

## Qualitative study: Pilates on body's perception of college students

### Projeto de extensão de Pilates na percepção corporal de universitários: estudo qualitativo

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**RESUMO | INTRODUÇÃO:** O método Pilates promove um equilíbrio entre o corpo e a mente, trabalhando o ser humano integralmente, exigindo de quem o pratica uma percepção também do que acontece no meio em que vive. **OBJETIVOS:** Avaliar a contribuição de um projeto de extensão abordando o método Pilates na aprendizagem sobre o conceito e percepção de corpo de acadêmicos de Fisioterapia de uma universidade pública. **MATERIAIS E MÉTODOS:** Trata-se de uma pesquisa prospectiva, qualitativa, observacional e analítica, contendo uma amostra de oito acadêmicos de Fisioterapia de uma instituição pública da cidade de Teresina-Piauí, participantes do projeto de extensão com aplicação de práticas corporais baseadas no método Pilates. Os participantes foram entrevistados no período de maio de 2018, mediante entrevista semi-estruturada, composta por perguntas relativas ao conceito e percepção de corpo. **RESULTADOS:** Após serem analisadas as falas dos acadêmicos, surgiram duas categorias temáticas a serem discutidas: Pilates na percepção de corpo e as possibilidades do corpo. **CONCLUSÃO:** Atividades de extensão em Pilates contribuem positivamente para o conceito e percepção de corpo de acadêmicos do curso de Fisioterapia.

**PALAVRAS-CHAVE:** Pilates. Imagem corporal. Acadêmicos.

**ABSTRACT | INTRODUCTION:** The Pilates method promotes a balance between body and mind, working the whole human being, demanding from those who practice it a perception of what happens in the environment. **OBJECTIVES:** To evaluate the contribution of a project that deals with the Pilates method in the learning process of the concept and body perception of physiotherapy students from a public university. **MATERIALS AND METHODOLOGY:** It is a prospective, qualitative, observational and analytical research. The study was conducted with a sample of eight physiotherapy students from a public institution in the city of Teresina-Piauí. The students were participants of the project with the application of body practices based on Pilates method. Participants were interviewed in May 2018 through a semi-structured interview, consisting of questions regarding the concept and body perception. **RESULTS:** After analyzing the students' speeches, two themes came up: Pilates in body perception and body possibilities. **CONCLUSION:** Pilates extension activities contribute positively to the concept and body perception of physiotherapy students.

**KEYWORDS:** Pilates. Body image. Academic students.

## Introduction

Body image is the picture of our own body that we draw in our mind, that is, the way the body reflects itself or how we experience it<sup>1</sup>. It is also a constant and active process that lasts throughout life and involves physiological, affective and social characteristics that interact with each other at all times<sup>2</sup>. In this sense, the contemporary imaginary construction of a perfect or ideal body is often closely associated with an obsessive discourse of health<sup>3</sup>.

According to Bomfim<sup>4</sup>, it is necessary for academic teaching to include in its curriculum practical classes on the body, proposing a total vision of the human being, respecting the motivations and feelings as part of the teaching-learning process. These classes should be considered as classroom activities to diversify experiences. Thus, it is necessary that during the process of professional formation a globalized vision of the human being is built, not seeing him only as parts of the body. It is necessary to see, feel and experience the totality in which body, feelings, cultural habit and environment are part of the patient's physical rehabilitation<sup>5</sup>.

The Pilates method is being spread and practiced all over the world. One reason for this adherence is the various benefits gained through frequent practice of this method, such as, strengthening the body (especially the muscles of the abdomen), improving stretching and flexibility, developing body awareness, improved coordination, posture, balance, increased joint mobility, development of the stabilizer muscles of the body spine and relief from chronic pain<sup>6</sup>.

According to Souza<sup>6</sup>, this method promotes a balance between body and mind, working the body in its entirety, demanding from those who practice it also a perception of what happens in the environment in which they live. Thus, people can also analyze how the environment can influence the tensions caused where they live. In addition to integrating body and mind, it becomes easier to perceive the surrounding environment.

For Pires and Sá<sup>7</sup>, through Pilates, the student will finally know and learn to use their own body correctly, through the connection between body and mind. However, its effect on physiotherapy academics who are preparing for professional performance on each other's bodies is little known. This fact justifies the importance of this study, since through concentration, the student can feel the movement intensely and develop self-knowledge and respect for his own body<sup>8</sup>. It is likely that this is going to prepare him better to take care of the other's body.

Given this, the objective of this study was to evaluate the contribution of a project that approached the Pilates method in learning about the concept and body perception of physiotherapy students from a public university.

## Methodology

It is a prospective research with a qualitative, observational and analytical approach. The sample was intentionally made up of physiotherapy students from a public institution in the city of Teresina-Piauí. These students participate in the project with the application of body practices based on the Pilates Method entitled "PILATES USE TO IMPROVE THE QUALITY OF LIFE OF STUDENTS OF PIAUÍ STATE UNIVERSITY IN TERESINA".

Students were selected to participate in the extension project at random. Registrations were opened, containing 15 vacancies, for all physiotherapy students, from the first to the tenth period. The vacancies were filled as the registrations were made, until completing the pre-established amount.

The Pilates method extension project lasted six months, from October 2017 to April 2018, twice a week (Monday and Thursday), lasting one hour. The practical classes were performed by physiotherapy students, coordinated by a teacher, where they were

previously oriented with initial theoretical classes on the principles of the Pilates method. The practical classes were held in the classroom, using mats, one for each participant, and a speaker with appropriate music for the moment.

The exercises performed focused on stretching and strengthening, such as: spine stretch, roll up, roll over, roll like a ball, double leg stretch, swimming, saw, side bend, spine twist, the hundred, the shoulder bridge, high one leg bridge, criss-cross, mermaid, plank, among others.

The research was reviewed and approved on May 15, 2017 by the Research Ethics Committee under number CAAE 67139317.2.0000.5209 according to the ethical standards of National Health Council Resolution 466/12. Students selected for the research signed the Consent Form, guaranteeing full confidentiality of the participants' identity, clarification of any doubts about the research, as well as acceptance and refusal to participate.

In order to collect the data, the students were approached at the end of the Pilates Method project, and then scheduled the place and time for the interviews. Participants were interviewed through a semi-structured interview consisting of questions about their body vision. The guiding questions were:

1. Has the extension project helped you in any way to understand your body? Talk about it.
2. What can the body do? Talk about it.

The collected data were analyzed according to the Content Analysis proposed by Bardin (2004) which allows the encrypted interpretation of the qualitative material.

Interviews were held in May 2018 at the institution where the project took place, respecting the availability of respondents. The questions were asked in person and individually. Data were recorded by the

researcher using a digital voice recorder (Samsung J5 Metal Smartphone). Then, the audios were transcribed in full to the computer, allowing a better content analysis. In addition, the material collected underwent linguistic corrections without eliminating the natural character of the speech.

## Results

Initially the sample consisted of 15 physiotherapy students, but there were 7 dropouts, leaving 8 students, 7 female and 1 male. After analyzing the speeches of the students, two thematic categories emerged to be discussed: Pilates in body perception, which was defined "Pilates promotes a balance between body and mind, working the body in its entirety" and the possibilities of the body, which had as definition "The body is where there is symmetry breaking, where anything can happen and it happens".

It was observed an improvement on the perception of bodies exemplified in the following statements:

*"... I realize that I can do more. I can do more than I could do before. I think Pilates helped me a lot to realize that." (Copo de Leite)*

*"I had many limitations before I started, so throughout the process I was both really getting to know my body and knowing how to use it and having it easier to do the activities." (Orquídea)*

*"... It made me work muscles that I didn't know about. I felt the strength I had and I could work it better." (Lótus)*

From the analysis of the speeches, it was remarkable that the Pilates method practice provided moments of relaxation, decreased emotional stress and body tension for the students, acting on their mental health, as reported in Rosa and Tulipa's statements:

*When I came to exercise I was like ... my body changed, sometimes I was stressed, so I was super tense, then I exercised, and I felt more relaxed ... (Rosa)*

*I am a very stressed person, very stressed and sometimes when I come here I get lonely, I have a lot to study, that whole thing. All that pressure from the university. And sometimes when I get here, I feel better... (Tulipa)*

It was found that the experiences in this group provided moments of pleasure and self-knowledge, recovery of importance and self-care, through activities to improve their health and bring well-being, as shown in the following fragments, extracted from the speeches of the interviewed ones:

*So, I am going to talk straight and it may sound a little rude. Before I was a little sloppy, and this project stimulated me a lot to take care of myself, do you know what I mean? I starts do have a better perception of my health, like, to take care of me ... (Tulipa)*

*It helped to realize that I am very short, but it also helped to work my body harder, to work on stretching my body. And to realize that exercise is good for my body and that I need to continue doing this ... (Margarida)*

*I realized that I need to take care of myself, do you understand? After I came here, I feel motivated to workout, to have a healthier diet, since it is important to do both, so my organism e body can work properly...(Rosa)*

The following category brings the perceptions of the possibilities on the project participants' bodies, the limits it can reach, its mutability and ability to convey feelings, and the interaction of body and mind in the successful execution of movements.

The body when trained is able to reach points never imagined. It acts according to the stimulus given to it, and the human being can overcome his own limits. The capacity of the body and its power of mutability impressed the students who, due to their body practices, could resignify their concepts about themselves and could perform exercises that they considered themselves incapable of doing. This could be evidenced in the two highlighted lines:

*So, I think it is capable of evolving, as I have already said of overcoming itself, of changing, of accepting new limits, of new things, of adapting also to new environments, new activities ... (Copo de Leite)*

*It is just a matter of preparation, a matter of... how can I say... it is preparation, do you know what I mean? It is not only about to want something, I also have to prepare for it, so it can do what I want it to do, understand?... (Tulipa)*

The students may have understood that the capacity of their bodies occurs through the limits imposed by their minds, as seen in the Girassol and Tulipa's speech:

*I think the body acts according to your mind too. Here in Pilates classes with concentration you can do beyond what you think ... (Girassol)*

*It can do everything, not only what I ask it to do, but what I am determined to do, understand? If I want to overcome my own limits, my body is going to do that. It will help me to get there,' cause it is capable e and I am too. I am capable and my body can do whatever I want it to do, everything I demand it to do...(Tulipa)*

There is a thin line between body and mind, the body being able to transcend the apparent physical. This characteristic of the body interferes with the way of acting and behaving in relation to activities of daily living, including the practice of exercises, such as those proposed in the project.

This could be noticed by the participants, as they could possibly feel that at times when they had curricular or extracurricular difficulties, this could interfere with the evolution of the proposed exercises, as seen in the speech below:

*My body conveys everything inside me, what I am thinking, living and going through. It is the mirror of my soul, of my being, it ... I don't know. It's my image, it's what I'm living, I'm going through. For example, if one day I'm very sad, thrown, sloppy, my body will transmit it, my physical characteristics will transmit it ... (Tulipa)*

The students could have the feeling of self-care, since when performing the exercises they seemed to have the perception of doing good to themselves, and from that care, they could be prepared for the activities of life. This can be noticed in the highlighted speech:

*The body can do anything. I think a good body functioning is the basis of everything, both for us especially at work and in life itself. For everything, I think you can not accomplish anything if you do not have a good functioning of your body ... (Orquidea)*

## Discussion

### Pilates in Body Perception

In this category it is possible to observe that the study participants broadened their thinking about their own body from the reflections that came from body experience through Pilates. Being an activity that requires concentration and good management of movements and breathing, Pilates is able to arouse in its practitioners a state of attention that allows the perception of body movement to increase. This state of contemplation of their own self provides the interviewees with a moment of self-knowledge and self-care.

In the method developed by Joseph Pilates we identify concerns that go beyond purely kinesiological orders, but which are present in the execution of exercises with broader focus, we may call aesthetics, occupying the sphere of the sensible. Therefore, the practice of Pilates allows the ability to integrate the states of consciousness and relationship with the environment, surpassing the mere physical execution<sup>9</sup>.

A body free of nervous tension and excessive tiredness is the ideal shelter offered by nature to maintain a well-balanced mind, which is always able to successfully cope with the complex problems of modern life<sup>10</sup>. According to Pinton and Franco<sup>11</sup>, the benefits that the method provides are diverse, ranging from improved flexibility, improved posture, postural reeducation, among others. However, the biggest benefit is reduced stress.

### The possibilities of the body

It is important to emphasize that the subject dominates his own body, since the body is a modelable matter, capable of changing and evolving. However, it is known that this domain capacity can be closely linked to several factors, not only hereditary, but also physiological, social and psychological factors<sup>13</sup>.

From the analysis of the speeches, it is clear that the interviewees agree that body practices are the result of the body-mind binomial. The body is a reflection of the mind, and concentration being one of the Pilates principles, allowed practitioners to notice the influence of the mind on the body by completing exercises in which they never thought they could do.

In the past, the relationship between mind and body was viewed in a dualistic way, independent of each other. However, over the years, psychoanalysis has begun to study these factors jointly and dynamically. Thus, scholars have attempted to explain the interrelationships between emotional aspects and somatic manifestations, and although there is no consensus on the subject, it is agreed that there is a relationship between them<sup>14,15</sup>.

It is very important to think about the body according to its movements, as we think of sport, gymnastics, dance as body practices. The body also represents a participant language of social life, in the construction of knowledge and values, representing human behaviors and relationships<sup>16</sup>.

Moreover, given the vast dimension of the body's possibilities, there is the idea of the biological body, and the importance of taking care of oneself to perform well in the proposed activities.

The link between the healthy body and good living ranges from the simplest to the most complex actions. By referring to bodies in the sense of health as freedom and independence, people highlight the importance of a healthy body for the autonomy of the human being. Health is responsible for well-being and happiness, providing comfort and joy in living well<sup>17,18</sup>

Considering these reports and the discussions made here, which were undoubtedly enriched by the analysis of data available in the literature, it is possible to affirm that activities such as this one, which evidence the body, contribute to the learning and self-knowledge of those who practice it.

## Conclusion

The present study led to reflections on the body and its relationship with learning. The project based on the Pilates method contributed positively to the concept and body perception of the physiotherapy students, where it was possible to obtain several learnings from the body experiences practiced, for

example: body self-perception, self-care and body integration. of mind. In addition, it was possible to know the possibilities that the body can develop, as well as the limits it can reach. However, it is necessary to conduct further research on this theme, reporting new experiences and contemplating broader samples with more diverse participants.

### Author contributions

Souza SMO participated in the conception, design, search and qualitative analysis of research data, interpretation of results and writing of the scientific article. Oliveira BC participated in the research data collection and data interpretation. Silva CS, Souza LGLP, Da Silva VMS participated in the research data collection. De Paiva SSC participated in the interpretation of the data and review of the scientific article. Torres MV participated in the conception, design and review of the scientific article.

### Competing interests

No financial, legal or political conflict involving third parties (government, companies and private foundations, etc.) has been declared for any aspect of the work submitted (including but not limited to grants and funding, advisory board membership, study design, manuscript preparation, statistical analysis, etc.)

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