

## ANALYSIS OF THE LEVEL OF THE SPORT MOTOR KNOWLEDGE OF ITALIAN PRIMARY SCHOOL TEACHERS

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### Abstract

In the preamble of the Ministry Guidelines, primary school teachers are demanded to plan training routes for primary school students aged from 6 to 11 years; teachers are required to use their ability to relate knowledge and multiple skills in planning innovatory educational proposals. In particular, teachers are demanded to continuously operate a strict selection of "routes to cover" aimed at promoting the integral development of the student and his continuous improvement. Among the possible educational and operational proposals presented in the document of 2007 addressed to the Italian primary school, the subject area dedicated to the body, the movement and the sport gets a main role in supporting and improving the teaching-learning processes making use of the motor sport channel. In fact, the National Guidelines for the curriculum require Italian primary school teachers the planning of curricular and extracurricular activities based on the involvement of primary school children in motor sports activities requires teachers to bring together their knowledge related to motor sports field. The Italian Ministry of Public Education has also decreed that teachers already involved in teaching in Italian primary schools are required to attend motor-sport training courses, in order to ensure the acquisition of further knowledge in this area even to the already qualified teaching staff, highlighting the Italian educational need to ensure the Italian primary school teachers a rigorous theoretical and empirical preparation able to offer all instructional materials needed. The following survey is intended to provide an interesting reflection on the average level of knowledge of primary school teachers in the Campania region and offer a possible starting point in investigating the background of Italian research in teaching.

**Key words:** primary school, teaching, skills

### Introduction

The National Guidelines of the Italian Ministry of Education, in force since 2007, defining the characteristics of the Italian primary school, recall the need to revisit the curriculum of the teachers who are responsible for the training of students aged from 6 to 11 years to establish a relationship between the educational needs of the students and the teachers' skills.

The Guidelines are teaching suggestions and legislative constraints that the Ministry offers to teachers. In their preamble, they fix the level of responsibility of the teacher in planning educational routes for the students, defining it as the ability to correlate multiple knowledge and skills in the preparation of innovative teaching proposals and so assuming a crucial function "on the entire organization of the educational and teaching offer of the school"<sup>1</sup>.

In Italy, the previous ministerial programs of 1985 had already shown the need that each teacher had an appropriate knowledge and experience which could effectively target the methodological choices to make them better meet the educational needs of the students. This fundamental need has led to a rethinking of the teaching quality, redefining the hallmarks of teachers of all levels as well as the basic knowledge that each teacher must have to organize educational routes which may meet the educational needs of each segment of school. As a result of this great expectations of the programs, since the mid-nineties in Italy it had already been noticed the need to use more and more qualified staff, so leading the Italian Ministry of Education to revisit the structure of curricula and update and train teachers in primary schools; the priority was the urgent need to provide teachers knowledge and skills in different and transversal fields.

In 2007 the latest guidelines for the curriculum for the Italian kindergarten and primary school required additional skills to primary school teachers, serving as an operational-teaching guide for students and as the inventory of new training needs of teachers. In fact, the Ministerial document of 2007, in the definition of the different disciplines of the curriculum of the primary school, recalls the educational responsibility of primary school teachers and the urgency of a fundamental rethinking of the basic knowledge of teachers. Hence, the primary school teacher is first of all an experimenter who "exactly" knows "how to effectively guide the child"<sup>2</sup> through a constant and active involvement of educational and heuristic skills.

<sup>1</sup> National Guidelines of 2007, ch. "Assessment"

<sup>2</sup> Ibidem, p. 114



Particularly, the preamble of the Ministry Guidelines requires primary school teachers to plan innovative educational routes which are able to relate knowledge and multiple skills in the motor field to offer innovative teaching proposals. So, teachers are demanded to continuously operate a strict selection of "routes to cover"<sup>3</sup> aimed at promoting the integral development of the student and his continuous improvement. The primary school curriculum, according to the Ministerial directions, is indeed organized into subject areas to promote "the search for connections between disciplinary knowledge"<sup>4</sup> related to different fields, highlighting at the same time the importance that every primary school teacher shall have an accurate knowledge of it. Among the areas designated by the Ministry, there is a renewed interest in the language- artistic-expressive field that, together with the Italian and European languages as well as the music and the art-image includes body-movement-sports too.

Therefore the subject area dedicated to the body, the movement and the sport gets a main role in supporting and improving the teaching-learning processes. The activities linked to this area are defined as "a source of gratification that encourage self-esteem"<sup>5</sup>, which can enhance the development and the strengthening of various individual differences, branding themselves as activities that promote the chance to experience the success of their own actions. In fact, Italian primary school teachers are required to commit themselves in "making students convey and live the principles of a sports culture"<sup>6</sup>, which can bring out "the ability to make the student gradually protagonist and constantly aware of his motor skills gradually acquired."<sup>7</sup>

The planning of curricular and extracurricular activities based on the involvement of primary school children in motor sports activities requires teachers to bring together their knowledge related to motor sports field. In Italy, since the early nineties, the need of "a specific degree program, divided into two branches, and ordained to the cultural and professional training of both kindergarten and elementary school teachers..."<sup>8</sup> helped the need to include the subjects related to the motor-sports field in the curriculum of primary school teachers to provide teachers with the knowledge of the body, movement and sport.

The Italian Ministry of Public Education has also decreed that teachers already involved in teaching in Italian primary schools are required to attend motor-sport training courses, in order to ensure the acquisition of further knowledge in this area even to the already qualified teaching staff, highlighting the Italian educational need to ensure the Italian primary school teachers a rigorous theoretical and empirical preparation able to offer all instructional materials needed.

The following survey has been set in this background with the aim to provide an interesting reflection on the average level of knowledge of primary school teachers in the Campania region, choosing the territories of Naples and Benevento as samples, which correspond to 0,32% (3364 teachers of primary school, 1067637 people).

### Objective

The aim of the research has been to assess the primary school teachers' knowledge in the sport motor field in the provinces of Naples and Benevento.

### Method

The research involved a rigorous investigation at all stages, especially in the definition of the sample, the techniques and the tools to use.

Researchers of the University of Salerno have carried out a survey for a quantitative study by giving a questionnaire of 18 multiple choice items with a 5 levels scale and divided into 4 macro areas (or groups) related to the related to the anatomic-functional, biomechanics, auxologic, technical, educational and prescriptive aspects.

In the preliminary stages of the research, it has been provided for the involvement and sharing of the peripheral structure of the Ministry and of the primary schools in the province of Benevento and Naples; they have been shown methods of implementation of the research and the purposes of the work, defining the possible effects on the possibility of organizing training courses and refresher courses for primary school teachers. The survey instruments, requiring teachers a self-assessment process, were presented to the teachers before the administration phase, ensuring in advance their ability to consciously and consistently respond to the questionnaire.

### Sampling.

<sup>3</sup> National Guidelines of 2007, ch. "Targets for skills development"

<sup>4</sup> National Guidelines of 2007, ch. "Disciplines and subject areas"

<sup>5</sup> National Guidelines of 2007, ch. "Body, movement, sport"

<sup>6</sup> ibidem

<sup>7</sup> ibidem

<sup>8</sup> Italian Law of 19 November 1990, no.341, Reform of the university teaching rules, art. no. 3 – Degree"



The survey was conducted on a group of 120 teachers of primary schools, two teachers were involved in each of the 60 primary schools in the provinces of Naples and Benevento affiliated with the Department of Educational Sciences of the University of Salerno.

#### Materials.

Each of the two teachers was given a form of recognition of the educational needs prepared by the University of Salerno in order to self-assess their level of knowledge related to psychomotor development, game and sport theories and technique, techniques and methods of planning the teaching and motor sports activities, the rules governing the organization of sports activities in schools. Each teacher has answered each question by giving a score from 1 to 5 for each of the 18 questions found in the 4 macro-areas.

#### Data Collection.

The data, collected by University researchers, were placed on a table and from this were derived average, SD and VC for each of the 18 items, each of 4 groups and for the whole set of items.

#### Results.

##### Global data analysis.

Table n.1

Gr.	ITEM	Absolute Frequency					TOT	Percentage frequency					Average	SD	VC
		1	2	3	4	5		1	2	3	4	5			
A	1	6	7	78	20	7	118	5%	6%	66%	17%	6%	3,13	0,65	0,21
	2	11	22	63	21	2	119	9%	18%	53%	18%	2%	2,84	0,77	0,27
	3	11	27	25	19	6	88	13%	31%	28%	22%	7%	2,80	0,94	0,34
	4	3	11	35	56	12	117	3%	9%	30%	48%	10%	3,54	0,80	0,22
B	5	5	21	47	40	7	120	4%	18%	39%	33%	6%	3,19	0,87	0,27
	6	4	16	45	48	7	120	3%	13%	38%	40%	6%	3,32	0,80	0,24
	7	4	14	55	39	7	119	3%	12%	46%	33%	6%	3,26	0,75	0,23
	8	4	11	37	52	14	118	3%	9%	31%	44%	12%	3,52	0,88	0,25
	9	7	29	54	25	3	118	6%	25%	46%	21%	3%	2,90	0,79	0,27
	10	6	9	49	49	7	120	5%	8%	41%	41%	6%	3,35	0,79	0,24
C	11	6	31	63	15	4	119	5%	26%	53%	13%	3%	2,83	0,69	0,25
	12	6	24	52	21	3	106	6%	23%	49%	20%	3%	2,92	0,76	0,26
	13	7	38	55	14	4	118	6%	32%	47%	12%	3%	2,75	0,75	0,27
	14	6	20	32	50	7	115	5%	17%	28%	44%	6%	3,28	0,98	0,30
D	15	6	17	62	29	1	115	5%	15%	54%	25%	1%	3,02	0,64	0,21
	16	8	21	65	19	2	115	7%	18%	57%	17%	2%	2,88	0,68	0,24
	17	4	28	57	25	4	118	3%	24%	48%	21%	3%	2,97	0,72	0,24
	18	5	37	49	25	2	118	4%	31%	42%	21%	2%	2,85	0,74	0,26

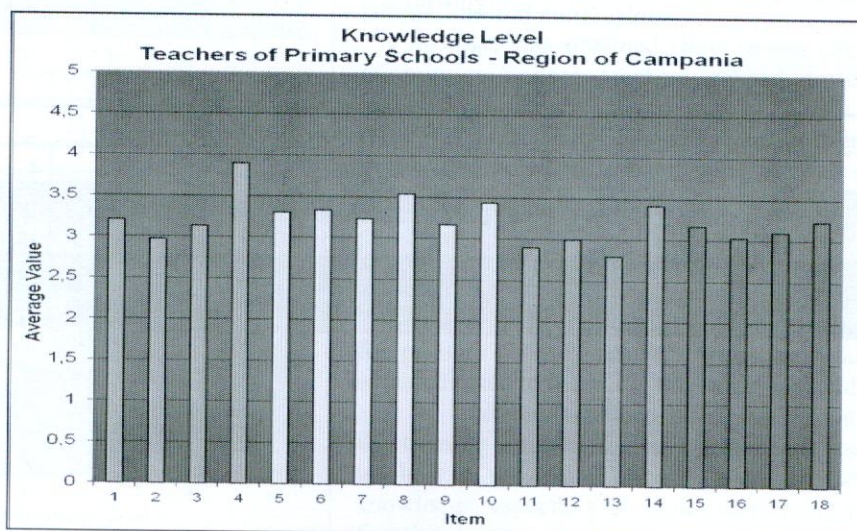


Chart n.1



The Graph 1 shows the mean levels of knowledge indicated for each item. We note that 9 kinds of knowledge (items 2-3 related to auxologic and biomechanical aspects, item 9 on the assistance to the prevention of risks of motor education, items 11, 12 and 13 regarding regulations on local authorities and sports associations in educational matters, items 16, 17 and 18 on the different forms of activity and sport matters in the field of motor sports with relative evaluation) have received insufficient average evaluation.

Most of the other knowledge were found to slightly above average. Not all teachers have responded to all items; in particular, 14 out of 120 (11.7%) did not respond regarding their knowledge of the potential use of the laboratory in education-sport area (item No. 12); 32 of 120 (26.7%) did not assess their knowledge about the auxologic laws of learning (item no 3). Item no. 3 is also one that has received the greatest variability in responses ( $CV = 0.34$ ), high variability ( $CV = 0.30$ ) is also observed in item number 14 on the knowledge of Ministerial Programs and Directions relating to motor activities and sports in school. In contrast, the less variability in judgments ( $CV = 0.21$ ) there was in item No. 1 and No. 15. The lowest average, 2.75, was observed for item no. 13 (Rules governing the relations between schools, associations, federations and other sports agencies). We note a contradiction between items 1 and 3, both in terms of the number of responses, both for the variability of the responses, both for mean values, although it was related items both anatomical and functional area.

Table no. 2, as summarized in Figure no. 2, shows that nearly one in four teachers (23.6% of the sample) considered his knowledge not sufficient.

Table no.2

ITEM	Knowledge Level					
	1	2	3	4	5	
FREQUENCY	109	382	923	567	99	2080
	5,2%	18,4%	44,4%	27,3%	4,8%	

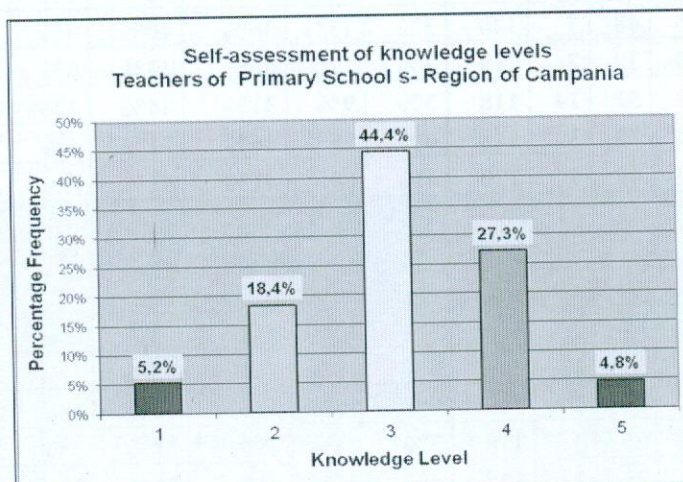
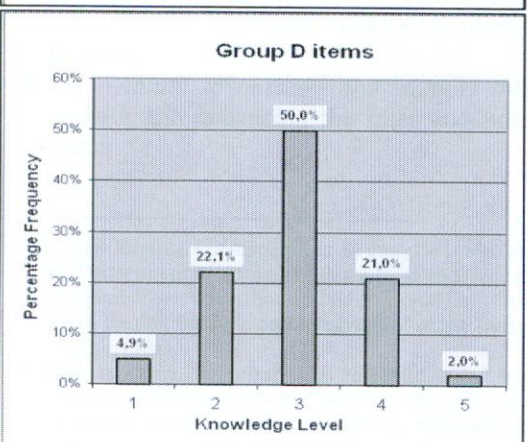
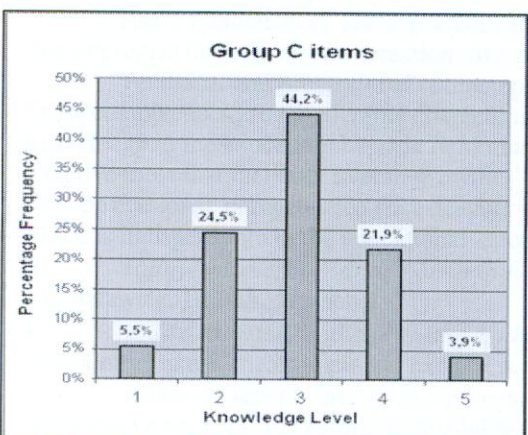
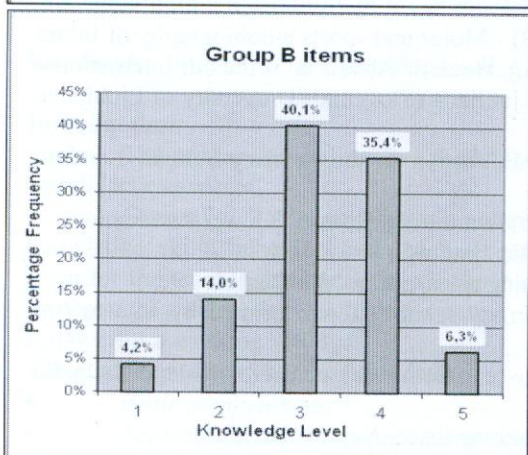
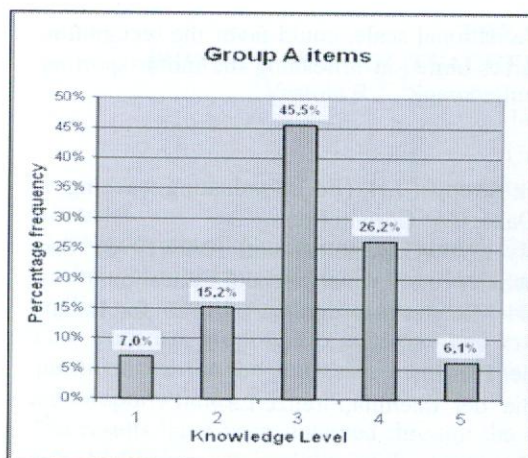


Figure no.2

Table no.3

Group/Item	Absolute Frequencies					TOTAL	Percentage Frequencies				
	1	2	3	4	5		1	2	3	4	5
A	31	67	201	116	27	442	7,0%	15,2%	45,5%	26,2%	6,1%
B	30	100	287	253	45	715	4,2%	14,0%	40,1%	35,4%	6,3%
C	25	112	202	100	18	457	5,5%	24,5%	44,2%	21,9%	3,9%
D	23	103	233	98	9	466	4,9%	22,1%	50,0%	21,0%	2,0%





### Data analysis for groups

Below, in particular, were considered the percentages of teachers who consider their knowledge is not sufficient in each of the four groups have been divided into such knowledge:

The 67.7% judges no more than the average their knowledge regarding psychomotor development of children; among them, the 22.2% has considered it even insufficient; only the 32.3% considered to be in possession of knowledge more than sufficient on.

In particular, items 2 and 3 are obtained, respectively, 27% and 44% of insufficient ratings.

The 58.3% considers not exceeding the average his level of knowledge about "Theories, techniques and teaching of game and sport"; among them, the 18.2% regarded them as inferior, the 41.7% judged the level high or very high. However, the item no. 9 (Technical assistance in the prevention of risks) reported rating (2.90) below the average (3.00) and the 31% of teachers considered lower then average their knowledge in this item.

The 74.2% does not consider higher than the average their knowledge on norms and programs for the sports organization in school, and as many as 30% considers them insufficient; only the 25.8% has considered to have high or extremely high knowledge. The average ratings of three of the four items included in this group were lower than average (3.00): the item No 11 (average 2.83), the No. 12 (average 2.92), the No. 13 (average 2.75, the lowest ever).

The 77% deemed not to have above average his knowledge of multidimensionality, theories and evaluation of the game and sport; the 27% has considered his level very low or low. Only the 22.9% has evaluated its (his) knowledge above average. Three of the four items (16, 17 and 18) included in this group have received insufficient average ratings (respectively 2.88, 2.97, 2.85).

### Discussion and conclusions.

The data obtained show severe cognitive deficiencies of primary school teachers related to different areas of knowledge.

In each of the four indicated macro areas, it is possible to note that only few teachers consider their own knowledge of a specific sector hardly more than enough.

This suggests that a low level of knowledge and teaching methodologies may not to allow the teacher suggest activities appropriate to the educational needs of pupils. Therefore it is necessary to organize training-refresher courses for primary schools teachers with particular reference to the area dedicated to the body, the movement and the sport.

The data obtained also confirm the need to organize the training courses for future teachers and the updating of teachers in service in order to increase and consolidate their knowledge, especially on issues concerning the anatomical and functional area.



To conclude, this type of investigation, also developed on a national scale, could favor the recognition of additional useful information to the construction of training courses aimed at refreshing the motor-sporting knowledge and skills of the Italian primary school teachers.

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