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Bodily expression and creative thinking: an experience in a second primary class

Espressione corporea e pensiero creativo: un'esperienza in una classe secondaria primaria

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Abstract
Numerous European documents (European Commission, 2018; EACEA P9 Eurydice, 2009; OECD, 2019) emphasise the importance of guiding children to engage in expressive, motor and artistic fields and reiterate the need to promote education for artistic-motor expression in the school context as an element through which to stimulate divergent thinking and creativity in a general sense.
An exploratory intervention research in a second primary school class aimed to propose experiences of creative movement, bodily expression, and improvisation through which to guide the child to the freedom of expression of the creative self in order to understand the possible relationship between movement (as dance) and creativity (Bournelli & Mountakis, 2008; Pürgstaller & Neuber, 2019). In particular, we will discuss the correlation between creative acting and creative thinking and foster the enhancement of some of the eight creativity factors to improve school well-being and trust in peers.
Apparent increases in divergent thinking (+18.39%) and creativity (+8.59%) emerged in boys and girls, especially in flexibility, elaboration, and titles, as well as an improvement in scholastic well-being and trust toward peers.

Keywords: Creativity, Creative Thinking, Bodily Expression, Creative Movement, Dance.

Riassunto
Numerosi documenti europei (Commissione Europea, 2018; EACEA P9 Eurydice, 2009; OCSE, 2019) sottolineano l'importanza di guidare i bambini ad impegnarsi in ambiti espressivi, motori e artistici e ribadiscono la necessità di promuovere l'educazione all'espressione artistico-motoria nel contesto scolastico come elemento attraverso cui stimolare il pensiero divergente e la creatività in senso generale.
Una ricerca-intervento esplorativa in una classe seconda della scuola primaria ha inteso proporre esperienze di movimento creativo, espressione corporea e improvvisazione attraverso le quali guidare il bambino alla libertà di espressione del Sé creativo per comprendere la possibile relazione tra movimento (come danza) e creatività (Bournelli & Mountakis, 2008; Pürgstaller & Neuber, 2019), in particolare nella correlazione tra agito creativo e pensiero creativo e nel favorire il potenziamento di alcuni degli otto fattori della creatività per migliorare il livello di benessere scolastico e la fiducia nei compagni. In bambini e bambine sono emersi evidenti incrementi nel pensiero divergente (+18,39%) e nella creatività (+8,59%), soprattutto per quanto riguarda la flessibilità, l'elaborazione e i titoli, oltre a un miglioramento del benessere scolastico e della fiducia nei confronti dei coetanei.

Parole chiave: Creatività, Pensiero creativo, Espressione corporea, Movimento creativo, Danza.

1. Movement and creative expression

The body is predisposed from birth to enter a dynamic relationship with the world. In its vitality and natural tendency to manifest itself, entering into a relationship with the environment, lies the root of the creative drive (Garcìa, Plevin & Macagno, 2006). In the first years of life, the latter is expressed through play: while playing, the child, using his body as the first usable object, is free to be creative and uses the totality of his being (Winnicott, 1971).

While childhood is characterised by a direct relationship with the vitality of the body, as one grows up, one's mode of perception is transformed. Certain situations, external conditioning, and internal conflicts can lead the individual to experience general tension or blockages of particular body parts that inhibit their readiness to resonate in response to stimuli (Garcìa et al., 2006).

This concept is based on one of the basic premises of creative movement that sees in recovering the ability to play and express oneself with one's body. In particular, through play, the subject is offered the possibility of entering into a playful dimension through which he/she can give free voice to his/her essence, excluding the pre-eminent intervention of rationality.

Like play, dance is a natural expression of the inner self, a framework of action made of novelty and invention (Laban, 1975), a creative explosion of one's being.

In addition to recovering the playful aspect, the creative movement aims to reduce the psychological and technical conditioning of the students, focusing on the process, free and without judgment, rather than on the product. The creative movement wants to "reach the part of the individual that is a composer more than a musician, a director more than an actor, a creator more than an interpreter: a choreographer of himself" (Zocca, Garofalo, & Vecchio, 2004, p. 34).

Creative movement is therefore 'abandoned, free, expressive' (ivi, p. 35). In particular, through improvisation, it fosters the development of the expressive and creative potential of the body, promotes the liberation of sensitivity and imagination, and leads to the development of spontaneous movements and freedom of manifestation of the flow of inner drives (Garcìa et al., 2006). Therefore, dance is a "creative expression of subjective feelings" (Zocca et al., 2004, p. 33). In particular, the arts, including dance, understood as creative movement, "are not just for communicating ideas. They are ways to get ideas, to grow ideas, to experience and shape one's knowledge into new forms" (Zagatti, 2004, p. 25). The arts also help to develop emotional, relational, and human skills; teach self-discipline; promote self-esteem; strengthen the ability to perceive, interpret, and evaluate sensory and aesthetic stimuli; teach the value of teamwork; and educate in the search for creative solutions (Zagatti, 2004; Santini, 2014).

For Laban, dance is a medium through which the individual becomes self-aware and develops creative skills that are "stimulated by the possibility of providing personal responses to the 'tasks' assigned in dance" (Zocca et al. 2004, p. 32). This concept is also reaffirmed by Addessi, Anelli, and Maffioli (2018), who state that the repetitions, variations, and responses given by the subject to the assigned tasks in the dance stimulate cognitive conflict that is resolved in the course of the interaction, giving rise to learning that is based on research and problem-solving and that leads to the development of general creativity.

2. Creative movement in the educational context

Creative movement gives voice to those parts that cannot express themselves with words, opening the way to new ways of communicating and thus of perceiving and being, using the first language with which one comes into contact from the first days of life: the body language. A universal, direct language that allows one to relate with spontaneity and to share something that goes beyond gesture and form, something that comes from the soul and is transformed into movement.

Therefore, the challenge of any education to creativity through dance is to increase one's mastery of one's body, recognising the affective and emotional dimension of gestures.

All this requires a training context that guides the student to become an internal spectator and actor open to all levels of experience: emotions, perceptions, impressions, and thoughts (Garcìa et al., 2006). This kind of context, moreover, has to be understood as a favourable non-judgmental environment that encourages spontaneity of expression rather than the immediate expectation of a completed form.

In all this, reliability in the relationship between leader and pupil is fundamental. The latter is progressively consolidated if the conductor presents an inner disposition to remain present simultaneously to himself and the trainees and an ability to nurture, within himself, a witness, a capacity for open and welcoming observation. It means providing stimuli, setting up situations in which children can observe and get to know the world around them through the emotions that it arouses in them and express these emotions through a conscious series of movements" (Balduzzi, 2002, pp. 131-132).

In fact, as Marinella Santini (2014) states, 'in an artistic-creative process it is useful not to tell children what they have to do explicitly, but rather to give cues and intervene on the level of motivation, putting pupils in a situation that gives them the desire to do, which therefore motivates them by encouraging them to develop the proposed idea' (p. 37).

The guide is thus invested with an active role aimed at supporting the pupil in the organisational effort, with the utmost respect for his or her expressive intention, thus bringing the creative process to a completed form (Garcìa et al., 2006, p. 62).

Concerning the theoretical-practical foundations, Creative Movement references Laban's theory. The latter constitutes the backbone of the interventions due to its clarity and specificity in the analysis of the body, space, form, and movement, opening up new doors to everyone's creative expression.

In the educational context, dance also uses the Authentic Movement discipline as a reference. Born in the USA in the early 1960s, the practice consists of the relationship between two people or two groups who alternate respectively in the roles of "mover" (the one who moves) and "witness" (the one who witnesses the movement). The alternation between seeing and being seen, the space dedicated to inner listening with eyes closed. The linguistic-verbal and physical sharing of the experience opens up to clear changes in the state of consciousness and the personal sphere of bodily and psychological awareness, also giving space for understanding those dynamics that often counteract the perception of oneself and others.

Another important aspect related to the design of meetings on creative movement concerns musical research, which must avoid falling back into sound repetitiveness in order to be able to broaden the proposal and the variety of styles as much as possible. Implementing a strategic musical choice "capable of emphasising that particular type of movement, highlighting the expressive quality or supporting rhythmic research, facilitates the child's creative experimentation" (Zagatti, 2004, p. 95).

3. The research

With the overall aim of promoting the development of creative thinking through experiences of bodily expression within a second primary class, an exploratory intervention research aimed to investigate the relationship between the stimulation and accompaniment of the exploration of danced movement to the development of relational skills, the ability to search for creative solutions and the enhancement of their imaginative abilities in a broad sense. Numerous studies already emphasise the close link between movement and creativity, considering dance a fundamental element in promoting motor creativity (Bournelli & Mountakis, 2008; Pürgstaller & Neuber, 2019).

In particular, the research aimed to investigate whether a three-month empirical course linked to experiences of creative movement, body expression, and improvisation fostered the development of creativity in children and promoted a relative improvement in school well-being within the classroom.

Research questions

The research questions were as follows:

- RQ1: Does a pathway related to creative movement influence the overall development of creativity? If so, what impact can an experience of bodily expression have on the development of creativity in a general sense?
- RQ2: Is there a relationship between creative acting (understood as motor creativity) and creative thinking (understood as lateral thinking)?
- RQ3: Of the eight factors of creativity, which are most enhanced by a creative movement process?
- RQ4: Does a creative movement course improve scholastic well-being and trust in fellow pupils?

Context, methods and tools

The second class of a town of 25,000 inhabitants in xxx consists of 21 children (eleven boys and ten girls) attending school from Monday to Friday for a total of 40 hours per week (8-16). The present exploratory research intervention followed the mixed methods approach using both quantitative and qualitative instruments (Morgan, 2007; Mertens, 2012).

Methods and tools

A variety of instruments were used.

From a quantitative point of view, the TCD - Test of Creativity and Divergent Thinking by Frank Williams (1993) and an adaptation for second classes of the QBS 8-13 test - Questionnaires for the evaluation of school well-being and identification of risk factors (Tobia & Marzocchi, 2015) were used. The first aims to provide a method to assess the four cognitive-divergent factors of creative thinking and the four emotional-divergent factors of creative personality. According to Williams (1994), the first are: fluency, flexibility, originality, and elaboration. According to the author, however, the emotional-divergent factors are: willingness to take risks, complexity, curiosity, and imagination. The TCD was used as a pre-test and post-test and consists of two different instruments that can be administered in groups to pupils aged six to eighteen: the Divergent Thinking Test (maximum completion time 25 minutes) and the Creative Personality Test (no time limit). Both instruments were administered to the children in paper form during the first hours of the school morning and on different days. Following extraction, Protocol A of Williams' (1993) Divergent Thinking Test was chosen for both the pre-test and post-test.

Williams' (1993) TCD is composed of another instrument called the Williams Scale. The latter was administered to parents and teachers (via Google Forms) to compare the observations made by teachers at school and by the family at home with the children's performance in the eight factors of divergent thinking (fluid thinking, flexible thinking, original thinking, elaborative thinking, willingness to take risks, complexity, curiosity, imagination). In particular, it presents six characteristics for each of the eight factors on which parents and teachers have to rate the child. The scale returns a raw score for the fifty multiple-choice items. At the same time, the open-ended responses can be analysed and evaluated based on the frequency with which they are scored in a parent or teacher group for a particular class or a given group of pupils. The scale open-ended questions were modified to obtain more valuable data for research purposes without producing significant changes to the total scale score.

The QBS 8-13 test was proposed to the second grade in the adaptation already used in previous dissertations by the authors. The QBS was proposed to the children as a pre-test and post-test and was administered collectively in class in a single ten-minute session. In particular, the post-test made it possible to identify changes relating to the pupils' academic well-being and, specifically, to highlight particular improvements in relational aspects between classmates.

From a qualitative point of view, semi-structured individual interviews were administered, and the researcher took *narrative notes* to record particular considerations, events, and situations observed during the meetings on the creative movement.

Individual semi-structured interviews were proposed to the children of the selected class both at the beginning and at the end of the intervention. In particular, starting with reading the illustrated book *I Am an Artist* by Marta Altés (2015), the pupils were asked some open-ended questions about creativity. At the end of the course, the aim was to detect significant changes in the children's conceptions of the topic mentioned above. The pre-and post-interview questions were: What is creativity for you? In your opinion, when is a child creative? Do you think you are a creative child? Why?

Intervention programme

The intervention programme referenced Laban's Theory (Laban, 1980) and the discipline of Authentic Movement (Govoni, 2006). In particular, the founding elements of the first model, including the *efforts* of flow, weight, time, and space, were used as a basis for defining the meetings and were made explicit to the children during the course.

The intervention in the second class lasted three months (March-May 2022) for 15 meetings as a whole. Each meeting lasted a maximum of one hour, for an overall total of fifteen hours of intervention. The administration of interviews and pre-post tests took place outside these hours for approximately

twenty-seven hours. The meetings were held in the classroom; attention was paid to the arrangement of the setting, reorganising the classroom in the most suitable way possible for the types of activities to be proposed.

The meetings were structured following five basic phases: the welcome phase and initial ritual, the warm-up phase, the exploration phase, the reflection phase, and the cool-down phase and final ritual. They focused on promoting bodily and spontaneous expression in children by proposing creative movement practices linked to the spirit of play.

3.1 Data analysis

For each child, the pre- and post-test results yielded a pre- and post-total score relating both to the level of divergent thinking and creative personality achieved and to the eight individual cognitive-divergent and emotional-divergent factors of creativity. This was followed by the calculation of pre and post-class averages relating to divergent thinking, creative personality, attribution of titles, and the eight factors of creativity (fluency, flexibility, originality, elaboration, curiosity, imagination, complexity, and willingness to take risks).

With regard to class averages, there was an increase of 19.38 % in divergent thinking and 8.59 % in creative personality (Chart 1).

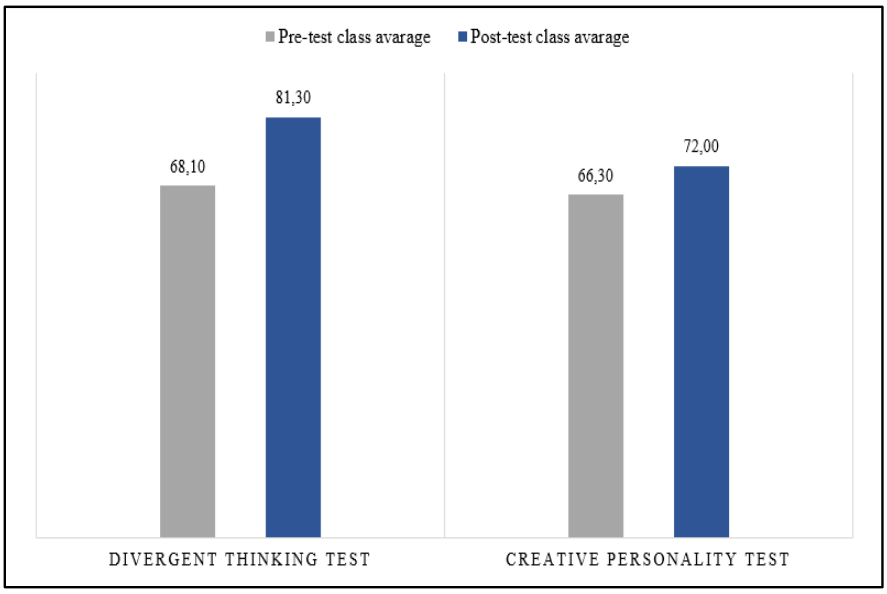

Chart 1: Pre- and post-test class average increase

Chart 1 shows an improvement in creativity and divergent thinking within the sample class, probably due to the proposed experimentation course.

With regard to the Divergent Thinking Test, the post-test class average reached the "average" level in contrast to the pre-intervention phase, where it was "below average." Similarly, this phenomenon also occurred in the Creative Personality Test, where the post-test class average reached the "above average" level in contrast to the "below average" level in the pre-test phase (levels are those in Williams' TCD).

Improvements were also found in the class averages referring to the figure titles and the eight cognitive-divergent and emotional-divergent factors developed by Williams (1993).

In particular, taking the Divergent Thinking Test as a reference, there was an increase of 4.82% in fluency, 121.93% in flexibility, 2.26% in originality, 51.78% in elaboration, and 37.77% in titles (Chart 2).

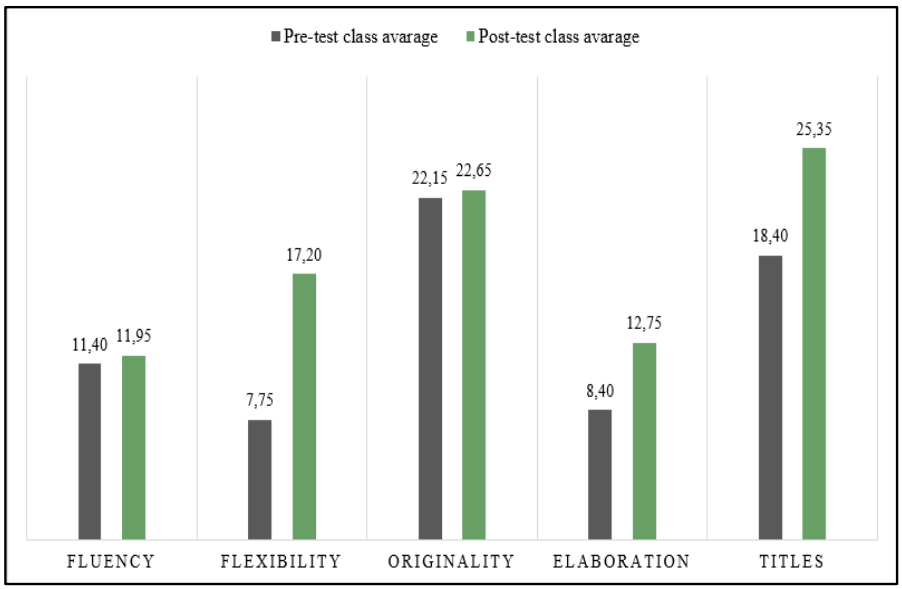

Chart 2: Pre- and post-test class average increase

Specifically, the post-test class average in fluency, flexibility, and originality rose to the 'above average' level, although it was already at the pre-test level. In contrast, the post-test class average in processing remained at a 'slightly below-average' level from the pre-test 'below-average' level despite the clear and significant percentage increase of 51.78%. Finally, the post-test class average in securities reached the 'average' level from the pre-test 'below average' level.

Now, taking the Creative Personality Test as a reference, there was an increase of 3.48 % in curiosity, 12.78 % in imagination, 7.59 % in complexity, and 11.27 % in willingness to take risks.

In particular, the post-test class average in emotional divergence factors increased the 'above-average' level, although it was already there at the pre-test stage.

The following graph (Chart 3) is intended to highlight the pre-and post-test class averages relating to the factors of the Creative Personality Test, visually showing the improvements.

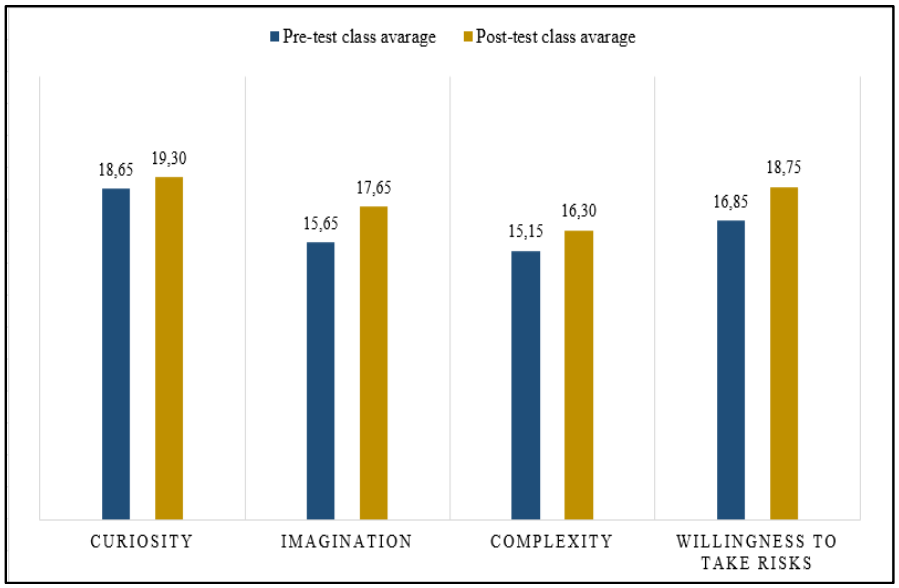

Chart 3: Data elaboration on the increase in pre- and post-test class averages

Table 1 shows the total raw scores, pre- and post-intervention, obtained in the Creative Personality Test by each pupil.

	Total raw score pre-test	Total raw score post-test
P1	52	70
P2	76	70
P3	81	88
P4	52	71
P5	75	70
P6	73	70
P7	67	68
P8	66	68
P9	76	81
P10	81	88
P11	55	77
P12	85	77
P13	52	72
P14	54	64
P15	79	70
P16	59	76
P17	29	65
P18	75	66
P19	78	66
P20	61	63

Tab. 1: Elaborated from data on total raw scores obtained in pre- and post-tests

These results were interpreted based on the ranges of creative personality values expressed within the Williams' TCD test (1993) (Table 2).

Under average	Slightly below average	On average	Above average			
44 - 50	51 -58	59 - 65	66 - 72	73 - 80	81 - 88	89 +

Tab. 2: Creative personality value range

The total raw scores obtained in the pre-and post-test showed that thirteen out of twenty pupils improved. Of these thirteen, two went from 'below average' to 'average,' four went from 'below average' to 'above average,' three improved their results to 'above average,' one student went from being 'average' to 'above average.' Finally, the last three students achieved minimal improvement (one to three points) by remaining stable 'average' and 'above average.' On the other hand, the seven pupils who deteriorated (by an average of seven points) still remained in the 'above average' range.

Taking the Divergent Thinking Test now into consideration, each pupil's total raw scores, pre- and post-intervention, are shown in Table 3.

	Total raw score pre-test	Total raw score post-test
P1	77	105
P2	77	95
P3	73	91
P4	78	79
P5	60	69
P6	53	67
P7	61	72
P8	68	83

P9	61	63
P10	74	77
P11	78	85
P12	20	79
P13	56	66
P14	83	76
P15	74	84
P16	73	95
P17	65	78
P18	91	100
P19	67	68
P20	73	94

Tab. 3: Elaborated from data on total raw scores obtained in pre- and post-tests

These results were interpreted based on the ranges of divergent thinking values expressed within the Williams' TCD test (1993) (Table 4).

Under average	**Slightly below average**	**On average**	**Above average**			
60 - 69	70 – 79	80 - 89	90 - 99	100 - 110	111 - 120	121 +

Tab. 4: Divergent thinking range

According to the total raw scores obtained in the pre-and post-test, nineteen out of twenty pupils improved. Among these nineteen, six pupils went from 'below average' to 'slightly below average,' three from 'below average' to 'average,' and five from 'below average' to 'above average.' In addition, four pupils achieved a minimal improvement (one to three points) while remaining stable 'below average', and one student who, although already 'above average' in the pre-test, improved further concerning his total score.

Returning to the data analysis on the Divergent Thinking Test, only one student deteriorated by seven points from being 'average' to 'slightly below average'. However, a clear improvement was observed at the relational level.

At the end of the proposed course, the teachers drafted some evaluative and observational comments as an alternative to completing the Williams Scale for time reasons. The following is what they wrote with reference to the pupil mentioned above:

> In the dance painting meeting, E. showed enthusiasm through her body language (jumps, cries of joy, smiles) even though she was a timid child at the beginning of the course, afraid to expose herself. Last year, she was also very closed off with teachers, not telling her personal experience.

The overcoming of shyness and the demonstration of openness mentioned by the teachers could also be observed in the post-intervention interview, during which, unlike the first, E. showed more confidence and openness.

Table 5 elaborates on the pre-intervention interview from which E.'s shyness and closure emerge.

Pre-intervention interview
Reading the illustrated book *I Am an Artist* by Marta Altés (2015). Teacher: "What is creativity for you?". E.: [*silence*]. Teacher: "In your opinion, when does a child unleash his creativity? A child is creative when...". E.: [*silence*]. Teacher: "Do you think you are a creative child, a child who has a lot of imagination?". E.: "Yes". Teacher: "And how do you give vent to your imagination?". E.: "I draw". Teacher: "Beautiful! Thank you, E.".

Tab. 5: Pre-intervention interview elaboration

The interview conducted at the end of the pilot course shows clear improvements (Table 6).

Post-intervention interview
Teacher: "What is creativity for you?". E.: "It is a rainbow." Teacher: "For you, creativity is a rainbow. How wonderful! And, in your opinion, when does a child unleash his creativity? A child is creative when...". E.: "When he makes a huge heart." Teacher: "Wow. And besides the huge heart? A child is creative when...". E.: "When he makes a hug." Teacher: "A hug... [*smiles*]. Do you think you are a creative child, a child who has much imagination?". And: "Yes". Teacher: "Why do you think you are a creative child?". E: "Because I like it so much". Teacher: "And when you were dancing? Did you feel you were using your creativity? Did you feel creative?". E: "Yes". Teacher: "How come you felt creative?". E: "I can't explain it". Teacher: "All right, E., thank you".

Tab. 6: Post-intervention interview elaboration

Another significant example relating to a clear overcoming of shyness combined with an improvement in divergent thinking was found in S.

In this regard, the teachers write:

> S. had confided her difficulty expressing herself verbally in front of her classmates. We noticed that she felt much more comfortable with expression through her body, and, as a result, there were occasions when she was able to overcome some of her difficulties in using verbal language in front of the whole class.

We now report the case of N., who, from a 'below average' to an 'average' level, achieved a remarkable development in terms of divergent thinking.

Despite the clear improvements and the comments reported on the Williams Scale by the parents confirming their son's level of creativity, N., during the pre-and post-interview, he described himself as a child with little creativity (Table 7).

Pre-intervention interview
Reading the illustrated book *I Am an Artist* by Marta Altés (2015). Teacher: "What is creativity for you?". N: "It is the creation of beautiful things". Teacher: "Beautiful. So, according to you, a child is creative when...". N: "When he imagines or when he realises wishes." Teacher: [*smile*] "Do you think you are a creative child?". N: "No". Teacher: "Would you like to be one?". N: "Yes". Teacher: "In what would you like to be most creative?". N: "In the painting." Teacher: "You would like to be more creative when you paint. Don't you feel creative in drawing?". N: "No, I still have to learn how to draw". Teacher: "In my opinion, you can be creative just by making a line on a sheet of paper. And you can be creative in other things, not only drawing". N: "That is true". Teacher: "I am sure your creativity is hidden in there somewhere." N: [*smile*]. Teacher: "Thank you, N."

Tab. 7: Pre-intervention interview elaboration

A contrary case to what has just been described concerned S., who, although she remained at a 'slightly below average' level from a pre-intervention 'below average' level in divergent thinking, stated that she was a very creative child during the pre-and post-interview (Table 8). This was confirmed by the parents' words within the Williams Scale.

Pre-intervention interview
Reading the illustrated book *I Am an Artist* by Marta Altés (2015). Teacher: "What is creativity for you?". S: "My brother asked me that too". Teacher: "Do you want to tell me what you answered to your brother?". S: "I answered: 'It is drawings with lots of colours, with lots of subjects, with lots of things that come to your mind at once'." Teacher: "Wow! A child so for you is creative when...". S: "When he thinks of things to do, like, I don't know, when he does a creative drawing for a friend. I also draw like this: I make lines, and then I colour the spaces". Teacher: "Great. So you think you are a creative child?". S: "Yes". Teacher: "Why? Besides drawing, do you do anything else creative?". S: "I see videos, and so then I invent things with those things. Like I saw a video where they do with numbers, and I invented something with numbers, and something creative came". Teacher: "So videos are a source of inspiration for you: you invent something creative from them. And how else do you give vent to your creativity?". S: "When I do ballets, I do creative movements like one and two, and then I jump and turn like this" [*shows dance steps*]. Teacher: [*smile*] "And do you know any other creative people besides yourself?". S: "Yes. My brother, because he draws a circle, then he draws panoramas inside. That's why. And I tried to copy it, my friend was there too, and I was better at drawing it." Teacher: "Is your brother older than you?". S: "Yes, he is fifteen; this year, he will be sixteen." Teacher: "I understand. And does your brother express his creativity only in drawing or also in other areas?". S: "In the kitchen. We saw that you put frankfurters inside spaghetti, and then with the sauce, we made a creative dish". Teacher: "How wonderful! You're right; even in the kitchen, you can be creative". S: 'Yes! Like I crumble crackers, and then I eat them. Teacher: "A creative way to eat them". S: "Yes!" [*laughs*]. Teacher: "Thanks S.".

Tab. 8: Pre-intervention interview elaboration

We now describe the case of E., who, although he remained at a 'slightly below average' level, showed clear improvements in divergent thinking and creativity. This positive development was also noted by the teachers, who wrote:

> We knew him as a child used to following precise patterns in expressing himself. We noticed how he could 'get out of the box' by learning to be carried away by the moment and the context with personal attitudes and proposals in response to some much more creative peers.

These aspects were also observed in the post-intervention interview, during which, in contrast to the first, E. showed more openness (Tables 9 and 10).

Pre-intervention interview
Reading the illustrated book *I Am an Artist* by Marta Altés (2015). Teacher: "What is creativity for you?". E.: [*silence*]. Teacher: "In your opinion, when does a child release his creativity? A child is creative when...". E.: [*silence*]. Teacher: "Do you think you are a creative child?". E.: "Yes". Teacher: "Why do you think you are a creative child?". E.: "I invent new things." Teacher: "Wow. What do you invent new things, for example?". E.: [*silence*]. Teacher: "That's OK [smile]. Thank you very much."

Tab. 9: Pre-intervention interview elaboration

Post-intervention interview
Teacher: 'What is creativity for you? In your opinion, when is a child creative?". E.: "A child is creative when he/she dances, dances and when he/she draws." Teacher: "True! And you? Did you feel creative when you were dancing?". E.: "Yes". Teacher: "Why? Could you explain it to me?". E.: "Because I had never done it before and felt good." Teacher: "I'm glad you felt good. Thank you, E.".

Tab. 10: Post-intervention interview elaboration

In addition to this, concerning the evaluative comments made by the teachers, the proposed course would seem to have strengthened social group relations and the self-esteem of each individual. This is what emerges from the teachers (Table 11).

We noticed greater cohesion between the children both in the activities proposed in class and in less structured moments, such as playtime in the playground. Communication and relationships between them have improved. The proposed activities helped the pupils get to know and name their emotions. We defined it as a path that introduced them to the alphabet of emotions, and this was seen in the improved ability demonstrated by many of them in naming the emotions they felt, avoiding reacting with decisive, uncontrolled actions when faced with the emotions experienced daily within the class group. *We believe that this project was very valid and effective for the following reasons:* *- the development and enhancement of the children's creativity;* *- the promotion of inclusion within the peer group;* *- the recognition and management of emotions;* *- trying to get along well with everyone;* *- getting to know oneself better through the discovery of one's talents and potential and the consequent increase in self-esteem;* *- the development of critical thinking in the face of proposed activities;* *- respect for diversity, respect for the ideas and points of view of others in the face of the plurality of expressions manifested by the children;* *- the development of divergent thinking in the face of problem-solving situations.*

Tab. 11: Teachers' assessment comments

Improvements at the relational level may have been fostered by the way in which the activities of each meeting were carried out and by the children's constant presence at the planned interventions. In particular, the fact of having focused on the proposal of group and pair experiences, which were varied from time to time, may have implicitly guided the class towards unity and cohesion that was important on an interactive and social level, promoting the development of trust in others and the discovery of new and different friendships.

In particular, the improvement of the relational aspect within the sample class is confirmed by the data from the second class adaptation of the QBS 8-13, administered to the children before and after the intervention (Table 12).

Number of students	Statement test	Pre-intervention answer	Post-intervention answer
4	*I have many friends in class*	Sometimes	Always
4	*My classmates like working with me*	Sometimes	Always
1	*My classmates like working with me*	Never	Sometimes
3	*I feel accepted in class*	Sometimes	Always
2	*I feel accepted in class*	Never	Sometimes
3	*I have fun with my classmates*	Sometimes	Always
1	*I have fun with my classmates*	Never	Always
6	*I can trust my classmates*	Sometimes	Always
1	*I can trust my classmates*	Never	Always
1	*I can trust my classmates*	Never	Sometimes

Tab. 12: Pre- and post-intervention data from the adaptation for second classes of QBS 8-13

4. Discussion

The data analysis sought to provide a general overview of the research results obtained to highlight the improvements achieved due to the proposed experimental pathway.

The research questions are set out below to illustrate the answers based on the data collected.

RQ1: *Does a course linked to creative movement influence the overall development of creativity? What impact can an experience of bodily expression have on the overall development of creativity?*

With regard to the first question, the data show that the creative movement path actually influenced and enhanced the overall development of creativity in the children in the intervention class. In particular, the class averages obtained in the pre-and post-tests confirm this by showing a significant increase of 19.38% in divergent thinking and 8.59% in creative personality. Going into detail, compared to the results of the Divergent Thinking Test, the post-test class average reached the 'average' level in contrast to the pre-intervention phase, where it was 'below average.' Similarly, this phenomenon also occurred in the Creative Personality Test, where the post-test class average reached the "above average" level in contrast to the "below average" level in the pre-test phase. Participating in body expression experiences had an impact on the development of creativity in a general sense.

RQ2: *Is there a relationship between creative acting and creative thinking?*

The pre-and post-test results could identify a possible relationship between creative acting-out experiences and the subsequent development of general creativity in the intervention class. This would seem to confirm the possible relationship between creative acting and creative thinking.

RQ3: *Among the eight creativity factors, which ones are most enhanced as a result of a creative movement course?*

Flexibility, processing, and titles are the factors of creativity that were most enhanced, by 121.93, 51.78 and 37.77%, respectively. In particular, about flexibility, there was an improvement concerning the number

of times the subject was changed when moving from one frame to another in the test. The experimental course, therefore, would appear to have contributed to the development of a variety of types of ideas and the ability to switch from one category to another more quickly in the children.

On the other hand, referring to the 'processing' factor, a significant increase in asymmetrical features could be observed in the drawings produced by the children. This, according to Williams (1993), would indicate an increase in the students' extension or expansion of reasoning and ideas, probably derived from the multiplicity of bodily and musical stimuli offered during the intervention hours.

Finally, there was an improvement in the elaboration of titles as they creatively transcended what each person represented graphically. The experimental course, therefore, may have contributed to the development of creative idea-generating abilities by fostering in the children the ability to go beyond the visible and perceivable.

However, this general class increase in divergent thinking and creative personality could also derive from the children's post-intervention knowledge of how the tests themselves were conducted. During the administration of the pre-test, in fact, the children had expressed fear regarding the time factor. In particular, some believed they could not finish the task within the twenty-five minutes available to them. This may have implicitly limited the children's creative flow, leading most of the class to finish their work within fifteen minutes. However, the post-test noted more calmness for the imposed time limit. Most children handed in their work at the end of the set time, using every minute for creation.

RQ4: *Can a course linked to creative movement improve scholastic well-being and trust in one's peers?*

The data collected shows that a pathway linked to creative, accessible, and spontaneous movement can effectively and concretely encourage an improvement in scholastic well-being and trust toward peers. It can be hypothesised that courses of this type replicated over time could also support learning, improve self-concept and personal motivation, encourage curiosity for the unusual, promote motor development, and improve self-esteem.

In particular, according to the results of the QBS 8-13 test, the interviews, and the teachers' evaluative comments, it would appear that some pupils have developed more confidence and openness post-intervention, overcoming shyness and initial closure. The class as a whole would seem to have achieved improvements on a relational level, which may, in any case, have been implicitly promoted by how the activities of each meeting were carried out and by the children's constant presence at the planned interventions. In particular, the fact of having focused on the proposal of group and pair experiences, which varied from time to time, may have led the class to a unity and cohesion that was important on an interactive and social level, promoting the development of trust in others and the discovery of new and different friendships.

5. Conclusions

This intervention research aimed to investigate the effectiveness of a course designed for a second primary class. In particular, we wanted to understand whether, through the proposal of experiences linked to creative movement, body expression, and improvisation, we could foster the development of creativity and divergent thinking in children and a general improvement in school well-being.

Specifically, through administering pre- and post-tests and using qualitative instruments, an attempt was made to understand whether a course linked to creative movement can influence the overall development of creativity and, therefore, whether there is a correlation between creative acting and creative thinking. In addition, it was investigated whether a course of bodily expression fosters the enhancement of certain factors of creativity and improves the level of scholastic well-being and trust in fellow pupils.

From the analysis and interpretation of the data, clear increases in divergent thinking and creativity emerged, especially at the level of flexibility, elaboration, and titles. In addition, it can be stated that there was an improvement in the level of scholastic well-being and trust towards peers, all of which probably resulted from the proposed creative movement course.

Despite the exploratory and highly contextualised nature of the research, it is believed that the data collected and the discussion initiated may represent the basis for the launch of future research, also from

an experimental perspective. For example, it was impossible to have more time with the same class or involve other second classes.

In any case, the importance of work of this kind remains, which has supported the everyday life of a class by overcoming the limits of monotony and repetitiveness and has accompanied the pupils in discovering new and exciting bodily and sensory experiences.

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Ethics statement

The research was approved by the school Ethics Committee procedures. The qualitative data embrace the personal self-reflections of children and teachers that voluntarily participated in the study (with families' acceptation). To protect them, their identity was anonymised.

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