La Corporeità come strumento educativo e riabilitativo nei disturbi e nelle sindromi

Corporeity as a tool educational and rehabilitation in disorders and syndromes

A cura di
Francesco Peluso Cassese

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THE ROLE OF PHYSICAL EDUCATION AND CORPOREALITY IN THE INCLUSION PROCESS: AN EXPLORATORY STUDY WITH SPECIAL NEEDS TEACHERS IN TRAINING

IL RUOLO DELL' EDUCAZIONE FISICA E DELLA CORPOREITÀ NEL PROCESSO DI INCLUSIONE: UNO STUDIO ESPLORATIVO CON GLI INSEGNANTI DI SOSTEGNO IN FORMAZIONE

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Abstract

It was decided to carry out an exploratory study aimed at investigating the opinions of 100 teachers specializing in special educational needs at the University of Naples "Suor Orsola Benincasa", in relation to the aspect of corporeality and motor education as an essential dimension in the inclusive process to be implemented in the school context. 100 semi-structured on-line interviews were held. It was decided to carry out an analysis of the content of the interviews (Krippendorff, 2013) adopting the Grounded Theory (Glaser & Strauss, 1967) as the theoretical and methodological substrate, with specific reference to the constructivist-epistemological paradigm (Charmaz, 2005). The qualitative analysis was supported by the use of Nvivo software (Richards, 1999). The corpus of the interviews was subjected to content analysis (Krippendorff, 2013).
The qualitative analysis of the corpus of the interviews highlights the need for providing postgraduate teachers with more specific training in the field of physical education, particularly in its inclusive purpose. While recognizing the importance of physical education in the integral formation of the person, the teachers declared themselves not very competent and, above all, that they would not put into practice actions concerning the motor dimension in their teaching activity.

Si è deciso di effettuare uno studio esplorativo volto a indagare le opinion di 100 insegnanti di sostegno in formazione presso l'Università di Napoli "Suor Orsola Benincasa", in relazione all'aspetto della corporeità e dell'educazione motoria come dimensione essenziale nel processo inclusivo da attuare nel contesto scolastico. Sono state tenute 100 interviste on-line semi-strutturate. Si è deciso di effettuare un'analisi del contenuto delle interviste (Krippendorff, 2013) adottando la Grounded Theory (Glaser & Strauss, 1967) come substrato teorico e metodologico, con specifico riferimento al paradigma costruttivista-epistemologico (Charmaz, 2005). L'analisi qualitativa è stata supportata dall'uso del software Nvivo (Richards, 1999). Il corpus delle interviste è stato sottoposto ad un'analisi del contenuto (Krippendorff, 2013).
L'analisi qualitativa del corpus delle interviste evidenzia la necessità di fornire ai futuri insegnanti di sostegno una formazione più specifica nel campo dell'educazione fisica, in particolare nel suo scopo inclusivo. Pur riconoscendo l'importanza dell'educazione fisica nella formazione integrale della persona, gli insegnanti si sono dichiarati non molto competenti e, soprattutto, che non avrebbero realizzato azioni riguardanti la dimensione motoria nella loro attività didattica.

Keywords

Corporeality, inclusion, physical education, special needs teachers, disability

Corporeità, inclusione, educazione fisica, insegnanti di sostegno, disabilità

1 Il presente contributo è stato congiuntamente progettato dagli autori. Tuttavia, al fine di distinguere l'attribuzione dei singoli paragrafi a Valentina Paola Cesarano sono attribuiti i paragrafi 1, 3,4, e le conclusion e a Davide Di Palma, il paragrafo 2.

1. The educational value of corporeality

In recent decades, the legitimization of the body's teaching potential (Carlomagno, Sibilio, Palumbo, 2014), and the reconsideration of an education aimed at promoting the integration of the different human dimensions, has slowly led to the definition of new research paths and studies based on the plurality of theoretical models, capable of orienting and enriching the didactic action, outlining new horizons of knowledge. The transition from gymnastics to physical education and from physical education to sports games demonstrates, in fact, the centrality attached in recent decades to the body dimension in the training processes (Sibilio, 2008). In fact, in the last decades, we have witnessed the emergence of a field of confrontation and a space for common construction that has seen the conjugation, on the educational level, of apparently antithetical scientific traditions (Sibilio, 2017): a new bio-educational paradigm of didactic research (Frauenfelder et al., 2004), based on the recognition of the relationship between mind, body, environment, artifacts and knowledge processes (Frauenfelder 2001; Frauenfelder, Santoianni 2002; Gay, Hembrooke 2004; Frauenfelder et al., 2013). This is a post-constructivist line of investigation (Lesh, Doerr 2003; Rivoltella-Rossi 2012), which analyzes the relationships between organism and environment and between body and cognition proposed by the embodied cognition (Morin 1989; Varela et al. , 1992; Lakoff, Johnson 1999; Merleau Ponty, 2002; Shapiro, 2010; Gomez Paloma, 2017), which recognizes the full dignity of the body in the knowledge mechanisms. We are therefore witnessing a vision of knowledge as an active process, rooted in the body and in the biological dimension of the person. Within this frame, a new research construct is affirmed and takes the name of didactic corporeality (Sibilio, 2011; Carlomagno et al., 2014), which, in a non-verbal modality in the teaching-learning process, is able to express intentionality, be it conscious or unconscious, allowing the teacher to face and control the complexity of the didactic action. Within this perspective, another very central role is played by the reflection on "bodily functionality", i.e. on the technological extensions and potential projections of the body as prostheses with specific bodily properties (Vinci, 2016; Sibilio, 2017,).

The reference framework also includes the recent didactic contributions of neuroscience which consider the body as an integral part of learning (Gomez Paloma, 2017), since it is precisely in the body that there is an interrupted activity of information exchange, processing and storage. Neuroscientific studies review the theories and methodologies that support the teaching work of teachers, and open up new scenarios for reflection and study in which education is no longer a diligent intellectualistic process, but represents the ability to implement that interaction between mind, body and emotions. «As confirmed by neuroscientific evidence, the body and its potential for movement and action cannot be considered as passive elements within cognitive processes; in particular, the most recent studies indicate that conceptual knowledge is mapped into our sensory-motor system» (Sibilio, 2017, p. 54).

A scientific construct that strongly highlights the didactic potential of corporeality, enhancing the inputs from research in the field of cognitive neuroscience to didactic theorization, is that of Neurodidactics (Rivoltella, 2012), thanks to which body and movement are recognized as accelerators of human learning processes (Sibilio, 2005). In this perspective, Rivoltella questions what the supporting elements of neuroscientific research may be for educational intervention, and how the study of the brain can be useful for solving the problems inherent in teaching-learning processes. The transdisciplinary importance of neuroscience for teaching is thus reaffirmed, welcoming the suggestions provided by some neuroscientific discoveries in the research works on teaching practices: the study of learning, the relationship between body movement and enhancement of memory, the ability of the brain to generate new neurons (even in old age) and to change their connections, the role of experience and emotions on cognition, and so on.

As Frith points out, «My body is an object of the physical world. A difference However, I have a special relationship with my body with other objects. In particular, my brain is part of my body. Sensory neurons enter my brain directly from various parts of my body. Motor neurons

follow the opposite route: from my brain to all my muscles [...]. I am in immediate control of what my body is doing and I don't need to speculate about what state it is in. I have more or less direct access to each part of my body whenever I need it» (Frith, 2007, p. 77). This confirms the fact that the theory of somatic markers (Damasio, 1995) is certainly one of the strengths of the neurodidactic paradigm, where «the value of the body is widely recognized and allows us to represent that emotional vehicle that offers value and meaning to the actions we perform, activating attentional processes that are nourished precisely thanks to these somatic states. These same values which, thanks to emotions, must be attributed to actions and thoughts outline how important today it is to frame the forecasting capacity and categorization as processes directly linked to the body and not isolated [...] to it »(Gomez Paloma, 2012 p.138). Action theories and enactivism (Varela et al., 1991; Maturana, Varela 1987, 2012; Davis et al., 2000; Doidge 2007; Proulx 2008; Rossi, 2011) lead to consider learning processes as transformation systems shaping and structuring our world. Cognition is not the effect, the result of a deterministic action, but a complex process that co-evolves thanks to the interactions of the system: it is an "embodied action" resulting from the close interaction between action and knowledge. School is defined as a heterotopia in which didactic action takes place, «a space-time in which the student experiences practices of freedom» (Rossi, 2011, p. 13). In this context - and, more specifically, in the classroom context - there is a structural coupling between teachers and students that co-evolves and modifies not only their mutual knowledge, but also their internal structures, their global organizations. The enactive approach «leads us to believe that the sensory-motor system of the perceiver is the conditioning element of the surrounding reality; it would therefore determine the ways in which the subject acts, conditioned by environmental events and conditioning the reality that surrounds him» (Sibilio, 2017, p. 58). In this way the body becomes the means by which it is possible to describe the world, so that all the information coming from the sensory-motor system represents the elements that attach meaning to the abstract domain of thought. The enactive approach applied to teaching (Rossi, 2011) attributes value to the sensory-motor structure of the body; consequently, by working through the latter, it is possible to create the conditions for a didactic process that anticipates the consequences of acting. With Berthoz's paradigm of simplicity, instead, we get to a new interpretation of the relationship between body and cognition, where «thinking would mean [...] activating a whole series of bodily mechanisms that allow to inhibit, select, imagine, connect , project their hypotheses, their intentions and their interpretative schemes onto the world, foresee and anticipate the consequences of the action, comparing and correlating the data of past experiences with the actions in progress»(Sibilio, 2017, p.60) . In this way, the body in action (Berthoz, 2011) as a prerequisite for the construction of knowledge allows to create new and interesting didactic scenarios that provide for the recognition of a cognitive approach to the sense of movement (Berthoz, 1998). Movement and action therefore take on a formative value, as they lead to a reconsideration of teaching practices, establishing the possible intentional act as a principle (Berthoz, 2011). Today, reference is made to didactics of movement (Sibilio, D'Elia, 2015; Moro, Alimisis, Iocchi, 2019; Tinning, 2009) which allows the student to act with respect to problematic situations, where the body represents an alternative modality capable of perceptively interacting with the world not only through the senses, but also through the kinesthetic aspect (Sibilio, 2005).

2. The normative dimension of physical education in the school context: a brief excursus

The importance attributed to motor and physical-sports activities and the recognition of the potential of the body and movement, have also found space and recognition in the Italian legislative system (Sibilio, 2008). For a very long time, however, the teaching programs and the organization of school curricula have witnessed a reductionist vision of corporeality and its link with the educational relationship, which has relegated the body and movement to a passive dimension of the didactic action. As Gamelli affirms, there must be a broader bending on the

motor dimension, focused on the complexity of the knowledge that revolves around the concept of corporeality, combining the psycho-physiological dimension of performance tendency to the pedagogical-philosophical one with educational characteristics (Gamelli, 2006). Already in the 2007 National Guidelines for the curriculum of the pre-primary school and the first cycle of Education, where the importance of motor sports activities is strengthened, a rethinking of the experience of "doing school" was proposed, achievable through the recognition of the centrality of the person as a unique and unrepeatable being. Then the 2012 National Guidelines for the curriculum of the pre-primary school and the first cycle of Education clarified that motor and sports activities provide students with opportunities to reflect on changes in their own bodies, to accept and live them serenely as an expression of the growth and maturation process of each person; they also offer opportunities to reflect on the values that the image of oneself assumes in comparison with the peer group. Physical education is therefore an opportunity to promote cognitive, social, cultural and affective experiences. Through the movement, with which a vast range of gestures is carried out ranging from facial expressions to dance and to the most varied sports performances, the student will be able to get to know his/her own body, explore space, communicate and relate to the others in an adequate and effective way. The achievement of motor skills and the opportunity to experience the success of one's own actions are a source of gratification that stimulate the student's self-esteem and the progressive expansion of his/her experience enriching him/her with ever new stimuli. Sports activity promotes the value of respecting agreed and shared rules and the ethical values that are the basis of civil coexistenc (National Guidelines for the curriculum of the pre-primary school and the first cycle of Education). The Italian Law 107/2015 - Reform of the national education and training system and delegation for the reorganization of the laws in force (called "Buona Scuola") – makes reference to the strengthening of motor disciplines aimed at all school levels, which must be declined according to the needs of the different ages of the students and which provides for «behaviors inspired by a healthy lifestyle, with particular reference to nutrition, physical education, and sport, and attention to the protection of the right to study of students practicing competitive sports» (Law 13 July 2015, n .107). In the 2018 National Guidelines and New Scenarios for the curriculum of the pre-primary school and the first cycle of Education, however, the validity of what was already established in the National Indications of 2012 is strongly reiterated, with the aim of strengthen knowledge and skills related to environmental sustainability, citizenship, social cohesion, civil coexistence and intercultural dialogue. Thanks to these Guidelines, physical education is seen as the other "hinge" discipline between the scientific (knowledge of one's body, its functioning, movement physics), communicative and expressive field, as an enhancer of relationship and citizenship, insisting on aspects like the awareness of one's body, and on the social, cultural and affective dimension. Physical education therefore assumes an educational value by promoting the value of respecting the agreed and shared rules, and the ethical values that are the basis of civil coexistence.

The social value of physical education and sport was also confirmed in the Eurydice Report (2013) entitled "Physical education and sport at school in Europe", which - by examining on a large scale the strategies, curricula, and assessment methods - regarding physical education and motor activities - reaffirms the centrality of physical education in areas that go beyond the strictly sports dimension, such as good health, healthy development of the person and social inclusion: «Participation in many physical activities allows to learn about and fully understand principles and concepts such as "rules of the game", fair play and respect, tactical and body awareness, and to develop social awareness linked to personal interaction and team commitment characteristic of many sports» (European Commission / EACEA / Eurydice, 2013, p. 7). Therefore, the emergence of new educational research trajectories strengthening the link between body and knowledge and the enhancement of physical education at school, also from a regulatory point of view, assumes an educational value by promoting the respect of the agreed and shared rules and the ethical values underlying civil coexistence, of physical education at school, and clearly affects the teaching professionalism and the way of interpreting teachers' training.

3. The role of motor education and corporeality in the inclusion process: exploratory study with special needs teachers in training

Within a theoretical framework that emphasizes the role of beliefs in the development of "teacher's thinking" and focuses on enlightening the implicit factors of teachers' knowledge (Tochon, 2000; Clark, Peterson, 1986; Wittrock, 1986; Perla, 2008; 2009; 2010), it was decided to carry out an exploratory study aimed at investigating the opinions of teachers specializing in special educational needs at the University of Naples "Suor Orsola Benincasa", in relation to the aspect of corporeality and motor education as an essential dimension in the inclusive process to be implemented in the school context. The exploratory survey involved 100 attending teachers, during the 2019-2020 Training Course for the achievement of the specialization for educational support activities for students with disabilities at the University of Naples "Suor Orsola Benincasa". 100 semi-structured on-line interviews were held. It was decided to carry out an analysis of the content of the interviews (Krippendorff, 2013) adopting the Grounded Theory (Glaser & Strauss, 1967) as the theoretical and methodological substrate, with specific reference to the constructivist-epistemological paradigm (Charmaz, 2005). The qualitative analysis was supported by the use of Nvivo software (Richards, 1999). The corpus of the interviews was subjected to content analysis (Krippendorff, 2013). The generative research question posed at the basis of the qualitative analysis was produced starting from the formula expressed by Glaser (1998) "What's going here?", which, in the case of the research presented here, was articulated as follows: What kind of representations do teachers have regarding physical activity for people with disabilities?

The analysis of the corpus of the texts involved a first phase of initial or open coding, analyzing the texts line by line by referring to the "all is data" formula on which a Grounded-type methodology is based (Glaser, 1992). This coding phase led to the identification of nodes, that is, those themes, concepts and arguments put forward by the researcher, while reading and exploring the content of the research materials. In a subsequent step, the nodes were merged as some of them were superimposable, and subsequently, they were further reduced. In the focused coding phase, a series of macro-categories were identified through a re-labeling process of the first labels. For each macro-category the nodes that contributed to their definition were identified. This work of nodes classification and aggregation for the formulation of the macro-categories was carried out with the help of the Nvivo software through the creation of Sets, intended as conceptual containers that allow to group those concepts that pertain to the macro-categories enucleated through the focused coding. As regards the socio-personal characteristics of the interviewees, the ample was made up people predominantly of female sex (90.6%, 9.4% male), having an average age of 39 and previous teaching experience (74.3%; the average years of teaching activity was 7,8). As regards the educational qualifications of the participants, 42.6% obtained a master's degree, 18.4% a five-year degree, 17.6% a secondary school diploma, 12.5% a postgraduate master, and 5.1% a bachelor's degree, 3.7% a research doctorate. As far as the subject taught is concerned, no data could be significantly aggregated, as they included very different teaching fields. Among the respondents, 20% performed coordination roles or instrumental functions in the school. Below are the macro-categories that emerged following the qualitative analysis supported by the NVIVO software, which will be detailed in the following paragraph:

- Not using the body as an inclusive mediator;
- The identity-emancipatory function of the body in movement;
- The dimension of knowledge referred to the body in movement;
- The dimension of well-being referred to the body in movement;
- The playful and performative physical dimension of the body in movement;
- Didactic strategies to enhance physical education in the teaching practices.

4. The macro-categories

During the interviews, most of the respondents stated that they did not use the body as an inclusive mediator. The reasons provided by the teachers to justify that they did not practice physical education at school level were the most diverse: "I don't have the right skills"; "I haven't had the chance yet"; "There are no suitable spaces", "the work context does not require me to do it". Many responses provided show their belief that some disciplines are distant from the motor sphere or that motor activity concerns only the motor education teacher; "For the disciplines I teach I've never thought of using the body"; "I'm not a teacher of physical education and I don't usually deal with school plays; "I've never been a physical education teacher", "It's not the subject I teach". Those who would use the body in inclusive teaching practices, on the other hand, specified the method of use in terms of "non-verbal communication"; "In mimicry and gestures" "in motor games", "in the activities of expression of emotions"; "During group activities". The first one is linked specifically to the field of knowledge (knowledge, learning, and communication), the second one to the concept of health (well-being, balance, health, harmony), and the third one to playful and physical-performative dimensions (game, sport, coordination, movement, action, and dance). The representations of the teachers were therefore very semantically rich and heterogeneous. While speaking of the body in movement, the participants identified its multiple functions and dimensions. First of all, reference was made to the identity-emancipatory function in terms of "growth", "freedom", "expression", "autonomy", "awareness", and "expressiveness". Subsequently, reference was then made to the dimension of knowledge referred to the body in movement, in terms of "knowledge", "learning", and "communication". Most of the interviewees also reported the dimension of health in reference to the body in movement, speaking of "well-being", "balance", "health" and "psychophysical harmony". The playful and physical-performative dimensions were also identified in terms of "play", "sport", "coordination", "movement", "action" and "dance". The representations of the teachers were therefore very semantically rich and heterogeneous. Among the didactic strategies considered most capable of enhancing physical education, outdoor education emerged first, followed by role-play, laboratory activity and, only for some of them, cooperative learning, coding / computational thinking, peer-tutoring and problem-based learning. To enhance physical education at school it is necessary, according to the participants, to "support the teachers with physical education experts", and "integrate specific activities into the school curriculum".

Conclusions

In light of the exploratory study carried out, we can say that motor education has a very marginal role in the teaching practices declared by the teachers, despite the density of representations related to the concept of the body in movement. Probably, the value is sensed, but it has not been well understood yet how to integrate them into the teaching practices. There is a massive representation, by teachers, of physical education as a discipline in its own right, and consequently, an underestimation of the wide repercussions that the use of the body as a mediator could have, across the board, also in other disciplines. In this way, the sensorial dimension of learning, which is mainly represented by corporeality, is omitted. From the analysis of the answers, a certain differentiation according to the school grade is also evident: the enhancement of the body occurs mostly in the first school grades (kindergarten and primary school), while many answers on the lack of use of the body are attributable to the group of secondary school teachers. This data also makes us also reflect because it seems to show of how, with the greater disciplinary specialization typical of secondary school, the attention towards motor education (and / or towards the time available to practice it) and the game activities connected to it probably decreases. Therefore, if, on the one hand, most of the teachers believe that motor education can be enhanced through curricular integration, some others argue that it is necessary to support

the teachers with experts, pointing out the perception of a lack of competence in this context and/or the inadequacy of the teacher's role with respect to the purpose.

The use of the interview also made it possible to understand what kind of representation the specializing teachers have of the motor activity of students with disabilities, since everyone considers it a rehabilitation practice. This data is of great importance too for it suggests a representation of the motor activity of people with disabilities as a rehabilitative practice, rather than an educational one: this would perhaps also explain the difficulty of using the body as an inclusive mediator.

From the analysis of the data we can advance some final reflections. The qualitative analysis of the corpus of the interviews highlights the need for providing postgraduate teachers with more specific training in the field of physical education, particularly in its inclusive purpose. While recognizing the importance of physical education in the integral formation of the person, the teachers declared themselves not very competent and, above all, that they would not put into practice actions concerning the motor dimension in their teaching activity. In conclusion we can affirm that there is a need, in specialized university training courses, to emphasize the experiences of physical education and the use of the body as a possible facilitator, capable of amplifying accessibility and participation (Perla, 2013; Booth, Ainscow, 2002).

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