

BENEFITS OF THE UNIVERSITY RHYTHMIC GYMNASTICS EXTENSION PROJECT FOR UNDERGRADUATE STUDENTS OF PHYSICAL EDUCATION AND SPORTS

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Original article

Abstract

University Extension is a core activity of Higher Education that joins educational, cultural and scientific processes that develop and feed Education and Research. The purpose is to put knowledge into practice through its programs, projects and events; the university extension can be held on different fields, such as sports and physical activities. Purpose of the present study was to analyze the experiences of undergraduate students participating in the university extension project in Rhythmic Gymnastics (RG), which was designed to enhance their professional development. Semi-structured interviews were carried out with twelve students who were part of the Physical Education Teacher Education and/or Bachelor in Physical Education Undergraduate Programs. The interviews were delivered with the Ethical Terms of the research objectives, in order to answer students' questions and guarantee their privacy. For data analysis, the Elaboration Technique and Signified Units Analysis were used. From the data obtained, we verified eight categories that initiated discussions about being part of the RG Extension Project. The four most cited were: a) the experience was positive; b) they learned in action; c) they felt what it was like to be a coach; d) they had direct contact with novice gymnasts. The majority of the participating undergraduate students agreed that the university extension allowed them to think about RG and others gymnastics disciplines as a potential profession, and the mentoring process as a significant way of developing coach and/or physical education teacher education to deal with gymnastics.

Keywords: *rhythmic gymnastics, physical education and sports, coach education, physical education teacher education (PETE).*

INTRODUCTION

A coach and/or physical education teacher's knowledge is built not only by accumulation of information, but by the interaction between that information and experience. In other words, the coach and/or physical education teacher must

reflect on his or her actions and reorganize the knowledge required for the task as he or she carries it out (Martins, Dias & Martin Filho, 2016).

Tardif (2014) describes three ways of acquiring teaching knowledge: academic

(acquired in undergraduate academic courses); professional (obtained in professional settings); and experience (acquired through personal, social, and professional experiences), all of which must be considered and valued.

Universities promote effective reflection on professional education through teaching-learning practices. This assumes the inseparability of teaching, research, and extension activities favoring independent, competent, ethical, critical and creative professionals (Martins, Dias & Martin Filho, 2016; Moita & Andrade, 2009).

Extension activities complement educational, scientific, and social projects, allowing the student to participate in the teaching process and evaluate knowledge, both of which are essential to the student's trajectory. In addition, critical and creative integration into society is encouraged by social commitment (Carvalho & Síveres, 2013). Based on this assumption, extension activities should be aligned with the guidelines of higher education (Síveres, 2013).

In the case of this study, the guidelines for the university extension are based on the Brazilian National Politics for University Extension (FORPROEX, 2012), according to which two aspects must be considered when developing the programs: the educational process as a dialogical relationship and the training process as a relationship between theory and practice.

The Rhythmic Gymnastics University Extension Project is part of the Program on Dance, Circus Activities and Gymnastics (PROGAGIN) linked to the Federal University of Amazonas (Brazil), in Manaus, that offers the local community classes in dance, circus and gymnastics for all ages including people with disabilities.

Considering the local context (Northern Brazil), rhythmic gymnastics has some advantages as a gymnastic discipline. It can be practiced in a courtyard, ball games courts, dance studios, and it can be done with official

portable apparatus -- rope, hoop, ball, clubs and ribbon-- or with built and/or adapted apparatus. The practice is closely related to rhythm and dance and can be adapted to the traditional rhythms and dances of the local culture. It also requires and develops coordination in multiple ways, as the participants move according to music while handling different apparatus.

From this perspective, the teaching-learning process must follow a student-centered approach, where the instructor not only administers classes, but guides the students' personal learning processes (Goulart, 2004), especially regarding disciplines with which students are not familiar such as, dance, gymnastics, and corporal expression.

Studies indicate that most undergraduate students have little knowledge related to gymnastics, rhythm, and dance when they arrive at the university, because ball games appear more frequently on TV and social media and are more valued in physical education during the primary and secondary school years (Carbinatto, Gonçalves, Simões, Moreira, & Nunomura 2017; Alves, 2016; Schiavon & Nista-Piccolo, 2007). Thus it is necessary to give students access to concepts related to those subjects and the opportunity to apply their knowledge.

The objective of this study was to analyze the experiences of undergraduate students in a Rhythmic Gymnastics University Extension Project and its benefits for coach and/or physical education teacher education development.

METHODS

The present study was a descriptive case study with a qualitative approach. The research participants were 12 undergraduate students (seven males and five females) from the Physical Education Teacher Education and Bachelor in Physical Education Undergraduate

Programs who were engaged in the Rhythmic Gymnastics Course and joined the Rhythmic Gymnastics University Extension project in a university located in the north of Brazil. Being part of the university extension project was mandatory, as it was one of the assessment instruments displayed in the RG course syllabus.

The instrument used for data collection was individual semi-structured interviews, which allowed us a higher level of interaction with the participants of the study. This type of interview facilitates a deeper knowledge of the interviewee's personal motivations, values, beliefs, feelings, and opinions (Laville & Dione, 1999). Data were collected only after the project was approved by the Ethics Research Committee under CAAE 96192618.7.0000.5020.

At the beginning of the semester, children from the local community randomly registered for the Rhythmic Gymnastics (RG) project. Even though the program was open to both genders, only girls took part in the sessions ($n=30$) and were between 7 to 10 years old. During four months (one semester), the training sessions took place on Tuesdays and Thursdays for 90 minutes per day.

The undergraduate students were simultaneously enrolled in the RG Course and the Extension Program. First, they were invited to observe the training sessions with a mentor; in the classroom, they got to know the history, concept, rules and methods used to teach RG. After eight weeks, the undergraduate students were in charge of preparing the training sessions. Organized in groups of three, they were responsible for creating, teaching and training an RG routine to one girl. This routine was to be performed in a Gymnastics Festival at the end of the semester.

After every session, a mentor discussed with the undergraduate students their opinions: Did they like what they had prepared? How did they feel about the

children's performance? Would they change anything, and if so, why?

In the RG course, the mentor brought theories, videos and different sources to address the undergraduate students' concerns. Together, they planned the weekly sessions and discussed the performances of their gymnasts and the whole group.

When the semester ended, the undergraduate students were individually interviewed according to the established protocol. The questions focused on their perceptions about Rhythmic Gymnastics (RG), the RG project, the gymnasts, RG training routines and others issues. The interviews were audio-recorded, transcribed, and shown to the participants for review. If everything was accurate, they allowed disclosure.

The Elaboration Technique and Signified Units Analysis proposed by Moreira, Simões and Porto (2008) were used for data analysis. This technique is used to understand and interpret the reports of participants who issue opinions on a subject based on their feelings and values.

Two researchers did the analysis separately and then decided on the categories that emerged to prepare the final results. The analysis encompasses the following steps: raw narrative, identification of attitudes and interpretation.

1. Raw narrative – Responses of the interviewees to the following questions:

a) Tell us about your experience with the Rhythmic Gymnastics University Extension Project.

b) What is your opinion about being evaluated for your performance in the RG University Extension Project?

2. Identification of attitudes – Several readings of the interviewees' raw narratives were done in order to ascertain the main points of the respondents' discourse. The most frequently signified units that appeared were selected to create indicators and categories that were used as references for the interpretation.

3. Interpretation –We identified and assembled the most significant units of meaning, derived from the general framework of each individual’s discourse.

RESULTS

The analysis revealed eight categories that summarize what was most meaningful and relevant to this study (Table 1). The students were identified by the letter “S” followed by a number to indicate the order in which they were interviewed.

Table 1
Signified Units of experiences of coach education and physical education teacher education undergraduate students in the RG University Extension Project.

Signified Units	Participants											
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
Positive experience	√	√	√	√	√		√	√	√	√	√	√
Learned through application		√	√		√	√	√					√
Experienced being coach/teacher	√			√		√	√			√	√	
Enjoyed working with children		√	√	√	√		√	√				
Considered gymnastics as a profession		√		√		√	√	√	√			
Experienced the challenges of competition		√				√	√	√	√			
Had to think “outside the box”			√		√		√			√	√	√
Considered the experience a good instrument of assessment			√			√					√	

DISCUSSION

The category with the highest convergence was “Positive experience”. As many students had never done and/or taught gymnastics, this was a new experience for them. According to the participants, (S2) *It was very good; for me it was a new thing, not something that I had already experienced;* (S5) *It was the first experience [of the extension program] that I had up to that point in the three years that I have spent here . . . we have started to have an experience that we do not have in other places most of the time;* (S9) *It was good, and an area that I had no experience in at all;* (S11) *It was very useful to me;* (S12) *It was quite interesting . . . a very nice experience.* The university extension activities benefit both the

undergraduate students and the community being served. While the community receives a service, free of charge in most cases, the students learn about teaching, as they have the opportunity to apply the theories discussed in the undergraduate modules (Rodrigues, Prata, Batalha, Costa & Passos Neto, 2013). It is necessary to deal with the people from the community to establish an academic culture and an environment of interconnection between society and university (Fernandes, Silva, Machado, & Moreira, 2012).

The university extension project could be considered an institutional guideline, that is, an intermediate step between the learning process and the application of

knowledge. This must be experienced by students daily, ensuring intellectual and professional development, so that they can become competent and conscientious citizens (Siveres, 2013).

One of the difficulties usually reported by coach education and physical education teacher education students in teaching gymnastics is their lack of experience. Teachers often cannot transcend the technical content of gymnastics, reinforcing the idea that only those who have mastered gymnastic techniques can work with gymnastics. Similarly, Schiavon and Nista-Piccolo (2007) reported that primary school physical education teachers stated that the main difficulties encountered in working with gymnastics activities were related to specific knowledge of its modality, the working method, and strategies for teaching the sport. The teaching of gymnastics is perceived as limited to procedural content, emphasizing the technique behind the movements.

One means of addressing this problem would be to provide opportunities during the undergraduate program that enable students to establish a practical relationship with the labor market (Lopes & Fátima, 2012). It is essential that the university allow students to practice what is learned in the classroom. For example, one who is in the process of learning ends up learning much more when theory is put into practice, thereby removing the sense of intimidation about teaching gymnastics (Rodrigues et al, 2013; Schiavon & Nista-Piccolo, 2007).

Doing research and working with extension activities during academic development makes the student a proactive contributor to changing a world in which information acquisition has been the main method of professional education for too long (Goulart, 2004).

Half of the participants confirmed that the experience was rewarding, as they "Learned through Application," exemplified by S1 and S5 respectively:

(S1) It is an amazing feeling to teach and pass on the knowledge that we picked up during this time! (S5) Seeing what they did today was quite rewarding!

The discourses about "Being a Coach/Teacher" were filled with emotion. Student S3 stated, *"It was gratifying to see the results of the girls at the end, knowing that we grew a little together . . . we have learned from them and they have learned from us! It was amazing!"* Two interviewees cried after confirming that *"The relationship goes beyond that of a student and teacher. We end up becoming attached to the students [gymnasts], which is very beautiful"* (S4) and *"To mix our profession with the emotion of having a student before finishing college was wonderful!"*(S10). In addition, they "Enjoyed Working with Children," because they expressed that the children were involved in and motivated by the sessions.

Participating in the Gymnastics Festival made the undergraduate students "Experience the Challenges of a Competition." The final festival intended to simulate the RG Championship on a local scale: *(S1) It was cool for the competitive style because, like it or not, it is a competitive evaluation; (S2) We get a little nervous, but is a good experience because it is something concrete . . . being presented to the public is a nice experience; (S7) It was hard, and there was a little tension, but in the end everything was all right; (S8) It was difficult and exciting, but I found it interesting;(S9) It was a little tense, and everyone wanted everything to be correct and beautiful; (S12) It was tense, but in the end, everything came out right.*

These four categories highlight the importance of university extension programs for the professional education of students. Although challenging, the RG discipline was demystified through these experiences.

Similar results were found by Sargi et al (2015), when studying participants in a

Gymnastics for All University Extension Project. It was clear that participation in an extension activities projects in the discipline of gymnastics increases the interest of undergraduates in this modality.

Accordingly, we suggest that the interaction between university and community through university extension programs enables the student to closely comprehend the cultural, historical, and educational aspects of a particular social group, thus making him or her more aware of the context in which he or she must participate (Oliveira & Almeida Junior, 2015).

Extension activities expand classroom knowledge through a democratic experience that generates a new way of seeing the world, respecting differences, and learning to exercise citizenship (Jantke & Caro, 2013). Therefore, extension activities reinforce students' critical and reflective views of physical education and sports fields, especially gymnastics (Pizani, Araújo, Braguin, Barbosa-Rinaldi & Lourenço, 2015).

Teaching gymnastics in the Physical Education Teacher Education and Coach Education Programs should motivate students and bring them personal satisfaction regarding what they do, giving meaning and importance to actions in different contexts of professional practice (Campestrini, 2014).

Meaningful learning occurs when theory and practice are combined for those who are in the midst of the educational process (Sousa et al, 2015); on the contrary, the educational process becomes limited when there is no application of theory (Rinaldi, Lara & Oliveira, 2009). Thus, we infer that the experience in the university extension program added meaning to the physical education and sports students' learning within the context of gymnastics. Half of the interviewees now "Considered Gymnastics as a Profession."

We highlight the statements of participants eight and eleven as an

example: (S8) *I did not intend to work in this area, with this training method and style . . . who knows whether, one day in the future, I will work with this;* (11) *First, I never imagined having a job working with rhythmic gymnastics, and of course the possibility of it has increased. This increases the range of opportunities in life . . . thus, of course, it can be something in my future.*

These findings are like those reported by Vieira, Santos and Ferreira Neto (2012), and Costa, Baiotto and Garces (2013). The former study was conducted with physical education teachers who narrated their trajectories during training, and the latter focused on undergraduate students who reported their perceptions of involvement in university extension programs for academic and professional development and social commitment. In both studies, the subjects stressed the importance of their participation in university extension programs, which contributed to academic knowledge and the discovery of new professional fields.

When they interviewed PETE and Coach Education students in a Gymnastics for All University Extension project in the city of São Paulo, Bahu and Carbinatto (2016) found that the prospect of gymnastics as a profession was a signified unit.

Having experience in university extension activities broadens students' professional views, sensitizes students to a different reality, contextualizes professional practices, enables self-knowledge, allows a reflexive critical development (Siveres, 2013), and can inspire new directions in students' development (Fadel et al, 2013).

The usually isolated content offered in the classroom is not enough to transform the undergraduate student into a reflective and critical professional. The mentor must incorporate research and extension activities into his or her educational process in order to complement and give meaning to learning (Goulart, 2004).

Providing these practices parallel to the courses can facilitate the participation of undergraduates who did not experience university extension activities until the present moment, due to either lack of time, lack of knowledge about how to join projects, or lack of understanding the role university extension activities play in academic development.

The Signified Unit “Had to Think ‘Outside The Box’,” expresses the interviewees’ opinions about how extension activities delivered broader knowledge than the syllabus’ contents, as indicated in the following statements: (S3) “[The Project] *deviates from the sameness of the classroom and encourages us to be creative . . . I had never participated in any university extension program;* (S7) [The Project] *went beyond the classroom;* (S10) *I thought I was going to take the class and study gymnastics in the classroom, but not that I would have the experience of acting as a coach;* (S11) *We always study theory and we never get to put it into practice;* (12) *We ended up leaving that “classroom-only” context!*

It is notable that undergraduates seek activities that surpass the classroom, even though what is done in the classroom is important, such as discussion and analyzing theories and concepts. Limited classroom time does not allow for application of theory in the way that RG training does. Síveres (2013) and Rodrigues, et al (2013) agree that extension activities definitely complement the teaching-learning process acquired in the classroom courses.

Students’ participation in extension activities projects allows them to better understand the reality that they will encounter after becoming professionals (Manchur, Suriani & Cunha, 2013). This will provide reassurance when they are asked to teach unfamiliar modalities that are considered challenging, such as gymnastics.

This type of insecurity occurs in other modalities as well, such as most rhythmic

disciplines. It is very common for physical education professionals to stop working with dance classes, for example, because they do not feel capable of imparting the content to their pupils. This difficulty may reflect their experiences in childhood and adolescence, which mainly focused on competitive sports. Thus, they are unable to visualize the range of professional possibilities (Alves, 2016).

In the Physical Education and Sports culture, we still believe that previous experiences in a sport offer enough knowledge to ensure a good job as a teacher or coach of that sport (Carbinatto, 2012). These experiences provide an undeniably good base of knowledge, but when the coach/teacher is restricted to this, without seeking other sources, he or she ends up promoting the idea that the professional can only teach the content if he or she has mastered all the specific techniques of that sport.

Gymnastics should be viewed holistically and not just as a series of bodily techniques that the student often cannot replicate. Student monitoring activities are important strategies for dissolving prejudices and promoting reflective approaches backed by practice (Alves, 2016).

In relation to the last Signified Unit, “Considered the Experience a Good Instrument of Assessment,” participants offered the following comments: (S3) *It’s a different evaluation; it is cool because it is creative and encourages people to be creative, to exercise the profession of coaching;*(S6) *Dude, everything has been a challenge and having a grade included was even more challenging, but we used it as an incentive to do our best at the tasks we were given;* (S11) *In fact, I completely forgot that it was an evaluation because I was worried about her (the gymnast) performing well in the presentation, liking it, and being happy with her presentation, but I really did not worry about it, which may seem incredible, because I worry a lot about grades.*

The instrument of assessment was not perceived by the students as something they might fail, but as a method of evaluating learning. The evaluation should be considered a natural consequence of the learning process. The aim of assessing students is to provide the student and the teacher with evidence of how the teaching-learning process is progressing and what, if anything, needs to be improved. Therefore, it is important to avoid qualification as an “A student” or “C student,” which is often accompanied by feelings of success or failure (Lima & Grillo, 2010).

The formative assessments became interesting because they included diverse instruments that followed the progress of each student during the semester (Carbinatto et al, 2016). If the goal of university education is to develop creativity and reflective thinking skills, it is essential to develop a curriculum that aligns with this goal and entails the selection of new content and skills, in addition to rethinking the evaluation strategies used (Garcia, 2009).

It is important to provide undergraduate physical education and sports students with knowledge in order to make them reflect on the wide array of possible fields of activity, especially in the area of gymnastics (Pizani, et al 2015). From this perspective, gymnastics classes should value initiative, autonomy, creativity, discovery and action versus memorizing concepts, regurgitating information and copying plans (Carbinatto, 2012).

CONCLUSION

Participating in a Rhythmic Gymnastics University Extension Project provided benefits to the undergraduate participants, ranging from practical knowledge to the expansion of employment possibilities.

The Signified Units discussed enable us to confirm that having a sport as a key

practice in an extension project produced important experiences for the future development of Physical Education and/or Sports, from better understanding of children and training children to comprehension of the competitive environment.

Breaking the paradigm in which only ex-athletes or those who have practiced gymnastics can work with the modality was possible because of the students' experiences in the university extension project, which enabled them to understand what it is to be a teacher/coach.

We underline the importance of the inseparability of the components of the “university tripod” (teaching, research, and extension activities). We discovered that the out-of-classroom activities surpassed the classroom environment in multiple ways. Leaving the classroom to teach gymnastics, as a reworked form of evaluation, richly complemented the teaching-learning process of these future professionals. This points to the importance of enabling the student to apply the knowledge that is generated in the classroom, thereby reducing the dichotomy that stills exists between theory and practice.

In conclusion, we affirm that the university extension program belongs in the teaching process. It can and should be tried with other modalities and their respective courses, so as to ensure student development that is more realistically aligned with the labor market.

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