Role Playing Game (RPG) on nursing undergraduate course: educational potentials

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ABSTRACT

The objective of this study was to evaluate the potential of a Role Playing Game as an educational strategy in Undergraduate Nursing course, emphasizing its subjective implications in understanding aspects of the profession. This is a qualitative study, conducted through an evaluative research, of deployment analysis type. Nursing students of the 3rd period participated. The instrument to collection was Memories of Game, reports prepared by students after game sessions. The game is a non-traditional educational strategy that enabled approach to students through professional practice, active participation, self-reflection and reflection on professional practice. This strategy favored individualization processes, allowing students to experience situations similar to the nursing practice and exercise skills such as teamwork and creativity. The expansion of studies that address the subjective processes in higher education, through simulation games, can contribute to better design of health development processes.

Descriptors: Education, Nursing; Teaching Materials; Educational Technology; Play and Playthings.

INTRODUCTION

The National Curriculum Guidelines for Undergraduate Nursing Course (DCN/ENF) guide the (re)signification of educational strategies used in nursing training. This is because there is a prevalence of traditional educational strategies, guided by the reproduction of knowledge over the critical, reflexive construction¹.

As the DCN/ENF, it is important that the educational strategies are guided in a dialogic and interactional design, in which the students actively participate in the construction of knowledge, and the
teacher creates and offers challenging situations that encourage the questioning and the search for knowledge\(^{(1)}\).

In this sense, the games can be facilitators of the teaching-learning process. Defined as a free action lived in a fictional order\(^{(2)}\), the game can be a strategy capable of fostering dialogue, autonomy, joint construction of knowledge, the creation of challenging and reflective environments\(^{(3)}\), practice of skills and better acquisition of content\(^{(4)}\).

In undergraduate Nursing course, the use of games is identified in different national and international experiences\(^{(3,5-8)}\), although it is often directed to the effects of the acquisition of knowledge and clinical skills of the students\(^{(3)}\). Simulation games, characterized by the incorporation of character and illusive reality and the combination of action and invention\(^{(9)}\), are also often aimed at improving knowledge and clinical skills\(^{(10)}\)-\(^{(11)}\). Attention to subjective implications of the game in the understanding of health dimensions involved in the profession and on aspects that characterize the situations experienced by nurses in professional practice is unusual.

Noticing the subjective implications means giving visibility to the effects produced by the game that affect the players, causing them to connect with their emotions and experiences and making new meanings about training and profession. For being illusory and inventive, it is believed that a simulation game, as the Role Playing Game (RPG), can go beyond the emphasis on knowledge and skills. It may favor the production of subjective implications that, when revealed, potentiate reflection on nursing training.

Thus, in this study we tried to assess the potential of a RPG game as an educational strategy in Undergraduate Nursing course, emphasizing its subjective implications in understanding aspects of the profession.

**METHOD**

This is a qualitative study, conducted through an evaluative research, of deployment analysis type. The analysis of the implementation is intended to study the relationship between an intervention and its context during its implementation. With this type of analysis, we aimed to the identification of the relationships between the game context and its effects, allowing the appreciation of how, in a particular context, intervention has caused changes\(^{(12)}\).

This research was held in the School of Nursing of a public university in the state of Minas Gerais. In the last change of the Undergraduate Nursing Course in this university, a set of disciplines was developed, entitled Seminars of Integration, in order to address issues of nursing training as well as understanding of its activities and the development of critical and reflective thinking.

RPG game was implemented and assessed in the context of these disciplines, between May and June 2012. Participants were students of Undergraduate nursing course. Inclusion criteria were: belonging to the 3rd period and be regularly enrolled in the Seminars A and B and the exclusion criterion was refusing to participate in the study. All students enrolled in the course participated in the game, and the participation in

the research was voluntary.

RPG is a role-play game, defined as a cooperative activity in which a group of players, led by a master (narrator), creates an oral, written or animated story\(^{(13)}\). In higher education, RPG allows the exercise of decision-making, reasoning, imagination, cooperation, interaction and building concepts\(^{(13-14)}\).

The assessed RPG game, entitled "Order of Ers", was developed by a multidisciplinary team consisting of a PhD in Education, a PhD in Health Sciences, a psychologist, a nurse, a Nursing undergraduate student and two RPG specialists. Its creation process, lasting six months, involved the steps of setting the game design; prototype creation; assessment of its dynamics by RPG players; and preparation of masters\(^{(15)}\).

"The Order of Ers" is a reality metaphor of the student of Nursing undergraduate course before the main nursing work scenarios – primary care, hospital care, management and education-research. This metaphor is represented by a fictional story that describes the journey of a group of learners who should help maintain the well-being of the population of their kingdom after a war. In this context, students create a character (picture, name, age, story and skills) to represent it in the game and are invited to experience problem situations that portray the nurse reality in the main practice settings, called in the game as the House of the Helpers, the repairers, of the Sustainers and of the Trainers. These denominations correspond, respectively, to the scenarios presented above, and their suffixes, "Ers", gave rise to the name of the game. Situations experienced in these Houses are narrated in the game by the master and for each of them students must build resolutions together.

The game was applied to groups of six students, in six two-hour sessions, weekly. Each group was led by a trained master. After participating in each session, students wrote one page, called Memories of Game, and sent in a period of 24 hours. The guidance was for them to refer regarding their impressions about the situations experienced, the feelings and exercised skills.

These Memories of Game were the data collection instrument of this research. The texts of Memories were analyzed using the content analysis considering the pre-analysis steps, which were organized by fluctuating readings; material exploration, from which encoding and data categorization were developed; and interpretation, which led the search for patterns\(^{(16)}\).

In this study the requirements of Brazilian law for research with human beings were considered, with the approval of the Research Ethics Committee (CAAE: 04827712.3.0000.5149). Students who have expressed interest to participate signed the Free and Clarified Consent Term after collective reading and clarifications to the researchers. To ensure anonymity, the students are identified by the letter "S" followed by a number that designates them.

**RESULTS**

In the game evaluation 32 students participated, of which 29 women (90.6%), aged between 18 and 30 years old (average: 20.6 years, SD: 2.74). The majority of participants had joined one and a half year before the study (81%), while the other students had joined one (16%) or two years before (3%).

In the analysis of the Memories of Game, five categories appeared, among which the category "Educational potential" stands out, composed of four sub-categories: (1) the game as a means of approach to professional practice; (2) as a non-traditional and playful educational strategy; (3) as a strategy that promotes active participation; (4) as a strategy that promotes self-reflection and reflection on the future professional practice.

**The game as a means of approach to professional practice**

This subcategory addressed the students' perception about the possibility of approaching the professional practice through the game. This approach was due to the experience of similar situations of the nursing practice and by the training of important skills for professional performance.

Regarding the experience of situations occurring in the nurse's day-to-day: *it was proposed the challenge of helping an injured boy to treat himself and address his psychological and family matter. Everything made sense to me; those are situations very likely to happen in professional practice* (S20).

This example portrays the students' understanding of the psychological and family approach, associated with physical care, such as the nurse practice process.

In the game, the situations of the daily working experience appeared without fear of error: *this game makes us handle these situations without fear of making mistakes. The game is the moment to make mistakes, because in our professional lives making mistakes can cost lives* (S22).

The game provided an opportunity to approach the practice situations with room for error, unlike the professional reality.

As for the practice of skills, teamwork was the main skill practiced in the game: *the game teaches us a fundamental practice to our profession: to work as a team* (S9).

Decision-making, reasoning and creativity skills were also highlighted: *it was remarkable how a simple game could develop in a short period both my reasoning and decision making* (S31). *Each game day we exercise more our creativity* (S17).

Students have recognized many skills in the game, highlighting the practice of experiencing the decision making processes and the creativity proposed in the situations.

**The game as a non-traditional and playful educational strategy**

This subcategory addressed the students' perception about the possibility of experiencing a game at undergraduate course, which represented an innovation of the used strategies and the possibility of introducing playful teaching:

*It is very different from the conventional learning and I believe it can work* (S26).

*This first day of play showed that we have the opportunity to disconnect ourselves a bit from the college requirements and have fun, even through a discipline that tells us much about professional nursing reality* (S10).
The playfulness seemed to be relevant by moving the students' demanding academic reality for fun moments that approach them to professional practice.

Additionally, fantasy and art, linked to the game, were highlighted: *I believe that fantasy and art have a lot to say and have a special power to touch people. Learning by playing makes the experience real and more striking than if it were in a "technical" way, using common methods that we are tired of doing* (S14).

It was stressed that less technical strategies, with fantasy and art, act on the subjectivity and capture students' individualization.

**The game as an educational strategy that promotes active participation**

This subcategory addressed the students' perception about the need for them to participate actively. For the game development, the students pointed out that participation and active involvement is needed: *we had to participate and our resourcefulness was necessary to carry on with the game; even with a master, he would not give us the resolution, it was our mission to solve the problem* (S11).

The game was an invitation to the active and subjective implication, in situations and their resolutions.

**The game as an educational strategy that promotes self-reflection and reflection on the future professional practice**

This subcategory addressed the students' perception about the possibilities of the game to encourage self-reflection and reflection on the future professional practice. As for self-reflection, the game favored the self-projection in the situations and in the characters. As for reflection on the performance, the students were able to (re)think feelings and attitudes as future nurses.

On self-reflection, it was observed that the projection in the situations and characters has enable (re)knowledge of the characteristics and skills:

*The "parents" reaction moved me; I began to think of his father's disappointment, because if it had happened to me there would be shame and anger for disappointing my father that way...* (S1).

*My character sometimes used skills that were not her own, but mine... it made me think that I was often not acting like her, but as myself...* (S25).

This indicates that the game was an experience that exercised direct action on subjectivity and made it possible the displacement of students in directions that could be life itself.

The game also allowed the connection with wishes for future action: *this situation deals with questions about education and production of knowledge, which does not seem to have to do with me* (S26).

By promoting the knowledge of different acting areas, the game gave rise to (re)knowledge of the (un)desired professional future.

As the reflection on future performance, the students highlighted aspects related to the patient approach and the own professional development:
The situation made clear the issue of holism, the importance of the nurse not being focused only in the clinic, but on the whole (S14).

Something called my attention; it was the lack of communication skills, because we had knowledge but no enough skill when we had to communicate it (S3).

This shows that the game allowed the reflection on the importance of the patients’ approach in their entirety as well as the need of communication in nursing work.

Students also stressed the importance of knowing how to deal with frustration and the difficulties they face:

Just as in professional life, these failures cause frustration, but also great opportunity of increasing our experiences (S10).

We often finish our studies at the University willing to work things out, but then the system prevents us to do something innovative or repairer (S20).

There is, in the students’ perception, a possibility of growth in the face of frustrations and a gap between the academic life and professional practice.

It also appeared the importance of the multidisciplinary team for health assistance and communication with deaf patients:

This phase enabled me to associate the importance of various types of professionals who can work in teams (S3).

Knowledge in relation to sign language is of great importance to us, because we find ourselves with different types of people, including the deaf (S31).

The second example shows that the game favored the development of perception on the provision of care, considering the individualization of people.

**DISCUSSION**

The simulated experience of situations that occur in nursing work can respond to the difficulty that Nursing students have of working in professional practice settings and understand the patients’ reality.

This difficulty creates fear due to the possibility of error in patient care.

Students pointed out that the game enabled experience situations of the profession without fear of error. The game, with the clear intention to deviate players from everyday concerns, enables them to (re)create imaginary scenarios without consequences in real life. With this possibility, when the participant is playing, he/she experiences the possibility of error, feels freer to test and make mistakes, which favors the inventiveness.

The practice of relevant skills for nurses was also observed in other studies of simulation games, which highlighted the development of decision-making, critical thinking, leadership and teamwork. The emphasis on teamwork was also observed in another study, possibly due to the very interactive of
simulation games, such as RPG.

Thinking the game as opportunity to practice skills is to think on their contribution to social intermediation that defines the profession codes. However, it is also thinking about the possibility of the player to build local intermediation, in which the subject is introduced in the game, presents his/her individualization and elaborates intermediations that "drive off" the stratified intermediation\(^{[21]}\).

Apart from skill development, games have been used in Nursing teaching to respond to the search for educational strategies with a focus on active participation and problematization\(^{(5)}\). However, the inclusion of games in education implies not necessarily the transformation of pedagogical practice. The proposition of a game as a strategy submits its voluntary feature to the learning objectives, with a tendency to reduce it to an instrument devoid from its characteristics of freedom and inventiveness\(^{(3)}\). Instead, the game is a free activity, which should be thought of as unrelated to external goals to gaming. This gratuity enables the player to fully play\(^{(9)}\).

The game playfulness is inherent to art and, as well as art, according to the students, the game "can touch people." The game has nothing to do with the necessity or utility, and thus is applied to the artistic field. It is through the game, and also art, that society expresses its interpretation of life\(^{(2)}\). In this sense, considering the game as an educational strategy means thinking of it as a way that makes teaching "less disciplinarian, important for the recreation of thinking and sensitive subjects"\(^{(3)}\).

Towards the recreation of thinking subjects, active participation was highlighted in this study as a power usage of RPG, as was also observed in a survey in which a simulation game was used to enhance the experience of nursing students on life support. In this game, motivation and involvement were highlighted as necessary elements for the development of learning and skills\(^{(10)}\).

This refers to the game characteristics that allow the player to surrender to it and by it be absorbed. Although the game is implied as company and usually appears as occupation of groups, each player should play in turn, lead the game as they wish and according to the rules, which requires active presence of all. In this active presence, the player is in a position to prevent the monotony and determinism\(^{(9)}\).

In the practice of active participation in RPG, players were able to reflect on themselves (self-reflection) and on the future role as nurses. In this sense, the game was an experience and it is through experience that the subjects become identical to themselves, forming their subjectivity, their aspiration to immanence with the world.

Self-reflection, favored by the game, shows the importance of addressing subjective aspects of students and encourages them to consider their emotions in the situations. This is necessary for the student to be able to relate emotionally with the patients, including them in their entirety. On this, the experience of using a simulation game that addressed aging with nursing students is highlighted. In the game, students experienced feelings of frustration and impatience and improved empathy and understanding towards the other-elderly\(^{(18)}\).

Reflection on the nurse practice, promoted by the game, reveals that the game has an own domain...
whose content can intersect with everyday life. Given the intersections between the game and life, in both the same impulses can be identified: the pursuit of repetition and invention, the pleasure of the challenge, the establishment of rules, the duty to respect them and the temptation to break them\(^9\).

Their paths, competing with reality, are recognized as belonging to the game, although this does not mean its contamination with everyday life. According to students, the game led them to reflect on aspects of themselves and the profession, and this refers to the intrinsic characteristics of simulation games such as RPG, as identified in other studies\(^{18,22}\).

Simulation games presuppose the preservation of the player’s identity. It is based on pretending to be another subject, but the players do not convince themselves that they are another. On the contrary, there is the corruption of the game: they live in the simulacrum, but do not behave as such; they behave like the other and renounce who they are. The loss of identity represents the punishment of those who, in the game, cannot curb the pleasure of taking a strange personality\(^9\).

When reflecting on themselves and their profession, students denote loyalty to simulation game rules. They preserve their identity and put into action into that other pretended. "Identity" may not be the best term to describe the subjective aspects translated in these reflections. It prioritizes the difference, instead of identity, because thinking of identity is to try to reduce diversity to a common element. And, contrary, when reflecting on themselves and project them into another that is actually themselves, students are allowed to think of a difference self – a difference without the other. Thinking of the difference is considering differentially the difference; it is preferring variation, multiplication, instead of one, of the whole. In this sense, thinking of the game as a self-reflection and reflection on the future action means considering that it operates by multiplicity; it operates the difference itself. It means to think that the game promotes differentiation and individualization processes instead of identifying processes\(^{23}\).

**FINAL REMARKS**

The RPG game was a space of experimentation, based on subjectivity and sensory experience. The sessions of the game have favored a sensible experience, in which it was possible to observe the differences and irregularities escaping from the boundaries of traditional educational strategy, commonly used in nursing training.

This research has revealed data that show the importance of addressing the subjective processes involved in the use of simulation games, such as RPG, in Undergraduate Nursing course. These processes have highlighted important elements to be worked during the undergraduate course, to strengthen technical and relational training of future nurses, as the fear of making mistakes during care and the difficulty of communication.

Although this study was carried out with nursing students from a single institution, it showed results that stimulate investigations in other Nursing courses and graduations in the health area. The expansion of studies that address the subjective processes in higher education through simulation games can contribute...
to better design of health development processes.

REFERENCES