

## 124 - RELATIONSHIP BETWEEN PREFERENCES OF MATERIALS AND ACTIVITIES OF AQUATIC SWIMMING THIRD CHILDREN'S CHILDREN

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### INTRODUCTION

This study seeks to understand the preferences, motivational factors and use of instructional materials in aquatic perspective to discuss the possibility of a teaching of swimming to the east for a paradigm shift from teaching, understood as a conceptual network (KUHN, 1987 apud LIMA, 2006) involving theory, methods and logic patterns that are tied together and lead the teaching of swimming and at the same time, a given teaching of swimming.

In the world of childhood imagination is unlimited. Through play, children explore and understand the world around him, and curiosity, discover new things and situations in the real world as scary and lovely at the same time (POLET & NASCIMENTO, 2006). Playfully interacting with the world, through drawings, paintings, dances, songs, doodles, mess, playing, among others, the child establishes a harmonious understanding between their two worlds, reality and his imagination, which so happens learning, child development and growth (PEDROZA, 2005).

Objects and different materials are reported in the literature on the play as a constant presence, or at least part of the important games and playing in different perspectives developed in the field of psychology in relation to play and human development (Oliveira & Menander, 2008), so swimming lessons are a practical and necessary to merge business with pleasure, since, through fun, learning can come from swimming (Santos & Pereira, 2009).

The teaching of swimming have been characterized by systematic routine calls "pedagogical sequences" (Fernandes & COSTA, 2006), composed of content predetermined for technical learning the four competitive swimming styles. It seems that still prevalent in schools, clubs and academies teaching that could be classified as analytical in nature-progressive, with fragmentation of movements according to the style of swimming to be learned and systematization of teaching sequences with progressive degrees of difficulty (LIMA, 2006). The stage of adaptation to the water is always present, and some elements are shown out of the water and there is a continuous monitoring of the teacher in order to eliminate technically inadequate movements modeled the execution based on rigorous biomechanical principles (CARVALHO, 2004 apud GRAEF & CRUEL, 2006). Although this model of education, there is a proliferation of swimming schools throughout the country and huge demand for professionals to work in this area.

Unfortunately, many institutions responsible for teaching swimming are limited by several factors that do not always allow for a coherent organization of learning, such as lack of infrastructure and overcrowding of them, plus the absence of auxiliary means. In this case, we are referring to textbooks water.

Thus, teaching is focused on the product and thus aspects such as the development stage of the skill of swimming in which the student is, their age, their interests and physical abilities are not considered private (PARRA, 2004 apud & FERNANDES COSTA, 2006), which can make learning to swim a monotonous and meaningless process and learning and repetitive and uninteresting to those who teach. In order to change this situation, it is essential that the focus of education becomes a process of learning to swim and not its product, namely the field of mechanical established styles of swimming.

The factors that interfere with learning to swim may involve the individual, the environment or task, and these aspects could be investigated and known to the benefit of learning, which is what you want to highlight here during the search. Instructional materials water can facilitate the teaching of swimming for children, depending on how it will be used and the way they are presented to children.

However, there was a dearth of literature studies on preferences for learning materials and types of swimming activities for children of middle childhood. Therefore, it is not known what materials, games, exercises, among other aspects of the sport, these individuals have preference in use for pleasure and motivation at the time of your workout, not just an obligation. Thus, this study aimed to identify the types of teaching materials and activities swimming that children 7 to 10 years like most practitioners of this modality.

### METHOD

This study is a descriptive qualitative and quantitative, as we want to describe the results obtained by applying the instrument and analyze it by statistical tests.

#### Choose Institution

The study was conducted at the School of Sport and Culture of the Jesuit College, located in the city of Juiz de Fora / MG, one of the largest swimming infrastructure in the region and receives a large number of practitioners of this modality in the age range studied.

#### Population and Sample

The study population consisted of children swimmers School of Sports and Culture of the Jesuit College in the city of Juiz de Fora / MG, mean, standard deviation, minimum and maximum shown in table I. The sample consisted of 70 individuals of both genders. For the sample selection criterion adopted was simple random sample (Guedes & Guedes, 1998).

#### Inclusion and exclusion

For inclusion of individuals in research, they would have to be available to answer the questionnaire, parental consent regarding their participation in the study and systematic process of being in swimming lessons at the School of Sports and Culture of the Jesuit College.

The study excluded subjects who possessed some kind of disability, which would not have parental consent and / or do not possess the signing of the consent form (ICF) by parents.

#### Instrument for data collection

For the reason of not finding scales, questionnaires or some suitable instrument in the literature to achieve the objective of this study, we designed a questionnaire with 10 questions quick and easy application. For better visualization and understanding of the subjects, this instrument was illustrated with figures relating to aquatic materials belonging to that school. We conducted a pilot study (STRONG, DE PAULA & Polissen, 2009) to ascertain the reliability of this instrument. After some modifications, the

questionnaire was restructured to the present study. This assessment tool (appendix 1) was reviewed by three specialists in child swim before they are implemented and used to collect data concerning the preferences of educational materials on water and water activities for children aged 7 to 10 years.

**Data collection procedure**

Questionnaires were given to research subjects, who then received the same verbal directions. A written guidance on the proper procedures were also present in the questionnaire. Any doubt was clarified at the time of filling the enforcement of the instrument, and the subjects of this study did not communicate with one another while filling out the questionnaire. The distribution of the questionnaires was conducted in the final minutes of the classes, and fill your voluntary. There was no time limit for completing it.

**Data analysis**

A statistical analysis was performed using the software Statistica 8.0. For all variables, we calculated the relative frequency, cumulative frequency and absolute frequency. We performed Fisher's correlation to relate the frequencies of the issues of the assessment instrument (questionnaire). In all cases, the level of significance was  $P < 0.05$ .

**Ethical aspects**

All participants answered responsible for a term of informed consent, explaining the objectives and procedures of the study, allowing voluntary participation of children in research. It was also guaranteed the anonymity of all study subjects. This research was conducted only after receiving approval from the ethics committee and research in humans, Federal University of Juiz de Fora, in accordance with Resolution 196/96.

**RESULTS**

**Table 1 - Description of the age range of the sample**

Variable	Average	Standard Deviation	Minimum	Maximum	N (sample size)
Age (years)	8.37	1.03	7	10	70

**Table 2 - Frequencies of instrument variables**

Category	Absolute Frequency	Cumulative Frequency	Percentage (%)	Cumulative percentage (%)
<b>Gender</b>				
Boys	27	27	38.57	38.57
Girls	43	70	61.43	100.00
<b>Reason for accession to swimming</b>				
My favorite sport	41	41	58.57	58.57
Want to learn to swim	2	43	2.86	61.43
Like the aquatic environment	21	64	30.00	91.43
I want to make new friends	1	65	1.43	92.86
I dream to be a swimmer (a)	2	67	2.86	95.71
Medical advice	3	70	4.28	100.00
<b>Activity you like best</b>				
Jokes	36	36	51.43	51.43
Exercises	9	45	12.86	64.28
Learning a different style	13	58	18.57	82.86
Improve swimming	9	67	12.86	95.71
Using the floating materials	1	68	1.43	97.14
Find your friends	2	70	2.85	100.00
<b>Preference textbooks aquatic</b>				
Pasta	10	10	14.28	14.28
Plank	5	15	7.14	21.42
Pullboy	3	18	4.28	25.70
Halter	3	21	4.28	30.00
Carpet	41	62	58.57	88.57
Swab	2	64	2.85	91.42
Duck walk	2	66	2.85	94.27
Ball	1	67	1.43	95.70
Flexi colored	2	69	2.85	98.55
Letters floating	1	70	1.43	100.00
<b>Type of activity you like best</b>				
Pick up objects in pool	2	2	2.86	2.86
Recreational Activities	22	24	31.43	34.29
Jump in the pool	4	28	5.71	40.00
Activities double	3	31	4.28	44.28
Practice swimming	7	38	10.00	54.28
Competitive activities	32	70	45.72	100.00

**Table 3 - Correlation between frequency of "preference of aquatic instructional materials" and "type of activity they like best"**

Preference textbooks aquatic	Category	Type of activity you like best						Total
		Pick up objects in pool	Recreational Activities	Jump in the pool	Activities double	Practice swimming	Competitive activities	
	Pasta	0	3	0	0	2	5	10
	Plank	0	0	0	2	0	3	5
	Pullboy	0	1	0	0	1	1	3
	Halter	0	1	1	0	0	1	3
	Carpet	0	13	3	1	4	20	41
	Swab	0	1	0	0	0	1	2
	Duck walk	0	1	0	0	0	1	2
	Ball	0	1	0	0	0	0	1
	Flexi colored	2	0	0	0	0	0	2
	Letters floating	0	1	0	0	0	0	1
	Other	0	0	0	0	0	0	0

## DISCUSSION

This study shows similar results in some questions to dance in research conducted with young people. Alves, Junger, Miller & Palma (2007), for instance, found by means of a questionnaire completed by 98 individuals aged between 13 and 18 years enrolled in swimming schools in Rio de Janeiro, 16% of Subjects began the practice of the sport because they like the sport, 31.5% medical advice by 4% because they wanted to be swimmers and 2.5% to make new friends. Studies investigating other age groups have ascertained that the reasons related to health are often reported in surveys. Shigunov & Benassi (1993) analyzed the factors influencing 137 subjects of both genders, aged 9 years, to begin the practice of swimming and found higher scores for responses related to health and wellness.

Scalon (1998) in turn, investigating 119 children between 9 and 12 years of age, found that they practiced physical exercises as "like being happy and having fun," "like to improve their skills" and "would like to find new friends." This study draws attention to the fact that health-related characteristics are not dominant in relation to other categories of reasons for their adherence to physical exercise.

In our study, despite having been performed with different ages of upper, identified "my favorite sport" and "taste of the water environment" as the answers with the highest frequency (58.57% and 30% respectively). However, even with a lower incidence of response, we detected a trace of the athletic compliance related to health when we observed three (4.28%) children admitted to start swim practice for medical advice.

Since this is a relationship between motives for joining the swimming and age, it was not possible to compare the results with other studies due to its scarcity. Our results show that girls aged 7 to 8 years old showed more frequent "my favorite sport" as a reason to join the swim, but female subjects aged between 9 and 10 years showed no major differences in responses (12.86% "my favorite sport" and 8.57% "like the aquatic environment"). Already in both males aged 7-8 years, and in 9 to 10 years had higher incidence in the category "my favorite sport."

Fortes, Paula & Polisseni (2009) assessed 15 children and adolescents with a mean age of  $9 \pm 2.5$  years and swimmers in relation to the activities of classes like this sport, they found their results in a preference of 53.33% in the "games", 26.67% in the "exercises", 13.33% preferred to improve the swimming and the rest chose other answers. From this, we can infer that there are similarities with our study in the investigations which diagnosed "activity they like best."

Placing the last item mentioned in the questionnaire with practice time, we can report that girls with "2 to 4 years of swimming practice" is more interested in pranks than boys with the same length of membership, but individuals over 4 years Practice mode males like to play more than female subjects. Table 2 reminds us there is a preference for girls with practice time between 2 and 4 years of "learning a different style" and "improve the swim" should be given a great importance too.

In a study similar to ours, but using toys miriti instead of floating materials swimming, Bridges, Magellan & Martin (2008) identified the highest score of Contact toys like a boat (157.51), air (145.92) and snake (113.10) in males and in females the highest scores were for dancing (171.50), boat (89.52) and charges (59.13) diagnosing, then, a certain similarity in the preference of these materials in both sexes.

In the variable "preference textbooks water" can perceive the occurrence of a huge interest in "carpet" for both genders and in both age groups (Table 3) and can thus infer the existence of some similarities with the study quoted in the preceding paragraph. This instrument (carpet) is usually used in synthetic analytical learning method (segmented) through exercises / activities of leg, arm, dip, thrust edge, dive, but can also be used in the overall method (swimming completed), but this needs to be adapted for such an achievement, preferably, less, making only the fluctuation of the practitioner.

Making a list of frequencies between 'preference of aquatic instructional materials "and" type of activity they like best' (Table 3), we can highlight the high incidence of "carpet" with recreational and competitive activities (28.57% and 18.57% respectively). These data bring us the idea to create / invent in a swimming class, recreational activities as "play boat", playing a surfer, "among others in the stage of adaptation to the water, for example, and, as in competitive activity relays and organize activities in pairs with stimuli of healthy competitiveness using only targeted exercises (leg, arm, etc.), also depending on the purpose of the lesson and the learning stage in which these children are present. Such activities may be executed in the same class by using this floating material (carpet) to promote greater motivation for these subjects, thus making it an enjoyable practice and not merely a practice mandatory. Remember that these competitive and recreational activities can also be offered to students with the use of other instructional materials as "noodles," which also won a significant rate, as may be prescribed and enjoying the overall method of teaching and learning when the goal is to swim the entire style, be it crawl, backstroke, breaststroke or butterfly. Just the teacher has enough creativity to develop different activities and do not let this turn into a routine. It is important to always bring something new to swimming lessons for this age group in this study.

## CONCLUSION

We conclude that the materials that bring more pleasure Water use in swimming lessons for this study group is the "carpet" and "pasta" and that the preferred activities are recreational and competitive, but more studies are needed covering the same range age of other swimming schools of the city of Juiz de Fora for us to find better results.

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#### **RELATIONSHIP BETWEEN PREFERENCES OF MATERIALS AND ACTIVITIES OF AQUATIC SWIMMING THIRD CHILDREN'S CHILDREN**

Instructional materials center can make easier the teaching of swimming depending on how they are used. The objective of this study was to identify the types of materials and swimming activities that children aged 7 to 10 years like the most. The sample consisted of 70 children. A questionnaire was developed to serve as an evaluation tool. We calculated the Fisher correlation to relate the responses of the instrument. The correlation between "materials" and "water activities" showed a high incidence of "float-shaped rug" with competitive activities and recreational activities. We conclude that the materials that bring more pleasure for use in swimming lessons are the "float-shaped rug" and "float-shaped cylinder" and the favorite activities are recreational and competitive.

**KEY-WORDS:** Swimming; learning materials; preferences; water activities

#### **RELATION ENTRE LES PRÉFÉRENCES DE MATÉRIEAUX ET ACTIVITÉS DES ENFANTS LES ENFANTS DE NATATION AQUATIQUES DU TIERS**

D'enseignement de l'eau matériaux peuvent faciliter l'enseignement de la natation en fonction de la façon dont ils sont utilisés. L'objectif était d'identifier les types de matériels d'enseignement et les activités de la natation que les enfants de 7 à 10 ans de plus, comme. L'échantillon se composait de 70 enfants. Un questionnaire a été élaboré pour servir d'outil d'évaluation. Nous avons calculé la corrélation Fisher de rapporter les réponses de l'instrument. La corrélation entre les «manuels» et «activités aquatiques» a montré une incidence élevée de "tapis" avec les activités concurrentielles et activités récréatives. Nous concluons que les matériaux qui apportent plus de plaisir à l'utilisation des cours de natation sont "tapis" et "pasta" et que les activités préférées sont récréatifs et compétitifs.

**MOTS-CLÉS:** natation, matériaux, les préférences, les activités de l'eau

#### **RELACIÓN ENTRE LAS PREFERENCIAS DE MATERIALES Y ACTIVIDADES DE LOS NIÑOS LOS NIÑOS PISCINA ACUÁTICO DE TERCEROS**

Materiales de instrucción centro puede facilitar la enseñanza de la natación en función de cómo se utilizan. El estudio fue identificar los tipos de materiales y actividades de la natación que los niños de 7 a 10 años más como. La muestra consistió de 70 niños. Un cuestionario fue desarrollado para servir como una herramienta de evaluación. Se calculó la correlación de Fisher para relacionar las respuestas del instrumento. La correlación entre los "materiales" y "actividades en el agua" mostró una alta incidencia de la "alfombra" con actividades competitivas y recreativas. Llegamos a la conclusión de que los materiales que dan más placer en su uso en las clases de natación son la "alfombra" y "pasta" y las actividades favoritas son recreativos y competitivos.

**PALABRAS CLAVE:** Piscina, materiales, preferencias, actividades acuáticas

#### **RELAÇÃO ENTRE PREFERÊNCIAS DE MATERIAIS AQUÁTICOS E ATIVIDADES DE NATAÇÃO DE CRIANÇAS DA TERCEIRA INFÂNCIA**

Materiais didáticos aquáticos podem facilitar o ensino da natação dependendo de como serão utilizados. O objetivo do estudo foi identificar os tipos de materiais didáticos e atividades de natação que crianças de 7 a 10 anos mais gostam. A amostra foi constituída por 70 crianças. Foi elaborado um questionário para servir como instrumento de avaliação. Realizou-se a correlação de Fisher para relacionar as respostas do instrumento. A correlação entre "materiais didáticos" e "atividades aquáticas" apontou uma grande incidência do "tapete" com atividades competitivas e atividades recreativas. Concluímos que os materiais que trazem mais prazer na utilização em aulas de natação são o "tapete" e o "macarrão" e que as atividades preferidas são as recreativas e competitivas.

**PALAVRAS-CHAVE:** Natação; materiais didáticos; preferências; atividades aquáticas