enhance learning outcomes by making educational activities more engaging and rewarding. If a possible risk of this approach can be seen in its neoliberal emphasis on individual achievement, self-regulation, and measurable success in educational settings (Tulloch & Randell-Moon 2018), on the other hand the social dynamics of gamification may counteract by promoting social cooperation through team-based challenges and collaborative goals. These dynamics are significant because they reveal how gamification is not simply a tool for individual achievement but also a means of structuring social interactions and relationships within the classroom (Kim et al., 2017).

Each of the above-described methodologies offers unique contributions to addressing the complex social, cultural, and behavioural factors that influence sexual health knowledge and practices. In the following paragraph we will explore how these approaches can be applied to sexual health education, considering the sociological dimensions of participation, empowerment, and social dynamics.

2.1 Application to sexual education

In the context of sexual health education, action-research allows educators, students, and community members to identify issues related to sexual health, develop interventions, and assess their effectiveness. This approach is rooted in the belief that knowledge production should be a collaborative process that empowers participants to create meaningful change (Reason & Bradbury, 2008). Action-research in sexual health education fosters a participatory environment, where individuals actively engage in problem-solving and knowledge creation. This can challenge traditional power structures, giving voice to marginalized groups who may otherwise be excluded from mainstream sexual health discourse. By integrating community input and feedback, action-research helps tailor sexual health programs to the specific needs and contexts of the population, leading to more relevant and effective interventions.

Also, citizen science involves the active participation of non-experts in scientific research, often through data collection or analysis. In the context of sexual health

education, citizen science can empower individuals and communities to gather information about sexual health trends, behaviours, and attitudes within their own environments. This approach helps bridge the gap between scientific knowledge and everyday experiences, offering valuable insights into how sexual health issues manifest at the community level. In our case, working both with high school students and with the general population, we faced different ways of experiencing and making sense of sexuality and of pelvic-vulvar pain, widening the collective understanding of sexual health. Moreover, the citizen science approach allowed us to promote social engagement and activism, as some participants became more invested in the health of their communities and in advocating for changes in sexual health education policies and practices. In this perspective, we involved both medical experts and activists as well as members of the main patient associations from the very beginning, in the design and testing of the research tools. The dialogue between expert knowledge and embodied experience was very fruitful in the definition of both the form and contents of the gamified tools.

Finally, in sexual health education, gamification can help overcome barriers to learning by creating a non-threatening, playful environment for collective participation through multiplayer challenges and collaborative tasks, fostering social connections and peer learning, where students may feel comfortable discussing sensitive topics (Haruna, 2024). Furthermore, by using technology, gamified platforms can reach diverse audiences, including adolescents and young adults who may be more receptive to digital learning methods (Sewak et al., 2023). In our case, we devised a set of gamified education tools and a digital contest to provide the opportunity for a larger audience to participate.

The interactions between researchers, student volunteers, activists, and participants were deeply shaped by shared values, generational proximities, and institutional affiliations. These relational dynamics influenced both the co-construction of the games and the framing of sexual health knowledge. In particular, the researchers' dual role as facilitators and insiders has contributed to a fertile space of trust and engagement, but also entailed implicit assumptions about shared understandings that warrant critical scrutiny.

In the following section we provide an illustration of the games, the rationale underlying their design and some preliminary reflections on how they were received by the groups on which we tested them.

2.2 Creating games, creating representations

In order to make our activities as accessible as possible, we turned to popular existing games that could be adapted to our project's purposes. This required an array of multidisciplinary skills, as well as technical competences (game rules and management, practical creation). We therefore selected five different games that could appeal to different age ranges, operate at different levels of complexity and address different needs and competences. After coming up with game ideas, created drafts and prototypes, and re-elaborated them with our student volunteers' group.

Co-construction lies both in this re-elaboration stage and within school activities and in our events to be catered to the adult population. In the case of the school setting, the student volunteers' group was closer to the target audience (i.e., secondary school students) in terms of age and social practices. This proximity enabled the group to promptly identify both shortcomings and strengths of the activities proposed, which was key to the co-construction process.

The first game to be created by our team was the Memory card game, also known as Concentration, Pairs, or Pelmanism, and it is a classic card game that challenges players to match pairs of cards through memorization (Thibodeau, de Lemos, Levy, 2021, p. 3143). The modern version of the Memory card game was first published by the German company Ravensburger in February 1959. Historically the game dates back to 16th-century Japan, to a game called Awase or Kai-awase involving matching pictures painted on shells. The Vulva Memory Card game features a set of 12 creative artistic representations of a vulva produced by a group of university students involved in a previous related project within the context of an artistic and scientific exhibition: "Il Dolore Vulvare. Arte. Scienza. Resistenza" (Vulvar Pain. Art. Science. Resistance) (Manfredi, 2024).

The primary purpose of this game is to encourage our audience to explore and experiment with images of a strongly tabooed body part, rather than to train memory skills, and/or to facilitate learning, which are standard uses of this type of game (Faiella and Ricciardi, 2015). The artistic realisations on the game cards vary: some include more realistic aspects, others combine visual components with written messages and popular culture references while some others adopt a metaphorical approach (see Fig. 1), in some cases depicting the vulva as different types of fruit or as a flower. The game is devised to offer the opportunity to normalise and legitimise this body part by viewing

it beyond its anatomical, medical and sexualised components, exploring different symbolic values and facilitating reflections and conversations around its existence and importance while playing. When we discussed these images with our student volunteers' group, issues emerged around some images perceived as particularly controversial. For example, one image (see Fig. 2), representing the vulva as the Holy Mary was identified as being potentially offensive for religious people and was therefore removed from the set on occasions where its reception could be problematic, such as school settings or public events involving particularly wide and diverse audiences. The first time when this game was tested outside our research group, that is during the Unight Event (see Introduction), the Vulva Memory Card game attracted numerous little children to the stand, as this type of game is rather popular among this age group. Their parents occasionally engaged with them during play sessions. However, they more frequently preferred to converse with the members of the V-Games project, allowing the latter not only to normalise representing female body parts, but also to inform about and discuss health issues related to them. Although there were cases when some parents felt uncomfortable with the topics displayed in our stand and quickly moved on, diverting their children's attention towards other stands, the activity was largely well-received. By and large, the Vulva Memory Card game worked as a "hook" to capture the attention of young families, first by appealing to children and then by offering adults a chance to learn about often-overlooked women's illnesses like endometriosis and vulvar pain.



Fig. 1 Memory Card Example 1

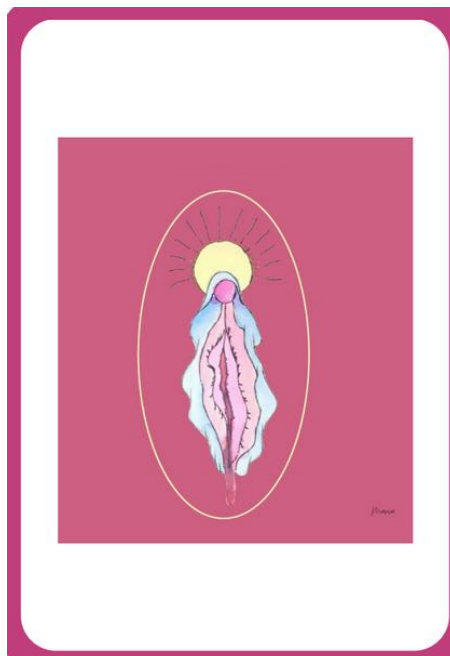


Fig. 2 Memory Card Example 2

The second game created was inspired by the “blank map” or “outline map” game. It refers to a map without labels, often used for educational purposes, like practicing geography by adding names of locations or features. In our case, the Blank Vulva Map is an expanded drawing of a vulva designed by Federica Manfredi, with the graphic assistance of Carola Morando and Alessia Moretti (see Fig. 3). The anatomical map was originally developed in 2023 within the above-mentioned Public Engagement

project “Il Dolore Vulvare. Arte. Scienza. Resistenza” (Vulvar Pain. Art. Science. Resistance) and it is today used as a research method in the project “Dare Voce al Dolore” (Giving Voice to Pain)². All the main parts that compose the drawing are flagged in order to be labelled. Here we thus recontextualize a tool, blank maps, which is generally used from a geographical perspective, in the more traditional meaning of a map.

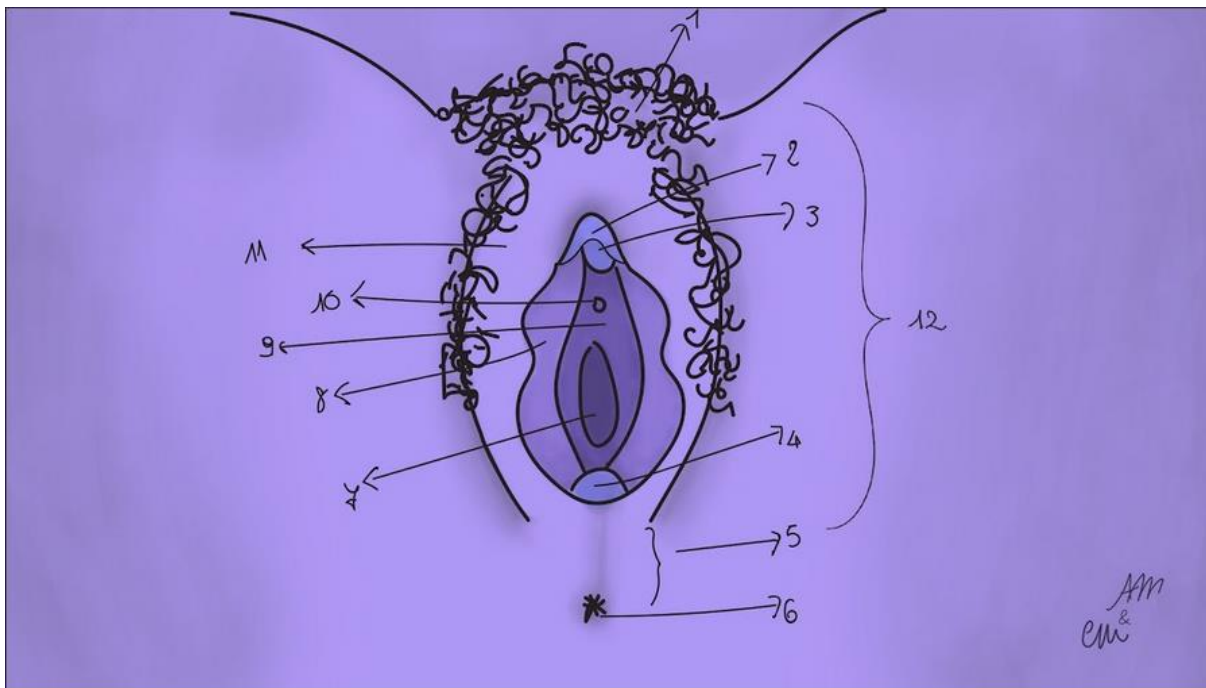


Fig. 3 Blank Vulva Map © F. Manfredi

The main aim of the game was to promote awareness about individuals' knowledge (or lack of) of this body part. One of the most common misconceptions in relation to this body part is to refer to it as vagina rather than vulva, without realizing that the vagina is only one internal component of the whole feminine genital area, and it is not even externally visible (See Labuski, 2013, p. xiii). The map includes 12 items to guess (1 - mons pubis, 2 - clitoral hood, 3 - clitoral glans, 4 - fourchette, 5 - perineum, 6 - anus, 7 - vagina, 8 - labia minora, 9 - vestibule, 10 - urethra, 11 - labia majora, 12 - vulva). In our experience, people approaching this game during the Unight event often overestimated their competences and realised only later how limited their knowledge was. Conversely, one positive aspect which we noticed while presenting this game, was that not only people were curious about testing their own knowledge, but they

² The project was co-funded by the CRT Foundation (RF disbursement: 106780 / 2023.1853).

were also eager to compete when playing in pairs or groups, which increased their engagement.

The third game we created was inspired by the well-known game Taboo, a popular word-guessing game where players aim to have their teammates guess a specific word without using certain “taboo” words or phrases associated with it. The game was invented by Brian Hersch in 1989 and was later acquired by Hasbro. We selected a set of relevant words, terms and expressions that spanned across the themes of vulvar pain, medicalisation, sexuality and sexual and reproductive health. Each of these items, reported on its individual card, was accompanied by a set of related words or terms that players needed to avoid mentioning while trying to make fellow players guess the main word. For example, they would need to explain the concept “vulvodinia” (vulvodynia) while avoiding mentions of “Giorgia Soleri” (an Italian influencer known for supporting a national patient association requiring the inclusion of vulvodynia in healthcare and publicly speaking about her vulvodynia condition), “Måneskin” (Giorgia Soleri was the girlfriend of the frontman of this band which become very famous after winning Sanremo - a yearly national music competition - and Eurovision musical context in 2021), “malattia” (disease), “vulva” (vulva), “male” (pain) (see Figg. 4 and 5).

VULVODINIA	MEDICAL GASLIGHTING
Giorgia Soleri	invalidare
Måneskin	mentire
malattia	negare
vulva	esistere
male	

Fig. 4 and Fig. 5. Taboo card Example 1 & 2³.

The re-elaboration stage with the student members of the research team was crucial for expanding the list of items initially chosen by researchers, whereby a wider range

³ Translations of the words appearing in the card from top to bottom, except for Medical Gaslighting, already in English: invalidate, lie, negate, exist (taboo words).

of concepts was deemed necessary for a more comprehensive discussion of the project themes and to improve time management while playing. This game was also conceived to test players' pre-existing knowledge and awareness. As such, one of the most important moments came after the game itself, when players and the research team debated those concepts that could not be guessed or explained properly, due to a lack of knowledge and awareness on either part (speaker or guesser). This offered an opportunity to everyone involved to share their own perspectives, experiences and doubts: the research team could answer questions, provide further context for relevant notions and link them to the aims of the project; players contributed their own views and perceptions, including personal experiences with vulvar pain.

The fourth game included in our game set is inspired by the Trivial Pursuit game. This is a renowned board game that challenges players' general knowledge across various categories. It was created in December 1979 by Canadians Chris Haney, a photo editor for The Gazette in Montreal, and Scott Abbott, a sports editor for The Canadian Press. The idea emerged when Haney and Abbott were missing pieces from their Scrabble game and decided to invent a new game. They developed the concept and rules, and the game was released in 1981. In the Vulva Trivial Pursuit we focused specifically on knowledge related to the vulva and other connected topics, such as vulvar and pelvic pain (Fig. 6).



Fig. 6. Trivial Pursuit card Example⁴.

⁴ Translation of the question appearing on the card: "How long is the uterus on average?".

This was likely the game with which players faced the most difficulties. It requires a previous knowledge that many of the participants did not have. We thought about the possibility to include a list of possible answers in the cards to help the players. Ultimately, during the co-construction phase, where we presented this game to the student volunteers, we decided to keep this game for more specific training (such as with medical staff) rather than use it during the Unight public engagement event and in the schools.

The fifth game we created in our tool kit is inspired by the Monopoly game, the classic board game originally created by Elizabeth Magie in the early 20th century. Designed as a critical and educational tool, the game was intended to teach Henry George's theory of the single tax on land (Pilon, 2015). The aim of our game is to provide an experiential journey of the impact of Vulvar/Pelvic Pain on people's daily life. In this sense, it raises awareness about the financial burden of medical expenses, healthcare nomadism, the effects of living with a chronic pain condition unrecognized by the national healthcare system, symbolic violence perpetrated by medical professionals, the challenges of adhering to standardized work schedules, and the numerous social difficulties associated with this condition. The game progresses similarly to Monopoly, where the dice roll determines the movement of each player's token. Depending on where the token lands, players interact with various spaces (for example, 'appointment with a specialist', 'psychotherapy session', 'workplace', 'home', 'patient association'), as well as 'chance' and 'surprise' cards. Each player takes on the role of a person suffering from Vulvar/Pelvic Pain who has yet to receive a diagnosis. To symbolize the pain, each player begins the game with a clothespin clipped to their finger. While landing on and interacting with the different spaces, players can gain well-being (in terms of money, health, emotional stability, or social connections) or experience pain, injustice, and substantial financial losses. For instance, the clothespin can only be removed when landing on 'bonus spaces', such as those granting help from patient associations or allowing players to attend a psychotherapy session, thereby gaining a 'well-being point'. The game does not have a defined endpoint and could theoretically continue indefinitely. This choice symbolizes the ambiguity and variability of diagnostic and therapeutic pathways for individuals suffering from Vulvar/Pelvic Pain, particularly those affected by endometriosis and vulvodynia. The gameplay enabled students/players to empathize with the real-life experiences of people affected by Vulvar/Pelvic Pain, and was accompanied by discussions on the challenges

highlighted, emerging from the profound sense of frustration entailed by the patients' condition.

All activities presented during the Unight event aimed at spreading information and raising awareness about both sexuality, reproductive health and overlooked conditions involving the female genital apparatus. Against this backdrop, the issues of knowledge and representation were pivotal in the development and realization of the games proposed.

Access to knowledge and facts about body parts that have traditionally been considered inappropriate subjects and are rarely debated in the public sphere (even in educational settings) is a major tool for empowerment, in particular for people with a vulva, and can benefit society as a whole. For these people knowledge can be related with a greater sense of agency and a reduction in passive behaviour, particularly in healthcare settings. The adaptations of Trivial Pursuit, the "blank map" game and, to a lesser degree, Taboo, were conceived with a strong educational purpose. People who visited the Vulva Games Unight stand often lacked a solid knowledge of female genitalia and its parts and were glad to learn about them in an entertaining way. Representation was also an element of paramount importance in the devising of the gaming activities, as it is acknowledged to contribute to the breaking of taboos. Visual portrayals of female sex and reproductive organs can help normalise them and make them a valid object of discussion. This is evident in the design of the "blank map" game, the type of image is comparable to those appearing in average students' science books; however, while the latter usually portray the entire female reproductive system, this image only focuses on the vulva, thus giving it prominence and legitimacy. Moreover, school textbooks frequently feature a frontal view of organs whereas the map created for the game offers a longitudinal perspective, thus allowing for greater detail. Another reason why body representation is key is because it can affect individuals' self-image and confidence. Repeated and widespread depictions of the female anatomy can influence common perception of what is "normal" and aesthetically pleasing as well as what is considered abnormal and unattractive. The Vulva Memory card game aims at making people aware that vulvas can come in various shapes, and that they are all acceptable. The utilisation of 12 pairs of artistic representations of this organ for the game indirectly and creatively conveys the message that, just like with any other body part, diversity is the norm and that there is no "ideal" form.

In conclusion, the games presented by the V-Days team all contributed, each in its own way, to enhancing knowledge and representation of vulvas, with a view to empowering those who have them.

DISCUSSION AND CONCLUSIONS

The V-Days project opens new perspectives for community-based reflections on vulvar and pelvic pain. Its initiatives proved successful in attracting a diverse audience from different backgrounds, age ranges, gender and sexual identities and nationalities (our Unight stand indeed unexpectedly attracted some foreign visitors). During the Unight event, in which we first tested the games on an unfamiliar audience, a certain degree of initial hesitation and embarrassment was observed in people approaching the stand, followed by an increasingly open disposition, or even enthusiasm, to engage in the activities of the games. This could be viewed as a symptom of how people are still not used to seeing vulvar anatomy portrayed in public spaces without connecting it with some form of moral connotation of judgement. As a matter of fact, older participants sometimes reinforced taboos about vulvas and vulvar health. Moreover, in some cases, men from heterosexual couples delegated participation to their female partners, reiterating the gendered idea that vulvar and pelvic health is an exclusive concern of people with a vulva. This aligns with a broader stereotype by which sexual and reproductive health are framed as a “women’s issue”.

Signs of improvement could be detected as younger generations who, regardless of gender, seemed to be more willing to engage with the topic. The tools we employed in our activities might have fostered this type of response, in that gamification proved to be effective in breaking down traditional knowledge barriers, by integrating educational content into interactive activities in a non-threatening environment. The competitive and playful elements of the games encouraged curiosity, active participation, and peer learning, reinforcing the value of gamification as a pedagogical strategy for addressing complex social issues.

The project invites us to rethink the conceptual role of play in feminist pedagogy and health education. Drawing on Mary Flanagan’s (2009) concept of *critical play*, the games developed within V-Days can be interpreted as cultural practices that actively challenge dominant norms and open up spaces of resistance. In this sense, play becomes not merely a pedagogical device but an epistemological and political practice, one that unsettles normative expectations around gender, sexuality, and embodied knowledge. Similarly, Sara Ahmed’s (2006) theory of *dis-orientation* offers a compelling framework for understanding how the embodied experiences elicited by the games create moments of friction with normative alignments—moments where bodies

no longer follow prescribed orientations, and thus allow new narratives and relational possibilities to emerge. This dis-orientation is not accidental but central to the project's aim of reconfiguring sexual health discourse in ways that centre lived experience, vulnerability, and difference.

The initiatives and design of the V-Days project highlights the transformative potential of participatory methodologies in addressing issues of pelvic and vulvar pain. As thoroughly discussed in the sections above, this is a topic traditionally marginalized in both biomedical discourse and public debate. Through an interdisciplinary approach integrating action research, community-based participatory research, citizen science, and gamification, we have demonstrated how knowledge about vulvar and pelvic health can be collectively constructed and disseminated. These co-construction and dissemination practices can bring about both individual health improvements and broader societal changes towards a more equitable and less discriminatory healthcare access.

A valuable contribution of this project can be identified in the central role played by participatory methods in empowering individuals and communities by valuing both expert and lay knowledge. In addition, the involvement of patient advocacy groups, medical professionals, and student volunteers in the process fostered a horizontal communication model where all actors contributed to knowledge production, and to the promotion of different ways to represent and thus normalise the topics central to our project.

Working on representations means actively engaging with the meaning that we, as societies and communities, assign to elements making up our reality. Meanings are complex and can change in time, as well as across different contexts (see Kidd, 2016). Our initiatives represent an effort to promote different meanings for the vulva, as well as of vulvar and pelvic pain, than those that currently dominate public representations, heavily affected by sexist and sexualising perspectives, as well as by medicalising and economic ones. Thus, our effort is towards a healthier, more legitimised representation of this body part, its features and some little-acknowledged conditions that can affect it. Moreover, adopting a participatory approach like the one characterising this project is as well a political statement, whereby representations can be co-constructed through the collaboration of experts, patients, advocacy groups, associations and the wider audience.

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