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ORIGINAL

DIFFERENCES BETWEEN THE DYNAMIC AND NORMATIVE PSYCHOMOTRICITY IN CHILD DEVELOPMENT

DIFERENCIAS ENTRE LA PSICOMOTRICIDAD DINÁMICA Y NORMATIVA EN EL DESARROLLO INFANTIL

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ABSTRACT

Psychomotricity in school contexts can be applied according to two currents: normative psychomotricity and dynamic psychomotricity. Although there has been research into the benefits of each one of these psychomotricity currents separately, there are no studies that compares the two types with one another. The aim of the present study was to establish if there were any significant differences between the two currents of psychomotricity at the level of general and psychomotor development in children at preschool age. At the same time, the study aimed to determine any emotional differences among 5-year-old children. Seventy-five pre-school children (aged between 3 and 5 years) were evaluated through standardised tests in two public schools, where 50.7% of the sample were girls. The results indicated that, in general, psychomotor development was significantly better in the group that had followed the dynamic

methodology than in the group that had been taught using the normative methodology.

KEY WORDS: Dynamic psychomotricity, normative psychomotricity, educational psychomotricity, general development, psychomotor level, emotional level

RESUMEN

La psicomotricidad en los contextos escolares puede ser aplicada según dos corrientes: la psicomotricidad normativa y la psicomotricidad dinámica. Aunque hay investigaciones de los beneficios de cada una de estas corrientes de psicomotricidad por separado, no hay estudios que hagan una comparativa entre ambas. El objetivo de la presente investigación fue establecer diferencias significativas entre ambas corrientes de psicomotricidad en cuanto al nivel de desarrollo general y psicomotriz en niños en edad preescolar. A la vez, se pretendió ver si había diferencias emocionales entre los niños de 5 años. Se evaluó mediante test estandarizados a 75 niños de educación infantil (entre 3 y 5 años) de dos escuelas públicas, donde el 50,7% de la muestra fueron niñas. Los resultados indicaron que, en general, había diferencias significativas a favor del grupo de psicomotricidad dinámica que de la psicomotricidad normativa.

PALABRAS CLAVE: Psicomotricidad dinámica, psicomotricidad normativa, psicomotricidad educativa, desarrollo general, nivel psicomotriz, nivel emocional.

INTRODUCTION

According to the European Forum of Psychomotricity and the Spanish Federation of Psychomotricians' Associations, psychomotricity is a discipline that deals with the interaction established between cognition, emotion, body and movement, and that affects the overall development of individuals and their capacity for expression and relationship in their social context. Psychomotricity emanates from a global vision of the human being, and can be carried out in different fields of action because it adjusts to the evolutionary, developmental and competential moment of people, regardless of age. Therefore, there are different levels of intervention. Currently, the fields of action of psychomotricity focus on education, rehabilitation, therapy, prevention, health and social services, which are aimed at people with different typologies: people with normalised evolutionary development, people with disabilities, disorders or other physical, cognitive, behavioural, learning, development and adaptation difficulties, and people in situations of vulnerability (European Forum of Psychomotricity, 2014; Mendiara & Gil, 2003; Mila, 2005).

At present, educational psychomotricity tends to be more relevant and better received in the stage from 0 to 6 years (preschool-child stages) (Rivas & Madrona, 2016). The objective of psychomotricity in educational contexts is to

facilitate development and maturity in childhood, within the school curriculum through the game and the motor skills (Mendiara & Gil, 2003). A priority of psychomotricity is the work of relating one's own person with oneself, with objects and with other people (Berruezo, 2000). There are different theoretical aspects that explain the practical intervention of educational psychomotricity. Ballesteros (1982) proposed two currents: a) psychopedagogical or normative represented by authors such as J. Le Boulch or P. Vayer and b) experiential or dynamic led by A. Lapierre or B. Aucouturier. This differentiation between normative and dynamic psychomotricity is named in other ways by other authors (for example, instrumental psychomotricity and relational psychomotricity, according to Serrabona, 2016), but the characteristics that define each of the currents are essentially the same.

The current of normative psychomotricity emerges from the idea that the sessions should be directed, where the learning of concepts or certain psychomotor parameters (such as body schema, space-time orientation, etc.) are acquired through exercises, games or activities that have been previously planned and organised. The session is structured according to the contents to be worked on, dedicating time to each one of them. The session is guided and all the children carry out the same activities. On the other hand, the current of dynamic psychomotricity is based on the idea that the session should not be guided, it should be the result of the action and spontaneous play of the child, in order to favour psychomotor expressivity. In this way, there are no fixed programmed activities, but a planning on the distribution of spaces, materials and proposals adjusted to the group of children and their relation with the curricular contents. Thus, dynamic psychomotricity gives importance to the context of the practice, as well as to the distribution of spaces and times or phases of the session, and especially to the attitudes and strategies of the specialist in psycho-motor skills development. The action and origin of the child's desire is also taken into account (Del Arco, 2017). Therefore, in this last approach, special emphasis is given to the personal and corporal training of the specialist in psycho-motor skills development (Camps, 2008; Camps, Mila, García, Pecelli, Tomás & Bottini, 2011; García & Camps, 2006; Lapierre, Llorca, & Sánchez, 2015; Mila, 2008; Sánchez & Llorca, 2008a).

Silva, Neves, & Moreira (2016) conducted a research through sessions of normative psychomotricity and found that these favoured greater development of motor skills and greater motivation of pre-schoolers in terms of academic activities. Similar results were found by Gutiérrez, Fontenla & Cons (2017) regarding an improvement in emotional intelligence and self-esteem through this type of psychomotricity.

On the other hand, Cró, Andreucci, Pereira & Pinho (2011) applied structured programmes, within which there was a normative psychomotor programme with a group of preschool children from families with low purchasing power and low stimulation. They realised that the children participating in these programmes had better scores in personal and social skills, and improved their life quality, well-being, and academic performance. Moreira, Almeida & Marinho (2016) also applied a structured educational psychomotor programme in their study, where they found that self-perception of physical competence in children improved,

and that there was a positive impact on academic activities. Kambas et al. (2010) also confirm the skills improvement through normative psychomotricity. In this case, with children between 4 and 6 years old, they verified that a normative psychomotricity programme resulted in a better ability in viso-motor control than those children who did not participate.

All these investigations show that the application of normative educational psychomotricity results in an improvement in the performance of different aspects in the children, specifically in the preschool population, subject matter of this study. But they do not make a comparison between both types of psychomotor methodology: normative and dynamic. Instead, they only carry out psychomotor education sessions of normative type and analyse the effects on them.

Nevertheless, there are few studies with an educational psychomotor practice of dynamic current. For instance, Mas and Castellà (2016) analysed the effects of dynamic psychomotor practice sessions on children between 11 and 22 months of age who had two weekly sessions. The results revealed that these children obtained better scores in general development, cognition and motor skills compared to another group of children who did only one weekly session. At the same time, they compared the results with children who did not carry out any session, always obtaining better results in the group with the highest frequency of sessions. It is therefore suggested that the dynamic psychomotor practice has consequences in the optimal evolutionary development and that these benefits increase as the number of sessions is higher. Theoretical proposals have also been made on the implementation of sessions of educational psychomotor practice from the dynamic current in preschool age, such as Del Arco (2017) and of strategies and resources that can be used by professionals of dynamic psychomotority in this educational field (Arnaiz, Rabadán & Vives, 2001; Aucouturier, 2004, 2018; Rota, 2015; Sánchez & Llorca, 2008b).

Analysing the results of the different researches that we have aforementioned, we can affirm that the performance of educational psychomotricity, regardless of whether it is of normative or dynamic current, provides a series of benefits in the development of children in preschool age, in terms of motor, personal and social skills, cognition, emotional intelligence, motivation and performance in academic tasks, general development, self-perception of physical competence, self-esteem, well-being, viso-motor control and improvement of the life quality. According to Lupu (2011), psychomotor education is the basis for harmonious physical and psychological development, and should therefore be implemented from preschool education. In addition, as Solís, Prieto, Nistal & Vázquez (2017) pointed out in their study, the majority of professionals who teach educational psychomotricity consider that this discipline is fundamental for working on children's global development and that the sessions should be planned beforehand. For Mamani (2016), when the psychomotor technique is applied in an appropriate manner, it helps children improve their skills in school, and, in addition, the use of adequate materials makes it possible to develop motor skills. They also emphasise the importance of prior planning that takes into account the social situation and level of development of each child.

However, there are no studies that compare these two currents of psychomotricity and whether one has better developmental results for children than the other. Terry (2014) proposed a comparison between normative and dynamic psychomotricity in children aged 3-4 years in terms of motor abilities using the three subscales of the McCarthy Battery (McCarthy, 1977): leg coordination, arm coordination and imitative action, and found that children scored higher in motor abilities with normative psychomotricity than with dynamic psychomotricity. However, the procedure used shows that dynamic psychomotricity was not carried out by an expert in this type of psychomotor practice, so the results of the study may be biased.

Therefore, the following objectives were proposed for the present research: to establish whether there are significant differences between the practice of dynamic psychomotricity and normative psychomotricity in the general and psychomotor development of preschool children (from 3 to 5 years old) and, if so, which is the most optimal methodology. Moreover, the analysis of emotional differences in 5-year-old children is considered.

MATERIAL AND METHOD

PARTICIPANTS

The sample is made up of 75 preschool children, aged between 3 and 5, from two public schools in the province of Tarragona (Spain). Specifically, 50.7% of the sample were girls. 28% were 3-year-old Preschool pupils, 42.7% were 4-year-old Preschool students and 29.3% 5-year-old Preschool pupils. Both schools accommodate families with a medium-low socioeconomic level, without being considered high complexity schools. The type of psychomotricity (normative or dynamic) was classified in relation to the training of the person who taught the psychomotricity sessions, their experience and the protocol of the sessions. The two trainers had postgraduate education in their respective current and the years of experience were similar. In addition, the research team checked one of the previous sessions in order to define the type of psychomotor practice.

MEASURES

In order to meet the proposed objectives, we provided a battery of questionnaires, which are described below:

Battelle Developmental Inventory (Newborg, Stock & Wnek, 1998): this inventory assesses the level of development in childhood from 0 to 95 months of age. Five areas are assessed: personal/social (ability to perform significant social interactions), adaptive (it measures autonomy in areas such as dressing, feeding, grooming, and ability to take responsibility), motor (body use and control, divided into gross and fine motor area), communication (expressive language and comprehensive language), and cognitive (it assesses conceptual ability). This test can be applied in full or in abbreviated form (screening). In this study the screening form was used, as it gives us general information on the

developmental level of the child within a shorter time. For each direct score of the different areas and for the total score, their equivalent ages are shown.

Picq and Vayer Psychomotor Test (Picq & Vayer, 1977): it is a test that evaluates the psychomotor level in childhood between 2 and 11 years of age. In our case, we have used the part of the early childhood psychomotor test, as it evaluates each behaviour of children between 2 and 5 years old, since it is more adjusted to the age of our sample. The behaviours evaluated included the eye-hand coordination (organisation of movements in which the vision and the upper limbs work at the same time), the dynamic coordination (organisation of movements in which several muscular groups are involved at the same time and have a purpose), the postural control (balance), the control over your body (body schema and praxis), perceptual organisation (interpretation and structuring of information from our senses), and language (immediate memory and pronunciation). This evaluation is complemented by a laterality test (tendency to use one side of the body in preference to the other).

Human figure drawing test (Koppitz, 1984): by drawing a person, a series of evolutionary items are evaluated (signs that are related to age and maturity level) and items that represent emotional indicators (signs related to the attitudes and concerns of children), the evaluation is made according to the quality of the drawings, the special details that are not usually drawn, and the omissions of items expected at a certain age. In this research, the human figure drawing test was used in order to explore the emotional level of 5-year-old children in preschool. This was due to the fact that the scales of this test begin at 5 years of age.

PROCEDURE

This study has taken into consideration the recommendations of the Spanish Organic Law 15/1999 and the Spanish Agency for Data Protection, which regulate the fundamental right to data protection. For this reason, different guidelines, which are explained below, were followed. Firstly, the research team defined the criteria for inclusion and exclusion of the participating schools. It was established that teaching staff should have specific postgraduate training in the type of psychomotricity they performed (minimum of 30 credits), as well as an experience of at least two years.

Six public schools were then contacted randomly using simple probability sampling. The management staff of five schools agreed to meet with the research team. At the meeting, the objectives of the study and the implications for the school were explained, as well as the type of psychomotor intervention they performed, the teachers' training, years of experience and the procedure used.

Subsequently, the research team gathered and evaluated the inclusion criteria. Only one school used dynamic psychomotor intervention and met the criteria. Out of the remaining four schools, two did not meet the criteria. In order to

match the sample, the school with similar sociodemographic characteristics was chosen.

Once the schools had been selected, informed consents were sent to the families of all the children, together with information on the objectives and implications of the study. Only children whose families gave consent were evaluated. Even so, the child was free to refuse to participate or to decline consent at any time. The tests were applied by professionals graduated in Psychology and with a Master's degree in Psychomotor skills and with experience in the application of this type of tests, and they became part of the research team.

As for the statistical analyses, the normality of the data was analysed using the Kolmogorov-Smirnov test ($p>0.05$) so it was decided to carry out parametric tests. Subsequently, a comparison of means was carried out through the Student t procedure for two independent samples, with the aim of identifying the differences that psychomotor practice could have in children's socioemotional development.

RESULTS

Table 1 shows the descriptive statistics for the different areas and subareas of the Battelle developmental inventory screening test and the student t test for two independent samples. Results show that the dynamic psychomotor group has higher means in most areas evaluated through the Battelle developmental inventory compared to the normative psychomotor group. Only the Personal-Social and Adaptive areas do not present significant differences between the groups. On the other hand, as it can be observed, asymmetry and kurtosis values indicate an adequate distribution of the data to perform parametric analyses.

Table 1. Descriptive statistics in the Battelle developmental inventory

Variables	General sample				Normative Psychomotricity		Dynamic Psychomotricity		Test for equality of means	
	Mean	SD	Asymmetry	Kurtosis	Mean	SD	Mean	SD	t	p
Areas										
P.S.	33.6	4.6	-1.1	-0.7	34.81	4.1	33.15	4.8	2.3	0.13
A	29.7	3.7	0.2	-0.5	29.41	3.1	29.92	4.1	0.3	0.58
M	13.6	5.5	-0.4	0.4	27.48	5.1	32.13	5	14.7	< .001
C	25.7	6.1	-0.2	-0.9	21.48	3.3	28.1	6.2	26.8	< .001
CO	25.6	5.8	-0.2	-1.5	22.67	6.3	27.29	4.9	12.6	< .001
Subareas										
G.M	13.6	2.6	-0.4	-0.6	12	2.3	14.58	2.4	21.3	< .001
F.M	16.8	3.4	-0.5	-0.3	15.48	3.3	17.54	3.4	6.6	0.01
R.C	12.8	3.3	-0.6	-1.2	10.04	1.9	14.38	2.9	47.3	< .001
E.C	18.9	3.2	-0.6	0.27	11.44	1.8	13.73	3.6	9.7	< .001
G.D.	30.45	18.6	-0.4	-0.1	136.22	14.85	150.5	18.59	11.7	< .001

Note. P.S = personal-social, A = adaptative, M = motor, C = communication, CO = cognitive, G.M = gross motor, F.M = fine motor, R.C = receptive communication, E.C = expressive communication, G.D global development

Table 2 presents the descriptive statistics for the different areas of the Picq and Vayer test. The results suggest that the dynamic psychomotor group scored significantly higher than the normative psychomotor group, except on the eye-hand and lateral coordination scales, where no significant differences were observed.

Table 2. Descriptive statistics in the Picq and Vayer test

Variables	Normative Psychomotricity		Dynamic Psychomotricity		Test for equality of means	
	Mean	SD	Mean	SD	t	p
Eye-hand coordination	4.13	1.05	4.49	1.27	1.56	0.22
Dynamic coordination	4.17	1.32	4.94	1.26	6.23	0.01
Postural control	4.43	1.68	5.31	1.39	6.06	0.02
Control over your body	12.63	3.02	16.73	1.85	53.3	< .001
Perceptive organisation	3.85	0.53	4.21	0.77	4.54	0.04
Language	3.85	1.13	4.46	0.71	8.09	0.01
Laterality	4.93	1.66	4.35	2.09	1.49	0.23

Table 3 shows the scores of the emotional indicators of the Human Figure test in 5-year-old preschool children. The data suggest that there are no significant differences in any of the areas.

Table 3. Descriptive statistics in the Human Figure test

Studied variables	Normative Psychomotricity		Dynamic Psychomotricity		Test for equality of means	
	Mean	SD	Mean	SD	<i>t</i>	<i>p</i>
Qualitative signs	1.75	1.39	1.57	0.94	0.13	0.72
Special details	1.50	1.20	1.14	1.03	0.55	0.47
Omissions	0.50	1.07	0.29	0.47	0.43	0.52
Emotional indicators	3.75	1.28	3.00	1.47	1.45	0.24

DISCUSSION

The aim of this study was to establish whether there were significant differences between the practice of normative psychomotricity and dynamic psychomotricity in general and psychomotor development in preschool age and, if so, which was the most optimal. Additionally, the analysis of emotional differences in 5-year-old children.

Two groups of preschool children were compared with two different psychomotor practice methodologies, one group with a dynamic normative type of methodology and the other with a dynamic type of methodology, a division noted by Ballesteros (1982).

Taking into account the differences in methodology of both psychomotor practices (Del Arco, 2017), the results suggest that children who were exposed to dynamic psychomotor sessions obtained better results in general development and at psychomotor level than children who performed normative psychomotor. Better results have been found in the motor area, gross motor subarea, fine motor subarea, communication area, receptive communication subarea, expressive communication subarea, cognitive area, global development, dynamic coordination, postural control, control over your body, perceptual organisation and language. These areas are closely linked to the idea of globality from which the concept of psychomotricity emerges and to the consideration of the person as a whole, especially in the stage from 0 to 6 years, in which motor, cognitive, emotional and social aspects are closely related. As Camps (2009) comments, the different definitions of psychomotricity highlight the incidence of psychomotor education on the totality of the human being, with the psychic and motor aspects being deeply interrelated. Thus, the psychomotor intervention favours a balanced development of the child's personality and contributes to their psychic construction.

The results show higher scores in the different areas of children's development and also in terms of global development. In relation to motor development, we see higher scores, specifically in gross motor skills (Battelle), dynamic coordination, postural control, and control over your body (Picq & Vayer), that is, at the level of general dynamic coordination and balance, but not in terms of fine or visual motor skills. We will further comment it below. In relation to gross motor skills, we believe that the fact that in these sessions children move, run, jump, etc., always from their own evolutionary and competential moment can favour a zone of close development (Chaiklin, 2003), not forcing motor learnings for which they are not yet ready or carrying out activities that have little emotional resonance because they have already overcome them and do not need to pay attention to them.

There are also higher scores in the cognitive area (Battelle), in the perceptive organisation and in language (Picq & Vayer). Although much more evidence would be necessary, we can hypothesise that the dynamic current, when working globally all aspects of child development, starting from one's own play and desire, favours cognitive development at the level of perceptual discrimination, memory, reasoning, and conceptual development, which are the skills and capacities involved in the applied tests.

Scores are also higher in the area of communication (Battelle). Specifically, the subarea of receptive communication, which evaluates discrimination, recognition and understanding of sounds and words, as well as accurate information through these signs, Braille system or other non-verbal means; and the subarea of expressive communication, which evaluates the production and use of sounds, words and gestures as a means of conveying information to others. We believe that this can be facilitated by the fact that in the dynamic current much importance is given to the spontaneous expression of children and the specialist in psycho-motor skills development uses in a significant way the different communication mediators (looks, gestures, contact, tone of voice, posture...), propitiating a non-verbal communication in addition to the verbal communication given in both methodologies.

The differences found may be due to the conception of dynamic psychomotricity and its methodology. As expressed by Aucouturier (2015), the child requires a tonic-emotional maturity in order to acquire school knowledge and culture, and not all children achieve it at the same age. He defends that in free play, they flow of tonicity, emotions, gestures, conscious and unconscious representations and the pleasure of acting arises. By playing, one can symbolise fear, represent oneself and affirm one's existence. It is a game that starts from the desire of the child and where this one finds an adult, specialist in psycho-motor skills development, who is physically and emotionally available. For Polacco (2015), the importance of this methodology lies in the spontaneous game and the interaction with an adult with a system of attitudes, developed from a specific training in which he works very well in his own body in the relation with himself and with the others. For him, thanks to the playing, the external world can be put in relation with the internal world and vice versa. This opens the way for a possible change on a deep level. For Polacco, the particular aspect of Aucouturier's psychomotor practice (methodology followed by the dynamic

psychomotor group in this research), compared to all the other activities based on game, refers to the importance given to actions in the game and to the fact that the pleasure that accompanies them may, by itself, mitigate some painful situations that the child may have lived through until then, and may imply a deep change. But, as he claimed, for that purpose the child must feel safe in front of an adult who accompanies him in the game. He considers the game as one of the 7 subcortical circuits with functions of survival, reproduction and psychological development.

The work carried out by the dynamic specialists in psycho-motor skills development based on the child's free experimentation of his body, through the game, and their attitudes of listening, availability and containment, as well as the use of adjusted strategies and communication mediators (Camps, 2012), can be the explanation for these differences, since work at a tonic-emotional level with preschool children has an impact on other areas of development, as we have noticed in the results of this research. According to Camps (2009), it is the intervention on the globality of the human being, the tonic-emotional relationship that is established with the child and the attitudes of the professional in dynamic psychomotricity that favours their development in a harmonious way and helps the structuring of their psyche.

The areas of development where no differences were found, Personal-Social and Adaptive, could be due to the fact that these areas are worked on daily in schools, being part of the area of personal autonomy, as established by Decree 181/2008. In fact, reviewing the items that correspond to the application of the Battelle developmental inventory for these ages, we observe that these items refer to the learning of habits worked on in preschool, for example, buttoning, dressing, in the case of the Adaptive area, or learning social behaviours, for instance, recognising differences between men and women, or distinguishing acceptable and unacceptable behaviours, in the case of the Personal-Social area.

Regarding the areas of eye-hand and lateral coordination, no differences were found between methodologies. This may also be due to the fact that schools work on in these areas every day, since they are the basis for subsequent learning. Thus, if we look in detail at the items applied in the tests of Battelle and Picq and Vayer for these ages, we realise that they correspond to learning and habits that are worked on regularly in preschool, for example, making a construction with cubes, threading a needle, making a knot, cutting with scissors, or copying a picture. In addition, in the case of laterality, we have detected that at the ages of our sample (from 3 to 5 years old), it is usually not defined. As Mayolas and Reverter (2015) indicated, laterality tends to become homogeneous in a large part of the population between the ages of 11 and 15, producing a significant change from crossed to homogeneous laterality around the ages of 8-10. On the other hand, concerning manual laterality, it is defined in some cases at the end of the first year, but in general there is an alternation of periods of ambidextrism, right or left dominance, with displacement to the right for those children between 2 and 3 years old and to the left for those with 3 and 5 years old, with an oscillation of laterality up to 5 years and sometimes up to 7 years in some children (Sassano, 2015).

As for the emotional indicators of the Human Figure test, we found no differences between the two methodologies. In fact, the applied test (Koppitz human figure) is applicable from the age of 5 and therefore we could only make this analysis with this age group. Nevertheless, an indirect indicator of emotional aspects is postural control and balance, since, as different authors (D'Mello, Dale and Graesser, 2012; Lelard, Stins & Mouras, 2019) state, there is an intimate relationship between postural control and people's emotions.

Thus, we can see how in Picq and Vayer's test the items belonging to the "postural control" scale are balance tests, as the test itself indicates, and within it the children in the dynamic psychomotor group have significantly higher scores. Likewise, analysing the gross motor items of the Battelle developmental inventory, we find that all of them are tests of balance and not of dynamic coordination. In this sense, we refer to different authors (Berruezo, 2002; D'Mello, Dale & Graesser, 2012; Lelard, Stins & Mouras, 2019) who highlight the relationship between balance and emotional development, a relationship that does not occur when we talk about gross motor skills in terms of dynamic coordination activities. We believe that this aspect is essential when interpreting the results of tests involving gross motor items, but that these may be of dynamic coordination or may also involve balance and it is essential to determine what psychomotor content is being evaluated in order to be able to make an interpretation according to results. Wallon (1978, in Berruezo, 2002) already highlighted the interrelationship between labyrinthine-proprioceptive or postural activity, on the one hand, and emotional life on the other. For him, the affective life has an organic substratum that is established on tonic-labyrinthine and postural functions. The existing relation between the balance alterations and the anxiety states has been proved, due to the relations between the affective life and the tonic background. The vestibular system influences the emotional functions, given its intricate connections with the limbic system. The balance, besides being the basis of all dynamic coordination, is an aspect of the education of the body schema and is linked to attention processes (Berruezo, 2002; Sassano, 2014).

Therefore, considering this relationship of postural control with the emotional sphere, it can be noticed how children who perform dynamic psychomotricity have higher values than children who follow normative psychomotricity. This suggests a positive and greater effect on the emotional sphere of children in preschool who perform a dynamic psychomotor practice than those in a normative psychomotor practice. For future studies, the emotional differences between groups could be evaluated using a qualitative methodology, where an expert in the interpretation of drawings can make an analysis of each drawing as well as comparisons.

Thus, our results are in line with the research of Mas and Castellà (2016), who supported that this type of psychomotricity favoured general development, motor skills and cognition. These results are also against Terry's results (2014), which showed superior motor skills with a normative psychomotricity over dynamics, although we previously discussed that these results could be biased.

LIMITATIONS

This study has some limitations. On the one hand, the methodological design contemplated a post-test evaluation; this has not allowed us to observe the initial level of development of the participants. This was due to the fact that the sample under study included children between three and five years old, and the exposure to two evaluations in the same year was considered excessive. However, children with developmental disorders or signs of developmental delay were excluded from the sample, so it is assumed that all participants had normal developmental progress. Furthermore, as Terry (2014) points out, homogenisation of motor skills is common in the early stages of schooling.

On the other hand, although different variables of the professionals in charge of carrying out the psychomotricity sessions were assessed, such as the level of training and experience, no personal factors that could be influencing the results were considered, as for example, personality traits, contact with the students apart from the psychomotricity sessions and close contact with the families. There is a need for further studies that evaluate and triangulate the characteristics of the specialist in psycho-motor skills development in order to benefit the development of pre-schoolers.

In the same way, in this study the group socioeconomic characteristics of the students were taken into account. However, the individual socio-economic situation of each child was not evaluated. These data could shed light on the literature about the influence of different types of psychomotor skills on specific social, economic and cultural situations.

CONCLUSIONS

The practice of educational psychomotricity has increased in recent years in preschools. However, there are few studies that analyse its benefits from a quantitative model. The data from this study suggest that dynamic psychomotor practice provides more benefits at psychomotor and developmental levels than with normative psychomotor practice, and possibly also at the emotional level. Further studies are needed to empirically prove the additional benefits of dynamic psychomotricity in comparison with normative psychomotricity.

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