

## Gameplay, learning and emotions in the board game *Violets: cinema & action in combating violence against women*

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**Abstract** *The board game Violets: cinema and action in combating violence against women was developed prioritising the liberating features of play to offer a setting for struggles to secure citizenship. The objective of the article was to examine the gameplay of Violets as regards players' understanding of the rules and engagement, and the game's mechanics and design; and to evaluate gameplay, emotions and learning comparatively as dimensions of play. This mixed method study proceeded in stages: a) perfecting gameplay: a workshop with 12 experts, usability tests with 33 participants and content analysis; and b) evaluating play: questionnaires for 78 participants and non-parametric Mann-Whitney U-test comparing groups of variables. Agreement among participants on aspects of gameplay was high. The group of gameplay variables returned values equal to those of the learning group; both differed significantly from the group for emotions felt while playing. In Violets, the interweave of gameplay with the formative, learning components set up a challenging, affective, symbolic field where players' imagination, interaction, tension and interest were expressed during play.*

**Key words** *Strategies, Education, Violence against women*

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## Introduction

Expressions of discriminatory, sexist, macho culture in norms that regulate social relations have worsened inequality between genders and rendered it complex, historical and structural. In view of the patriarchal values embedded in public agents' discourses, scientific production, culture and society, women continue to be blamed or morally constrained with regard to the aggressions they suffer. The State is implicated in the reproduction of violence, as attested by "invisible" forms of violence, which may be symbolic (that is, coercion based on non-conscious accords between people's objective and mental structures) and institutional (practised by commission or omission in public service provider institutions)<sup>1,2</sup>.

The violence against women that is renewed by health personnel, largely as a result of an authoritarian propensity, a lack of preparedness and the reproduction of moral judgments in health care, features widely in international and Brazilian scientific production. The situations where these aggressions mainly occur are reflected in: i) the silence that veils the cases that do reach health services and renders them invisible; ii) the weak accountability of health teams; iii) the gender stereotypes and moral constraints applied by professional practices; iv) the obstetric violence, insults and bullying against women (who are already victims) resulting from poor care; v) an ignorance of policies and approaches appropriate to caring for women who have suffered aggression; vi) health personnel's powerlessness when confronted with multifactor health situations; and vii) approaches limited to medical solutions to the problem; and others<sup>3-5</sup>.

The structural nature of this violence calls for social, educational and political approaches that surmount existing simplistic, superficial and linear manners of addressing the problems involved. The solutions proposed on a critical approach to addressing violence against women reflect pressures from social movements demanding inter-sector public policies in the societal, community, interpersonal and individual dimensions. Related scientific production corroborates the need to extend equity in power relations between men and women, which can be advanced primarily by pedagogical practices that problematise gender inequalities, especially in the training of personnel working in the services designed to address such violence<sup>1,6-8</sup>.

As concerns health system policies and practices, reviews suggest certain preconditions and

strategies for dealing with violence, which include: i) combating violence against women must be made a health policy priority; ii) approaches that are inter-sector, inter-institution and networked yield better outcomes; iii) the biomedical model is unsuited to addressing violence against women; iv) recommended approaches centre on power inequalities between genders and on critical theories that inspire political activism; v) women's movements are key to any gains; vi) investments are required in research, innovation and intervention assessments from a gender perspective; vii) there is a global consensus that continued professional development is needed in order for health personnel to identify, embrace, care for, refer, monitor and manage care for women who access health services; viii) assessments recommend active learning strategies; and ix) change is needed in training for health personnel in order to deconstruct gender stereotypes<sup>6-8</sup>.

Education with a critical perspective, which is able to counter the discursive practices that perpetrate violence visibly and invisibly, can be a strategy for strengthening women's voice and presence, so as to give us our turn and our say in public and private spaces with a view to assuring our citizenship. This is because the inventive characteristics of play dialogue with critical education and favour thoughtful, reflexive imagination as a counterpoint to traditional pedagogical approaches. As play is present in irreverent, disruptive and creative human relations, it was decided here to invest in a field for the production of meanings freed from disciplinary purposes, a field immersed in the singularities of those involved. In other words, pedagogical practices that draw on the experience of human free thinking are also playful, in that they play with the impossibility of the real, rendering it permeable to multiple interpretations and desires for change<sup>9-12</sup>.

By sidestepping more rigid conceptions (which constrain its uncertain quality), play finds expression in different manners in culture. The conception of play expressed in classical references transits, irreverently and unpredictably, between rules and subversion; between fiction and imagination; between relaxation and tension; between pleasure and pain; and between spontaneity and disciplined human action. These components generate, multiply and eliminate images, symbols and interpretations of the world, expanding the range of human experiences imbued with meanings and creative possibilities<sup>9-12</sup>.

However, the positivist scientific production on the subject of games limits the critical devel-

opment of those involved, in that: a) the meaning of the experience is nullified and subsumed to mere experiment; b) a purported axiological neutrality is attributed to scientific discourse cloaked in the incontestable power of evidence, which reifies domains immune to criticism; c) the libertarian qualities of play are precluded, either by relegating fun in favour of disciplined learning or by reducing any sense of *agon* (struggle, dispute) to mere artificial sensations of immersion confined to the power of technique. By contrast, the experience of being reinvigorated by play is precisely a refusal to repeat that remains beyond the reach of attempts to control the variables. To experiment, in the playful sense of interest here, is to open oneself to what is not repeated, to what unsettles and exasperates just as it completes us and causes us to brim over with what is new. This more intense sense of experience means delving deeper into passions, into the tension between pain and pleasure, allowing oneself to fall captive ambiguously to what enslaves and liberates. Such a conception of play hinges on laughter, on an ironic and ambiguous confrontation with what is “serious”, in a freer and more autonomous manner of dealing with the spontaneous universe of human interplay<sup>11-14</sup>.

In an attempt to combine the autonomy of game characteristics with reflexive education, a game board was designed in the form of a compass rose on which Brazilian municipalities with women’s names recall the power of things feminine and serve as environments for disputes for citizenship. Players take on roles as characters in services that address violence against women (legal operators, educators and researchers, militants in the women’s movement, public policy agents and health care personnel). This team has a mission: to collaborate to contain the violence (represented by cards) that is spreading through Brazilian towns and cities (named on the compass rose design that forms the game board). This happens whenever players draw “omission cards” that reinforce gender stereotypes (macho sayings, such as: “Feminism only lasts until the first flat tyre”) or when they are ignorant of matters relating to violence against women (answer the questions wrong). The imaginative abstraction of this game dialogues with scenes from films to frame the challenges; that is, in the context given by selected scenes, players answer questions about policies and practices for tackling violence against women. In the event that participants are unable to answer the questions or to act as a team to put an end to the violence (which increases as

omission cards are drawn), they all immediately lose to the board. Victory is achieved if the violence is combated by the players acting collaboratively.

The game *Violets: cinema and action in combating violence against women* was fashioned from the inventive force of play as an ambience for reflecting on struggles for, and the attainment of, citizenship for women. It prioritises play and provides for it to be expressed as freely as possible from disciplinary and content-bound purposes, by means of gameplay that sets up a symbolic field immersed in the libertarian characteristics of the game. In the course of the game, the gameplay – a concept from the design field – investigates the specifics of the player’s lived experience and what resources may favour it<sup>13-16</sup>.

This study is justified by how important the development of games centred on the autonomous characteristics of play is to the training of professionals, as a reflexive strategy towards gender inequalities that violate women. It is argued here that playfulness (the imaginative, free and reflexive reinvention of experiences shaped ambiguously in the emotions of pleasure and tension in the game) is expressed in its gameplay (if it is dynamic, interactive, inventive, reproducible and offers a sufficient degree of completion to hold players’ interest), and in players’ emotions and learning during the games.

The central concern of this article is that the gameplay of *Violets* stimulates players’ imagination, reflection, interaction, tension and interest during play. The study objectives were: i) to examine the gameplay of *Violets* as regards players’ understanding of the rules and involvement and the game’s mechanics and design; and ii) to compare and evaluate the dimensions “gameplay”, “emotions experienced in play” and “formative learning” as expressions of what it is to play the game. This study forms the second part of research funded by the CNPq.

## Methodology

The study used exploratory sequential mixed methods, as recommended in game production. First, qualitative aspects of *Violets*’ gameplay were explored so as to improve the game. A quantitative approach then informed comparative assessment of blocks of variables that constitute the dimensions of play investigated: gameplay, emotions and learning during the game. *Ludic Self-reinvention* was taken as a frame of reference

for the game production methodology, because it prioritises the centrality of imaginative components that help build critical subjectivities in players. Accordingly, the questions asked in this type of production are usually inverted, given the interest in framing participants' thinking processes by means of the constructive and disruptive forces of play, rather than disciplining them for behavioural purposes. In *Ludic Self-reinvention*, game production comprises three stages: a - theoretical conception of the game; b - refinement and evaluation of gameplay; and c - validation of the construct/criterion of play. This article presents the results from the second stage<sup>13,17,18</sup>.

### Qualitative refinement of gameplay in *Violets*

Once *Violets* had been designed and internal tests were performed to adjust the prototype, gameplay was assessed in a two-stage qualitative investigation. First, a workshop was held, in the adapted format of a deliberative dialogue, with 12 experts in the field of gender and violence against women (law operators, educators, researchers, health personnel, public policy agents, militants of the women's movement), corresponding to the characters in *Violets*. This method involved purposeful conversations with stakeholders invited to offer opinions on aspects in their special field. The deliberative process stimulated shared production of specific knowledge on a given topic or systematic production on a subject, which then informed the endeavour to refine the game<sup>19</sup>.

The participants in this expert workshop, divided into three subgroups, played a test game of *Violets* with no help from the research team to understand the rules. This was followed by discussions in a single group, where the guests were asked for their opinions on the following aspects of play: understanding the rules, the mechanics, player involvement in the game and the game's design. The discussions were recorded and annotated by members of the research team, who produced summaries, which were read out loud to the participants, so as to correct them and adjust them to the group's records.

The game was then adjusted and nine usability tests were performed with specific groups, using video cameras to monitor the games. In this way, 33 participants (students, health personnel, educators, researchers and people active in public policy and the women's movement) played nine test games (playtests), one after the other, in a room monitored by video and observed by

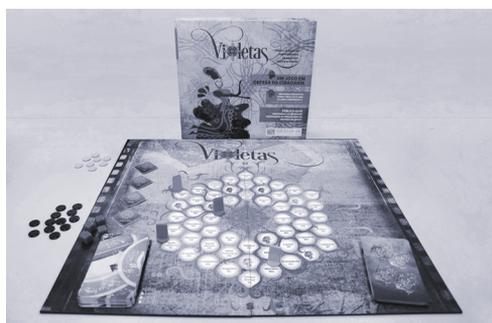
the team from another room. Usability tests have their origin in the design field and are performed in the production of games of all formats. The technique is invaluable for adjusting gameplay, because they enable player involvement, interaction and difficulties to be observed during the game. Observation of the nine usability tests followed a script developed from references in the design and software engineering field, with the variables: a - completion and reproducibility; b - understanding of the rules; c - involvement; d - challenges of the game; e - opinions of the cards; and f - field diary<sup>20,21</sup>.

Data systematisation contemplated the 10 games of this stage (one during the expert workshop and the nine usability tests monitored by video). The research corpus thus corresponded to these 10 scenarios. Content analysis considered the following material: audio recordings of the expert opinions and related summaries; and the recordings of the video monitoring script for the nine usability tests. Empirical categories were extracted from the material, quantified and presented with brief examples from the opinions and the observations ratifying them<sup>22</sup>.

### Comparative analysis of gameplay, emotions and learning during the games

After the qualitative stage, *Violets* was further adjusted, which included finalising the graphic design, bringing it closer to the final version (Figure 1). The following, quantitative stage was conducted with group playtests in classrooms at the *Universidade de Brasília* (UnB), between May and November 2015, in a pilot sample of 78 participants (undergraduate students in the fields of Health, Social Services and Anthropology). After the games, players responded to a closed, 53-item questionnaire evaluating play by way of their degree of agreement on a Likert scale validated in earlier studies<sup>23</sup>.

In view of the objectives and underlying assumptions of this study, a set of 33 variables was selected from the questionnaire in order to evaluate the play in *Violets*. The variables were distributed (Table 1) into: a - gameplay (play environment); b - learning components (transformative learning by players and learning tending to transform social relations, in a critical formative context); c - emotions (affects that mobilise) experienced by players during the game. These dimensions and variables were chosen on the following criteria: i) alignment with the theoretical frame of reference given by *Ludic Self-reinvention*



**Figure 1.** The board game *Violetas: cinema & action in combating violence against women*.

Source: Elaborated by the authors.

and with the study objectives; ii) constructs and variables recognised to be significant and/or validated in the literature on games; iii) playability heuristics recommended in related scientific production; and iv) results from the qualitative stage of this study<sup>9,13,15,16,18,21,24,25</sup>.

The dataset was built up using the statistical package of Excel for Windows, with double entries, followed by checking and unification of the files. The data were transposed to IMB-SPSS software, version 22, for the statistical analyses. Descriptive analysis of the 33 variables took the form of frequencies, percentages and measures of central tendency (medians). Play – expressed in the gameplay, learning and emotions experienced while playing the game – was evaluated by statistical comparison of the respective medians for each dimension. For that purpose, the variables were formatted in such a way that all the questions were scored in the same direction, with higher scores on the Likert scale indicating greater gameplay, learning or emotions during play. The values for each dimension were then grouped in three groups of composite variables (gameplay, learning, emotions) and the medians were recalculated. The non-parametric Mann-Whitney U test was used to compare the groups, two by two. After examining dispersion by Box Plot, the variables in Group 1 (gameplay) were assessed for significant relations with Group 2 (learning) and Group 3 (emotions). A 5% significance level was considered for the U test ( $p=0.05$ ). Non-parametric tests are recommended where variables do not return a normal distribution and the Mann-Whitney U test is indicated for comparing two non-paired groups. Both cri-

teria apply to this study, given the characteristics of the pilot sample and the objectives of this stage of the study<sup>26</sup>.

The study follows the guidelines of Brazil's National Health Council (CNS) and was approved by the research ethics committee of the UnB Health Sciences Department. All participants signed a declaration of free, informed consent.

## Results

### Improving the gameplay of *Violetas*

The mean time taken to read the rules was 25 minutes and to play the game, 90 minutes. Of the 10 games (each group played one game lasting a mean 90 minutes), 3 groups won, 2 lost to the board and 5 did not finish because of participants' other commitments. In the empirical categories extracted regarding understanding the rules, players were in doubt about the basic commands of *Violetas* in three games (30%), but those difficulties dissipated after reading the rules (50%) or were understood quickly (20%). The game's cooperative nature contributed to player involvement (50%), amid feelings of pleasure and tension in the game (40%). The design was considered aesthetically pleasing and was praised (70%). Positive opinions highlighted *Violetas*' "omission cards", which increase violence on the board, as well as the film scenes, which frame the questions. The game was considered complex and difficult to varying degrees in half the games played (Chart 1).

### Gameplay, learning and emotions in the games of *Violetas*

The 78 respondents to the questionnaire were mainly women (92%) from 18 to 23 years old (82.7%) or 23 to 29 years old (13%), undergraduate students (95%) of Nursing (48.7%), Social Services (23%) or Humanities (Law, Public Policy Administration, History, Pedagogy and others) (22.28%), and some were graduates or postgraduate students (3.8%).

In the descriptive analysis, the median score for players' assessment of *Violetas*' gameplay was 5.0, the maximum value on the Likert scale. That tendency was repeated in the high degree of agreement on the game's design (96.2%), on finding something interesting in the game that caught players' attention (89.9%), wanting to

play again (83.6%) and the perception that performance improved in the course of play (81%). The median for variables reflecting players' involvement in the game was high (4.0): many reported disconnecting from what was going on around them (65.7%), feeling more absorbed by the game environment (68.4%) and finding that the challenges held their attention (67.1%). Nonetheless, some found it hard to concentrate on the text of the cards (31.7%). Median scores for the formative learning components were the highest possible on the scale (med=5.0). Players declared that they interacted actively with other players (91.1%), associated the game with other things (88.7%), found that *Violets* facilitated

their learning (86.1%), reflected on the challenges they faced in their lives (82.3%), learned surprising things from the game (76%) and that their interest in the problem increased after playing the game (76%). As shown in Table 1, few thought that the game inhibited participation in the group (8.8%), were indifferent to what they learned (5.1%) or found that the text of the cards impaired their learning (13.9%).

The median score for emotions felt during the game was also high (med=4.0), following the tendency for the other dimensions of play assessed. The maximum possible median (med=5.0) was scored by those who liked the game (87.4%), had fun (83.6%), were motivated

**Chart 1.** Empirical categories extracted from the playtests of the game *Violets*, by variables and frequency of opinions and observations during the games. May-December, 2015.

	Empirical categories	Games (G) n (%)	Examples of opinions (O) and observations (OB)
Understanding the rules	Doubts about basic commands that impaired gameplay	3 (30)	G9 (O) " <i>After we understood, it was easy</i> ". G10(O) "[...] <i>the point is that it's a much more complex game and that is the game's great asset. If it were a much simpler game, I think that would be lost</i> "
	Initial difficulties in understanding the rules, but the game flowed after rereading	5 (50)	G3(O) " <i>The rules were no trouble, but we struggled with the strategy</i> ". G1(OB1) Doubts about the purpose of the citizens-network pieces and impatience during the reading of the rules.
	Rules quickly understood	2 (20)	G9(OB3) It was difficult to understand what to do with the pieces, particularly the citizen-violets. The participants reread the rules and advanced in the game.
Involvement in the game	The cooperative and strategic nature of the game contributed to player involvement	6 (60)	G10(O) " <i>One really good thing is that it is not a competitive game, but a cooperative game, where it is the group that wins. Actually, the game is fun when you understand the logic, so much so that when our group lost I said 'Let's play again, now we understand'. It made me want to play again and, this time, to play properly by the rules</i> ".
	Ambiguities among player pleasure, tension, immersion, boredom during the game	4 (40)	G3(O) " <i>Once you start to play, it gets really interesting</i> ". G5(OB1) Rebukes on reading the omission card "suck and see". G10(O) " <i>The material serves for a more general education, because works with cinema, a repertoire, a universal language</i> ".
Challenges of the game	Omission cards helped keep the game challenging and tense	5 (50)	G10(O) " <i>The omission cards made you uncomfortable. If that was what you wanted, you managed it. When you read them, it's a cliché, something so ingrained... it's the opposite of everything you want. I felt uncomfortable</i> ".
		5 (50)	G10(O) " <i>I also thought the omission cards were fantastic, because they bring out the thing with jokes. [...] But then, when you hear something that's so common, that you don't react most times, when you hear a joke or slang and there's a violence implicit, that's really unsettling and useful</i> ". G3(O) " <i>It's really tense, because when you get it wrong, the violence increases</i> ".
Total games n (%)		10 (100)	

Source: Research database.

to continue in the game (82.3%), felt a desire to win and a sense of fulfilment with the victories in the game (77.3%). Medians of 4.0 were scored by responses of feeling, during the game, relaxed (74.7%), anxious (54.5%), a mixture of relaxation and tension (54.4%), discouraged by the challenges (24.1%), wanting to leave (24.1%) or feeling bored (17.4%). Some players were made tense (43%) or irritated by some things in the game (38%) (Table 1).

In exploratory analysis of the three groups of variables relating to the dimensions of play, the Boxplot revealed a high median for learning (5.0), in comparison with gameplay (4.0) and emotions felt during the game (4.0), when these were considered as three composite blocks of variables. The dispersion of each of these groups ranged from 3 to 5 on the Likert scale and was relatively balanced among them. On the Boxplot, the values ranged from 1 to 5 (minimum and maximum), but 50% of the central data lay within the box (from 3 to 5) and were right-skewed (Graph 1).

Comparative evaluation of the variables by the Mann-Whitney U test showed that there were no statistically significant differences when gameplay was compared with learning (U test=218810.50,  $p=0.668$ ). There was, however, a significant 1% difference when gameplay was compared with emotions felt during the game (U test=333441.000,  $p=0.000$ ) and when learning was compared with emotions (U test=648440.00;  $p=0.000$ ), which revealed a distinction between these groups of variables. As a result, the gameplay variables returned values significantly equal to those for learning, forming a single Group 1 (Learning/Gameplay). However, this group was significantly different from Group 2 (Emotions), which comprised exclusively variables corresponding to affects (Chart 2).

## Discussion

The games played by experts and the nine usability playtests enabled *Violets* gameplay to be gradually improved, especially as regards the game's reproducibility and completability, mechanics, player involvement and understanding the rules. Given the game's cooperative and strategic nature, one of the aspects needing adjustment was the degree of difficulty, so as to make it sufficiently engaging and difficult as to keep players motivated to beat the board together. In that respect, the omission cards, by posing challenges and

producing tension, were particularly important in gameplay in *Violets*. These cards contain popular sexist sayings and expressions, such as "You agree without knowing it: It's beauty parlours that like ugly women". Once drawn from the pile, they immediately and irreversibly raise the level of violence on the board, prompting strong emotional reactions. They have dual impact on the game: i) they increase tension and difficulty, given the imminent risk of defeat for all involved; and ii) they draw attention to structural and symbolic forms of violence against women naturalised in common everyday phrases. Both characteristics were amply observed, remarked on and discussed by participants in this stage. The surprise of defeat, reflected in the remark "*Let's play again now we understand!*" (Chart 1), illustrates involvement and desire to win the game. Those requirements were stressed during work to improve gameplay<sup>21,24</sup>.

Also in the qualitative stage, content analysis showed central aspects of gameplay – involvement in the game; particular mention of the strategy and cooperation components in maintaining interest; the ambiguities between feelings of pleasure and tension; the mounting challenges as motivating play; and the alluring aesthetics of *Violets*' graphic design – to be favourably assessed by participants. These characteristics emerged in the course of play, as participants came to understand the rules and mechanics of the game. What were considered complex rules and difficult gameplay were certainly discouraging factors and were monitored at each game, with a view to gradually improving them so that they should not constitute a barrier to gameplay<sup>16,18</sup>.

As regards difficulty in understanding the rules, certain contextual factors must be mentioned. Firstly, violence is a complex phenomenon and difficult to approach and, accordingly, it was decided to design a game that provided a setting on a par with the challenges involved in combating violence, especially as regards emotional lability. An endeavour was made to avoid a dual risk: i) of unduly trivialising the serious aggression that women suffer and its severe repercussions; and ii) over-stressing the importance of violence, to the point of overriding any relaxation and playfulness. The solution was to create a modern type of board game (a Eurogame), in which strategy and cooperation were more important than luck (Alea)<sup>11,27</sup>.

Now, with the exception of certain niche houses specialising in modern-type games, which are restricted to major cities, game culture

**Table 1.** Play of Violetas. by gameplay. learning and emotions players felt during the game. Brasília. Nov 2015.

Variables by dimension of play	Degree of agreement			Median
	Disagree	Indifferent	Agree	
	n (%)	n (%)	n (%)	
Gameplay				5
I disconnected from what was going on around me when I played	10(12.7)	17(21.5)	52(65.8)	4
I felt I was more in the game environment than in the real world	10(12.7)	15(19)	54(68.4)	4
There was something interesting in the game that held my attention	4(5.1)	4(5.1)	71(89.9)	5
The game's design caught my attention	3(3.8)	0(0)	76(96.2)	5
The game posed new challenges at a rate that held my attention	8(10.2)	18(22.8)	53(67.1)	4
I would play this game again	13(16.5)	15(19)	66(83.6)	5
My performance improved as the game progressed	7(8.8)	8(10.1)	64(81)	5
I had difficulty concentrating on the text of the cards	36(45.6)	18(22.8)	25(31.7)	3
Formative learning components				5
The game favoured my learning	4(5.1)	7(8.9)	68(86.1)	5
After this game, my interest in the content increased	1(1.3)	18(22.8)	60(76)	5
I interacted actively with my colleagues during the game	2(2.5)	5(6.3)	72(91.1)	5
I associated the game's content with other things	4(5.1)	5(6.3)	70(88.7)	5
The game inhibited my participation in the group	62(78.4)	10(12.7)	7(8.8)	5
The game made no difference to my learning	71(89.8)	4(5.1)	4(5.1)	5
The difficulty with the cards impaired my learning	50(63.3)	18(22.8)	11(13.9)	4
Durante a partida, refleti sobre os desafios que enfrentamos na vida	4(5.1)	10(12.7)	65(82.3)	5
In learned surprising things from the game	7(8.8)	12(15.2)	60(76)	5
Emotions felt during the game				4
I wanted to win the game	5(6.3)	12(15.2)	62(78.5)	5
I wanted to leave the game	50(63.3)	10(12.7)	19(24.1)	4
I had fun playing the game	6(7.6)	7(8.9)	66(83.6)	5
The game made me tense	28(35.5)	17(21.5)	33(43)	3
I liked the game	5(6.4)	5(6.3)	69(87.4)	5
The game made me anxious	14(17.7)	22(27.8)	43(54.5)	4
The game kept me motivated to continue playing	4(5.1)	10(12.7)	65(82.3)	5
The challenges of the game discouraged me from playing	41(51.9)	17(21.5)	21(26.6)	4
I found the game too long	19(24.1)	22(27.8)	38(48.1)	3
I got bored with the game	51(64.5)	14(17.7)	14(17.7)	4
Some things in the game irritated me	40(50.6)	9(11.4)	30(38)	3
I relaxed during the game	7(8.9)	13(16.5)	59(74.7)	4
The game did not cause me any emotion	61(77.2)	10(12.7)	8(10.1)	4
I felt a mixture of relaxation and tension during the game	21(26.6)	15(19)	43(54.4)	4
I felt inept for not being able to answer the questions	53(67.1)	8(10.1)	18(22.8)	4
The victories in the game were fulfilling	9(11.4)	9(11.4)	61(77.3)	5

Source: Research database.

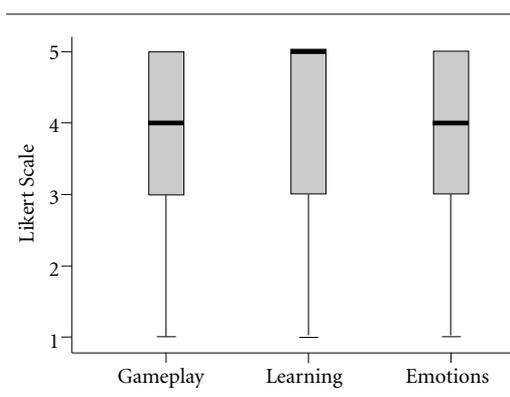
in Brazil centres predominantly on traditional board games following predefined tracks and moved by dice throws. *Violets* breaks with those expectations of a game with linear progression hinging on luck. It constitutes something quite different from what is normally seen (which is its great attraction) and from prior experiences of playing, especially among the female public. What must also be considered is the restrictive misogyny present in gamer culture (among frequent and habitual gamers), as amply demonstrated in research on the subject, which hinders women's gaining familiarity and skill with games. That given, it was found that the time it took for

the gameplay and symbolic fields of *Violets* to become clearly established among the participants depended on the existence of these factors among the participants<sup>24,27-29</sup>.

As with all games, a natural learning process was involved: the usability tests indicated that, depending on each group's profile and performance, the difficulties in understanding the game were overcome as the players entered into the game universe and as the game's gameplay was progressively improved. Participants who were younger or were more familiar with games were quicker to understand the rules and, accordingly, became immersed faster. At the end of this stage, the gameplay heuristics were established, making it possible to proceed on to evaluating play, in the interweave of the dimensions of learning, gameplay and the emotions felt during game<sup>18,24,28,29</sup>.

The results from the quantitative phase ratified the qualitative findings, expanding them with other complementary perspectives. As regards the gameplay of *Violets*, the characteristics that stood out were players' immersion, performance and interest in the game and its aesthetic allure. When the interweave of gameplay with learning in the game was considered, as attested by the statistical comparison of these groups of variables, the component "interaction", which was common to gameplay, stood out equally in the evaluations of learning. Given the importance of the game environment required for this study, this inseparability of interaction with the game from the learning processes experienced by participants indicated a mingling between gameplay and the intended critical education. Those results suggested that the tension set up around the board between (imaginative) free play and (regulated) instrumental play favoured learning arising from participants' associations with other things, their reflection on life's challenges, greater interest in the subject of gender and surprising discoveries during the game. In other words, the "as-if" of *Violets* – the expression indicates that the game involves interaction between fiction and imagination – simulates an arena for disputes between forms of violence and of citizenship, with no clear-cut ending and multiple interpretative possibilities open to participants<sup>12,14</sup>.

Given this mix of meanings between playing and learning, the conception of education prioritised here is what emerges from the interweave among affect, formation and critical resistance. In a possible synthesis among these elements, it is argued here that experience is important in the production of imaginative, unique, passion-



**Graph 1.** Exploratory comparative dispersion of variables grouped in the dimensions gameplay, learning and emotions felt during the games. Brasília, Oct 2019.

Source: Research database.

**Chart 2.** Comparison of the groups of variables for gameplay, learning and emotions felt during the game, by Mann-Whitney U test. Brasília, Oct 2019.

Groups	
1	2
Learning	
Gameplay	
	Emotions

Note: Dimensions equal within the group to a 10% level of significance. Group 1: Learning/Gameplay: U test=218810.50, p=0.668; Group 2: Gameplay/Emotions: U Teste=333441.000, p=0.000; Learning/Emotions: U Test=648440.00; p=0.000.

Source: Research database.

ate and engaged learning able to enhance critical discursive practices. The affective formation of resistance – combined with the understanding of experience as affective thinking that produces unexpected meanings – presupposes an inseparable connection among the propensity for thinking, feelings and political practice. These transgressive affects are forged from an educational perspective that combines singularities with theoretical analyses, making it possible to think, feel and rebuild more broadly. In an endeavour to connect feminist thinking with liberation theory, the theoretical production recommends that pains and suffering be voiced and experienced – both so as to narrow the gap between theory and practice and so that, in practice, they become cure and political resistance<sup>9,30</sup>.

How though is it possible to “speak out our pain” in a game, while still maintaining its characteristics as play? How can the superficiality of the unipolar, positivised emotions of “gamification” – pilferer of critical meanings – be surpassed while keeping the liberating characteristics of the game alive? How can an open field be produced where affects can mobilise deeper feelings (such as anxiety) freely in their provocative tension with emotions, around a simple gameboard with a compass-rose design (Figure 1)? How, in a game, can the sensations of pleasure and pain be made to open up cracks in experience in the endeavour to trigger thinking that is affective, uncertain, surprising and – why not? – transgressive?

In *Violets*, the endeavour to address these concerns is framed by a dialogue between scenes from films and the thematic issues posed to players, “as if” it were a backdrop to the attainment of citizenship for women. This strategy was found to interlace the characteristics of gameplay and the learning constructed by those involved, thus

awakening other interests and motivations that enhance play, amid sensations of pleasure and tension in the game. It is no coincidence that the slippage of the group of variables for emotions felt during the game – which, in his study, was distinguished from gameplay and learning – points to this intended ambiguity of affects, leaving them scope for other possible and emotional “free play” around the board. This result suggested that *Violets* makes room for feelings to play with our attempts to imprison them objectively, freeing up meanings that are not grasped by statistics, but are necessary for interpretations that are imaginative, reflexive, critical and excited to be produced in the players<sup>9-16</sup>.

## Conclusion

In the game *Violets*, the interweave between gameplay and the formative components of learning makes it possible to set up a challenging, affective, symbolic field where players’ imagination, interaction, tension and interest are expressed during play. In the process, by their thinking about combating violence against women, the possibilities of what they experience there are amplified and aligned with the premises of critical education, creativity and political engagement. By investing in the subversive elements of play as an open, disruptive environment that stimulates participants, *Violets* breaks with the linear, content-bound expectations of scientific production about games, and inverts the premises epistemologically in favour of the freer, imprecise and emotive elements of play. As a result, the restlessness of play, the reinvention of learning and the ambiguity of emotions are brought out unpredictably in *Violets*, without a single dice being present on the board.

## Collaborations

MRGM Pires worked in the conception, research and development of the article overall. AN Almeida performed the statistical data analysis and contributed to the discussions. LBD Gottens, RNG Oliveira and RMGS Fonseca carried out the critical revision and made additional contributions to the text.

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