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EFFECTS OF A CREATIVE RELAXATION PROGRAM AT LEVELS OF A MOTOR CREATIVITY IN PRESCHOOL EDUCATION

Cristina Arazola-Ruano
University of Jaen

Abstract. Despite the importance of the motor skills' development in the field of Preschool, research that focus their subject of study in identifying the effects of motor creativity in students in such ages are scarce. Starting from this premise, a study has been developed in order to verify the effects of creative relaxation on the levels of motor creativity linked to fluency, originality and imagination, of a group of Preschool students, more specifically, children in their last preschool year aged between 5 and 6. To this end, a creative relaxation program has been applied to a 25-subject group with a duration of 10 weeks and daily sessions lasting for 10-15 minutes. These sessions took place after the resting time or at the time of playground. As a data collection tool, we have used the Thinking Creatively in Action and Movement Method by Torrance in 1980, which is a validated tool. Two groups were established as follows: the first one is the control group whereas the second one is the experimental group—which receives the intervention program. Each group has 50 students, boys and girls. The results found in this study show how the creativity relaxation program promotes the increase in the motor creativity levels, referring to motor fluidity, motor originality and motor imagination, of the experimental group, that is comprised of children in their last year of Preschool.
Keywords: preschool, motor fluency, motor imagination, motor originality, creative relaxation.

EFECTOS DE UN PROGRAMA DE RELAJACIÓN CREATIVA SOBRE LOS NIVELES DE CREATIVIDAD MOTRIZ EN EDUCACIÓN INFANTIL

Resumen. A pesar de la importancia del desarrollo de la motricidad en el campo de Educación Infantil, todavía son escasas las investigaciones que centran su objeto de estudio en identificar los efectos que dan lugar a una mejora de la creatividad motriz en el alumnado de estas edades. Partiendo de esta premisa, se ha desarrollado un estudio con el objetivo de comprobar los efectos que tiene la relajación creativa sobre los niveles de creatividad motriz, referidos a fluidez, originalidad e imaginación, de un grupo de alumnos del segundo ciclo de Educación Infantil, en concreto a los niños y niñas del último curso, de entre 5-6 años de edad. Para ello, se ha aplicado un programa de relajación creativa, a un grupo de 25 sujetos, con una duración de 10 semanas, realizándose sesiones diarias con una duración de entre 10-15 minutos, después de la hora de descanso, u hora del patio.

Como instrumento de recogida de datos, se ha utilizado el Test Pensando Creativamente en Acción y Movimiento de Torrance en 1980, que se encuentra validado. Se establecen dos grupos, un grupo control y otro grupo experimental, que recibe el programa de intervención, formados ambos por 50 alumnos y alumnas. Los resultados encontrados en este estudio, demuestran como el programa de relajación creativa favorece el incremento de los niveles de creatividad motriz, referidos a fluidez motriz, originalidad motriz e imaginación motriz del grupo experimental, en el alumnado del último curso de Educación Infantil.
Palabras clave: educación infantil, fluidez motriz, imaginación motriz, originalidad motriz, relajación creativa.

Introduction

Research on creative relaxation and motor creativity in children's education has been omitted in most of human development researches. Most of researches are rather focused on aspects related to verbal and graphic creativity, and ignore motor aspects. Creativity accompanies us throughout our lives; in our daily activities, in our actions, thoughts and imagination. It has a vital and day-to-day importance, it is a personal feature, a capacity that helps face special situations, it is a process in human development; all human beings have creativity. This is why, in this field, it is positive "a form of educational inquiry designed to empower teachers to reconstruct their practice as an educational inquiry though a process of reflective understanding and rigorous critique" (Carr, 2002, p.14).

In recent years, research on the creativity's development field and on the creativity assessment has been varied and object of study for many studies, above all, for studies within the school context. Various research and definitions related to the creativity have been proposed, but research on motor creativity has been scarce, currently, innovation is beginning to happen in creativity areas, such as those related to the movement, in this case, to the motor creativity. Some research studies have been already conducted on students from Preschool, Elementary School, High School and with some teaching staff.

In 1980, motor creativity was beginning to be a concept, and Torrance created the Creatively Thinking in Action and Movement Test in order to assess it. And back in 2008, research was conducted that linked motor creativity with relaxation. The need for carrying out this study is due to the scarce researches on motor creativity and the importance that this aspect has for the development of students of such ages. "Through gesture and movement, the child enhances the possibilities for interpreting and expressing messages through body language, so in educational situations, creativity will have to be boosted by using these resources" (Order August 5, 2008, p.39).

All the human being's potentialities have to be optimized. That is the reason why one has to bet on a research that stimulates the positive affection, cognition, meeting others, with one's own body, with innovation, with discovery and movement.

Almeida, Ferrandiz, Ferrando, Oliviera & Prieto (2009, p.562) state that:

"Currently, the study of creativity is supported by the importance that is given to the ability to innovate, solve problems and take risks, in contexts and situations that are marked by constant changes that require from the thought's divergence and discontinuity".

Following the creativity, some of the authors consider the creativity as a combined process, in which many factors play a role: skills, interests, attitudes, motivation, intelligence, knowledge, abilities, habits, opinions, values and cognitive styles. "Creative teaching, apart from imagination, requires from creativity, flexibility, originality, ability to adapt and be used in the solution of the problem in the syllabus" (Bermejo, Ferrando, Hernández, Prieto, Sainz

& Soto, 2010, p.106). So it would be very advisable for the teaching staff to be familiarized with these basic principles in order to help and ease the students' highest creativity.

Gardner (2001, p.126) specifies:

"The creative individual is a person who regularly solves problems, develops products or defines new issues within a field in such a way that at the beginning is considered as new but that at the end is accepted in a certain cultural context".

Definitions of creativity are varied, "it is almost infinite, it involves every sense. Much of it is invisible, nonverbal and unconscious. Therefore, even if we had a precise conception of creativity, I am certain we would have difficulty putting it into words" Torrance (1990, p.43).

It is convenient to highlight that there are two ways of conceiving creativity. Creativity at a social level, understood as a contribution to the symbolic fields of culture and a personal creativity, as a personal achievement in any performance field.

Charaf (2012, p.129) claims:

The basic and specific creativity tools like: brainstorming, unusual analogy, Creative Problem Solving and Mental Image are tolls that once they are understood and well developed, they good partners for developing divergent thinking.

All of it depends in exercising and on the adequate use of each one of them, the effects would be personal for each person, which is way it is expected that every person is able to express the personal experience regarding the creative relaxation's practice, as well as to be able to communicate the personal product. It is a transforming imagination and fantasy, which is achieved by the relaxation process, when the person is free of thinking.

Creativity is a relevant topic, which is why a significant value must be given to it in order to assess it. Its social and educational relevance is highlighted, and that allows us to place value on it as to check its development and growth at an individual level. Creativity is going to be assessed as long as there is a creative stimulation project going on, as it is the case in this research. The development of creativity in the individual has to be taken into account, as well as the individual's abilities, environments, processes and results.

De la torre (2006, p.6) sets four cardinal points to assess creativity:

- N- Need for assessing the creativity
- S- Systematized in its conception and process
- E- Strategic, regarding how it is done
- O- Orienting and enhancing as its objective

In relation to its physical dimension, the development of creativity leads to a continuous improvement of the physical and body health faculties. From its intellectual dimension, it is related to the way to build and apply knowledge. Concerning its psychological dimension, it is focused on the importance if developing an ideal state, in which mind and body integrate as to lead to a physical and emotional well-being. All that leads to the fullness of the faculties that make up the personal profile. It leads us to link the creativity with the motor ability as a concept. "Motor creativity is a relevant subject for the humans' integral development in the physical, intellectual and psychological dimensions" (Trigo, 2001, p.5).

Motor creativity is crucial, it is defined as "the intrinsically human ability to live the corporeality as to process and produce, before a stimulus, the greatest number of original motor responses possible" (Olivares, 2014, p.16). Abundant, diverse and original responses before a motor stimulus. As well, a distinction should be made between motor creativity, that affects the invention of a new movement and the motor practice, which is the execution of the movement.

It is crucial to stress, as the motor creativity process is structured, "the analysis of the motor creative process is made up by various phases, the preparation phase, the incubation or internalizing phase, the inspiration phase and the expression or communication phase (López, 2005, p.23). In turn, the motor creativity consists of three areas: originality, fluency and imagination, through which it is possible to measure and observe it.

The originality term refers to something that cannot be repeated, at least for the person that assesses it that fact has been unique and non-repeatable, brilliant, it has not been seen before. Originality is something valuable and new, something that is very significant in creativity. Also, the deadline is established regarding the reference group or the moment to which the answer given to the sender is given to the sender.

The fluency term refers to the number of different, relevant and adequate responses. It is associated with productivity, the multiple responses, an ability to think of many ideas or solutions to one problem.

Following with another aspect of creativity, there is the imagination "the imagination is thinking in images or projecting in your mental image what you think when you close your eyes" (Del Prado, 2006, p.98). Some related synonyms would be ingenuity, intuition and fantasy. Defining imagination and creativity is somehow confusing, since both concepts are similar but with just one difference it is enough, since the imagination is a mental image and the creativity implies creating through that mental image.

The relaxation concept adds to all the terms that make up the motor creativity term, as a main element that accompanies this process. With the relaxation, muscles are the first to take advantage from it, the tension diminishes and the possibility of making a greater number of movements is given way. It has beneficial effects at a physical, psycho-emotional, medical-therapeutic and cognitive pedagogical. The relaxation is adequate for enhancing and gives way to the people's imagination. According to Franco & Justo (2008, p.34) "it can be said that relaxing the child's body and mind makes that the child breaks free from the tensions that block the child's creative ability in order to let go of the creative intern processes".

For Charaf (2012, p.136) through relaxation, the following points are achieved:

- Mind-body integration in harmony and balance, in order to focus the energy for the fluency of ideas and productivity.
- Mental flexibility, through the divergent and transformational thinking to be able to build, modify and understand new scenarios. To be able to combine realities and get involved in them.
- Spontaneity and authenticity before situations that require from an opinion, response or new or original solution.
- Ability to face the risk, to participate in poorly structured situations and to tolerate unexpected events and diversions in directions.

Since relaxation is a vital element in this process, "the interest as an educator must be placed on studying and looking for proposals so that students develop them, as a complement

for their personal integral training, since the society's future is going to depend on them" (Olivares, 2014, p.6).

Motor creativity is still a susceptible object of different models and perspectives of treatment, its presence within the educational context makes it necessary to intervene to ease and boost the motor development and all its processes, which turn into the development of the students in these ages regarding cognitive, affective and movement processes. For that reason, relaxation is proposed within an integral education with a good working methodology that is interesting and that catches the student's attention.

Creativity, added to motility, can meet that objective, in addition to inducing in all the human potential abilities: the creativity makes the primary processes of the right hemisphere and the secondary ones of the left hemisphere merge in a balanced way.

In order to try to give an answer to the research question:

What are the effects of the creative relaxation on the motor creativity levels in preschoolers? in the present study, a psychomotor intervention is made basing on the creative relaxation, with the aim of knowing the effects of a creative relaxation program on a group of preschoolers, concretely children between 5-6 years old. To dos so, a hypothesis is posed: if a creative relaxation program is applied to a group of preschoolers, then, their motor creativity levels, in terms of fluency, originality and imagination will increase significantly.

Method

Design

In order to the effects that the creative relaxation program (VI) on the motor creativity (VD), referred to fluency, originality and imagination a longitudinal design was used, measures were taken during two periods of time. It is a quasi-experimental design in which two groups were compared, with pretest-post-test measurements, one being the experimental group and the other the control group. The schools' allocation was done in a non-randomized way, as to control the possible differences between the two schools as well as the possible differences between the student body.

Population and sample

This study's sample consists of 50 students divided into two natural groups from two class groups of the last preschool year, of two public schools in two villages of Jaén. One of the groups was the control group, as the reference group and the other as the experimental group, also called the intervention group. The control group was made up of 25 subjects, 11 are boys and 14 are girls (44% boys and 56% girls) and the experimental group, made up of 25 subjects, 10 are boys and 15 are girls (40% boys and 60% girls). The ages of the subjects have oscillated between 5 years 4 months old, being the youngest subject, and the one with the highest age being 6 years 3 months old. There are no significant differences in age or gender between the groups.

Data collection tool

The tool used to assess the subjects' motor creativity has been the Thinking Creatively in Action and Movement test (Torrance, 1980). This tool comprises four assessment tasks in which mainly kinesthetic answers are included, in accordance with the main creative thinking abilities in Preschool.

By this test we can assess the various dependent variables of this study. In this way it is possible to assess the fluency (number of different, relevant and adequate responses), the imagination (the way in which the subject is able to adopt six proposed roles) and originality (assessed once more, depending on the statistical infrequence). Conducting the test requires from a limit of time. The tasks that make up the test are the following:

Task 1. In how many ways? This tasks' objective is to assess the child's ability to produce alternative movement ways, so the child is asked to show us different ways of moving, from one spot of the room to another. Motor and verbal tasks or a combination of both of them are also accepted.

Task 2. Can you move the same? It is designed to assess the imagination, empathy, fantasy abilities and to adopt not usual roles. Six situations are posed, in four of them the child is asked to act as if he/she were an animal or an object (a tree that is being moved by the wind, a rabbit, a fish and a snake) and other two in which the child has to associate him/herself with other objects (driving a car and pushing an elephant so the animal stops stepping in something the child wants to grab).

Task 3 in what other ways? In this third task, the child needs to experiment with different ways for throwing a plastic glass into a wastepaper bin. It is assumed that poorly creative subjects will do so only the way it is supposed to be or the ones that has been taught to them, while creative children will come up with many ways to do this very simple task and will look for newness or to let go of boredom.

Task 4 what can you do with a plastic glass? In the last task, the child is asked to use a plastic glass with a purpose other than what it was designed for, to play with it or to imagine that it is something else. It is a pretty similar task to the unusual use tasks that are present in many creativity tests for children and adults, being one of the most predictive elements in this kind of batteries.

This test is designed to apply it collectively, with children aged between 3 and 8. Tasks 1, 3 and 4 score in fluency and originality and task 2 does so only in imagination. Fluency and originality score in accordance with the manual criteria once the test has been conducted. The imagination (task) must be scored by the assessor according to the test's development and with the scale in the answer sheet. The scale for each one of the tasks has been the following:

Movement's fluency:

1. There is no movement
2. Movement is normal
3. The movement is one or two times different
4. Motor movement and verbal response

Movement fluency:

1. The child does not throw the glass
2. The child throws the glass once
3. The child throws the glass one or two different times
4. The child throws the glass more than three different times

Handling fluency:

1. The child does nothing
2. The child does so by using the regular way
3. The child plays
4. The child imagines and plays

Imagination:

1. Without movement

2. Similar movement
3. It is close to a movement
4. It is very close to a movement
5. It is identical to a movement

Originality:

1. 0 when the response is observable in 10% or more of the assessed subjects
2. 1 point when the response is observable between 5% and 9,99% of cases
3. 2 points when the response is observable between 2% and 4,99% of cases
4. 3 points when the response is observable in 1,99% of the cases or less

Procedure

First, the pre-test phase was done, which was a measurement of the motor creativity's initial levels of the subjects belonging to both studied groups. The test was done individually without the presence of the group and during the school time. Once the pre-test was finished, the intervention program in creative relaxation was implemented to the experimental group's subjects. The control group, meanwhile, was doing their usual relaxation routine, consisting of classical music and reading and writing.

The person in charge of the intervention was the tutor of the experimental group's subjects. The teacher was totally informed of everything that is related with the test and the methodology.

The creative relaxation program was developed during 10 weeks, belonging to the academic course's second quarter in order to avoid the maturation factor. This creative relaxation program was used by Clemente Franco Justo, professor in the Universidad de Almería. Daily sessions were done, which lasted for 10 and 15 minutes to avoid a lack of attention from students. All the sessions took place after the playground time, which meant coming back to calmness. The reason why it takes places after the playground time is that, at that moment, students come back to calmness, after having done some exercise, which results in a body and mind relaxation.

The creative relaxation program for the experimental group was divided into three periods of time. The first period of time lasted for three weeks of the school year. Every student would lay down, being completely relaxed, in mats and the teacher would ask them to close their eyes and listen to what she told them, relaxing sentences and calm states, while calm songs would be played in the background. After staying in such state for a few minutes, students would seat in a circle, discuss what they just did and how they felt.

After all this period of time, the second part or period of the relaxing program took place, which lasted for three weeks, and the usual procedure was followed: children would lay down in mats and relax while listening to calm songs. The teacher eased the relaxation process to them by talking to them and suggesting relaxing states for some minutes. Afterwards, the teacher would read them a tale and she would ask the children to imagine the tale's scenes as well as the characters, such tales were unknown to the children in order to avoid imagining a tale they already knew and therefore, making it harder for them to let imagination comes into play. Once the tale was finished, they would sit in circle and would discuss what they had lived and imagined in each one of the session's tales. In every session, a calm, secure, free and fun environment was established.

The third period of time lasted for four weeks, one week more than the previous ones. It would begin exactly the same as the others, with the students laying down in mats, with relaxing songs playing at the background and with the teacher suggesting calm sentences and

states. Subsequently, after a few minutes, the teacher would ask the children to imagine that they ran into determined objects and how they would play and use such objects. For example, imagining that it is on the street and thinking of what they would do with the object and so on with other daily objects.

Once the session was over, the students would sit in a circle and discuss.

Once the creative relaxation program was concluded, the post-test was done, in the same conditions and with the same subjects, in the control and the experimental group, using the TCAM.

Statistics' analysis

The used statistics analysis has been done by using SPSS software, version 19.0 for Windows.

Hereafter, every dimension of motor creativity is analyzed, as well as the differences in the control group and in the experimental group before and after carrying out the intervention program in creative relaxation. In order to do so, first, a general descriptive statistical analysis is made as to check the average scores of both groups, taking them as a reference and observe that there are no significant differences between both groups.

Then, each one of the motor creativity components is analyzed. Thus, a general descriptive statistical analysis of the control group and the experimental group was made, taking as a reference the average, the number of subjects belonging to each group and the standard deviation. To obtain the statistical value p (significance) an ANOVA 2(group) x 2(time) analysis is made by using the general lineal method, repeated measures, in the pre-test and the post-test in the experimental group and the control group for each one of the motor creativity variables, taking as a reference the intra-subjects effects' evidence. Results are shown in tables 1, 2 and 3.

Results

The results of the descriptive analysis, showing the average scores in each one of the measurements in the pre-test phase of the experimental group and the control group before the intervention program are shown in figure 1. For it was checked that there were no significant differences from the beginning between both groups, the intervention program was implemented.

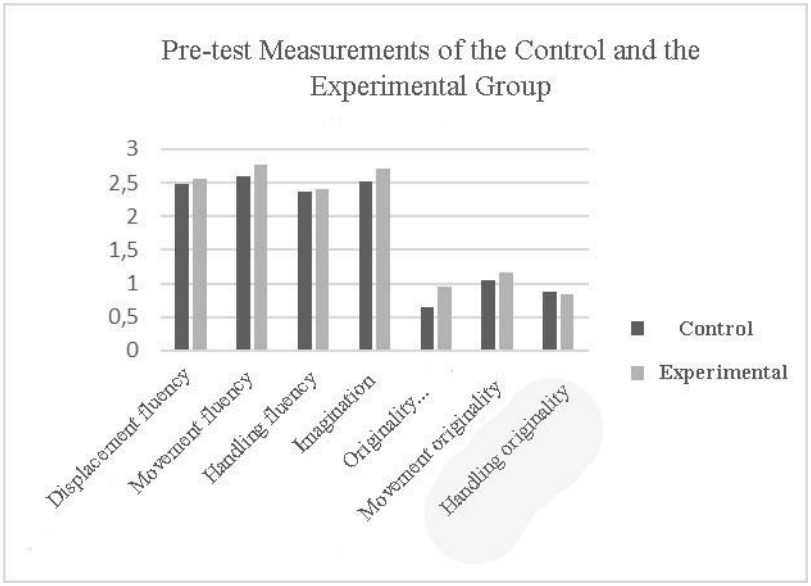

Figure 1. Average scores of the control and experimental groups in the pre-test phase

Every table 1, 2 and 3 the differences in the control group and in the experimental group before and after carrying out the intervention program in creative relaxation are indicated. The motor creativity indicators are collected, in each case, the number of subjects, the average and the standard deviation after the intervention and the statistical value (relevance) that shows the probability that the obtained results may be random or not.

Motor fluency

The scores belonging to the analysis of table 1 have been divided into the categories displacement fluency, movement fluency and handling fluency. In the displacement fluency category, the experimental group shows a slightly higher average (A=2.56) in comparison to the control group in the pre-test phase (A=2.48). In the post-test phase, the experimental group (A=3.12) and the control group (A=2.64) show significant differences, although the experimental group has a higher significant difference than the control group p<001. In the movement fluency category, the experimental group (A=2.76) shows in the pre-test phase an average which does not vary very much in relation to the control group (A=2.60). In the post-test phase the experimental group (A=3.16), p<01 and the control group (A=2.80), p<05. Both significant showing the experimental group a higher relevance. In the handling fluency category, the experimental group (A=2.40) and the control group (A=2.36) there are almost no differences between the pre-test and the post-test averages in the experimental group (A=3.12), p<001 and the control group (A=2.60), p<05. In all the categories, the experimental group shows a higher significance.

Table 1
Scores and motor fluency results in the control and experimental group

			Pre		Post			
	Creativity indicators	**N**	**Average**	**Stdrd Dev.**	**Average**	**Stdrd Dev.**	**Sig.**	
Control	Displacement	25	2,48	,510	2.64	,638	,043	*

	fluency						
	Movement fluency	25	2,60	,645	2.80	,577	,022	*
	Handling fluency	25	2,36	1.036	2.60	,866	,011	*
Experimental								
	Displacement fluency	25	2,56	,507	3.12	,526	,000	***
	Movement fluency	25	2,76	,663	3.16	,554	,009	**
	Handling fluency	25	2,40	1.00	3.12	,726	,000	***

Note: *p<0.05. **p<0.01. ***p<0.001

Motor imagination

In table 2 we can see the average pretest and post-test scores of the experimental and the control group, as well as the statistical value. In the pre-test phase, the control group (A=2.52) and the experimental group (A=2.71) obtained differences in the averages. In the post.-test phase, the control group (A=2.68) and the experimental group (A=3.26) obtained significant differences, p<05, being the experimental group the one with the greatest significant value, p<011.

Table 2
Scores for the motor imagination in the control and experimental group

	N	**Pre**		**Post**		**Sig.**	
		Average	**Stdrd Dev.**	**Average**	**Stdrd Dev.**		
Control Group	25	2,52	,641	2.68	,476	,006	*
Experimental Group	25	2,71	,630	3.26	,402	,000	***

Note: *p<0.05. *** p<0.001

Motor originality

The scores in table 3 have been divided into the categories displacement originality, movement originality and handling fluency. In the displacement originality category, the experimental group shows in the pre-test (A=0.96) that evolves in the post-test phase (A=1.76), which results in a p<001 significance. The control group (A=0.64) in the pre-test phase a favorable evolution is produced too, although it is less than the one that the experimental group has (A=0.84) p<05. Regarding the movement originality, the experimental group evolves from (A=1.16) to (A=1.68) in the post-test phase, with a p<001 significance. And the control group in the pre-test phase (A=1.04) obtains in the post-test phase (A=1.36), differences are not significant, p>05. In the handling originality category, the experimental group (A=0.084) in the pre-test improves the score in the post-test phase (A=1.40), p<001. The control group in the pre-test phase (A=0.88) obtains in the post-test phase (A=1.08), differences are not significant, p>05.

Table 3
Scores for the motor originality in the control and experimental group

	Creativity indicators	N	Pre		Post			
			Average	Stdrd Dev.	Average	Stdrd Dev.	Sig.	
Control		25	,64	,810	,84	,943	,022	*
	Displacement originality							
	Movement originality	25	1,04	1.241	1.36	1.254	,103	
	Handling originality	25	,88	1.166	1.08	1.152	,057	
Experimental								
	Displacement originality	25	,96	1.136	1.76	1.165	,000	***
	Movement originality	25	1,16	1.214	1.68	1.108	,000	***
	Handling originality	25	,84	1.143	1.40	1.118	,000	***

Note: *p<0.05. ***p<0.001

In figure 2, the general trend is shown, it is an increase of the average scores that show the motor creativity levels, classified into fluency, imagination and originality categories. Nevertheless, the significant increase in each one of the categories can be observed. A general descriptive statistical analysis has been carried out, taking as a reference the control group and the experimental group averages in the post-test phase.

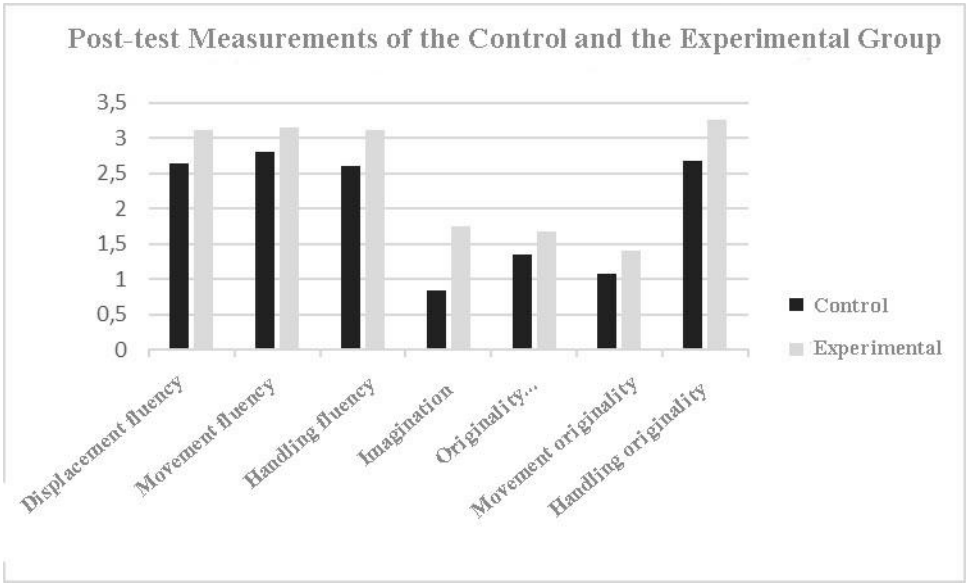

Figure 2. Evolution of the scores after the intervention program in the control and the experimental group

Discussion and conclusions

These results match other similar researches on creativity that claim that children following the creative relaxation program manifest a higher increase in the three evaluated motor creativity dimensions, displacement fluency and originality, handling originality, movement and imagination, in comparison to the subjects of the control group (Franco, 2008: Justo, 2009; Olivares, 2014). The hypothesis has been confirmed, from these data, it can be concluded that children subjected to the creative relaxation program obtained a greater significant improvement en their motor creativity levels, structured in originality, fluency and imagination, as compared to the children in the control group, who did not do any creative relaxation program.

The experimental group experienced a significant improvement in all the motor creativity dimensions, being the motor creativity the one in which the greatest significant difference was obtained, compared to the control group. The control group obtained a slight significant improvement in fluency and motor imagination, but it did not happen so with the motor originality.

It has to be emphasized that the control group subjects, who carried out no intervention, simply had to go on with their routine, also obtained an increase in most of the motor creativity levels, in spite of that the experimental group experienced a greater significant improvement, the control group also showed slight improvements.

In accordance with the obtained results, relaxation allowed the child to link the body and the mind while enjoying and experimenting in order to achieve the obtained results. Therefore, relaxation turns into a starting point when developing and enhancing the creative capacity. In addition to that, children ins these ages are in the representation stage, in the development of the symbolic functions and they are already capable of mentally handling objects and actions previously internalized.

The educational system must boost the creative abilities of preschool students so that they can naturally face any situation that will appear during their personal development. At this stage, the stimulation and the promotion of this abilities that allow them to solve the issues they may encounter during their learning process. At the same time, the educational system will need to value the free personal expression of all students and see the opportunities the students have to communicate themselves before any situation.

The present research presents some limitations which are convenient to highlight for future researches related to motor creativity. The population of study in this case has been rather small, which makes it difficult to be able to generalize more results in population. Besides, it would have been convenient to include different ages in the study in order to check whether the results are independent from the subjects' age. Had this research been wider, more time would have been needed as well as difficulties would have appeared to make different groups match in order to do the relaxation program.

In future research, a follow-up measurement should be made for some time to see if the achieved improvements are maintained or rather disappear, as well, this intervention could be taken into account to enhance other creativity areas, such as the verbal and graphic creativity, to verify if relaxation is more beneficial in other creative areas of the students.

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