

## 69 - ANALYSIS OF THE COGNITIVE TEST IS MOTOR OF THE TENNIS IN ADOLESCENTS OF MUNICIPAL SCHOOL

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### Introduction

In the General assembly of the Organization of the United Nations (UN), it was proclaimed the year of 2005 as International "Year of the Sport and of the Physical education", decision that reinforces in national level, the need there to be new approaches and scientific studies in the different social dimensions of the sport (TUBINO, 2001).

In Pacheco's understanding, Beltrão and Nunes (2006), in private the court tennis, a lack of planning of the contents can be observed, in other words, an extensive compromising in the true sport pedagogic actions.

Corroborating Scaglia (2001), emphasizes that every sport pedagogic process should be adapted to the development characteristics and the student's basic needs.

To the authors it is done necessary also to know the experience in the sport and the phases cognitive and motor of the student to reinforce the structuring of the sport program.

In agreement with Gallahue (1995) should be cultivated, through a correct pedagogy, the sense of fair play, health and physical condition, cooperative spirit, perseverance and spirit of inherent improvement to the sport practice.

Coming to the encounter of our study proposal in the dimension of the sport in the school, Tubino (2002) detaches that the objective is the "formation for the citizenship and active lifestyle, valorization of the beginnings of the participation, of the coeducation, of the solidarity, of the cooperation, of the equality and of the co-responsibility among the students."

However, can be observed during the practice of school sport initiation a high valorization of the aspects technical, tactical and physical (DANTE JR. 2002), in other words, pedagogic actions only limited to the methodological subjects of teaching.

The court tennis for presenting in it characteristic a respect differentiated to the opponent, the rules and the possibility of the student's effective participation, it cannot to leave of contributing for the sport pedagogic process in that differentiated context.

Corroborating Nunes (1990) in his master's degree dissertation concluded that "The practice of the court tennis can become an activity curricular in the school Physical education, before the possibility of use of materials and places adapted for the practice."

According to Lüdorf (1999), the process of teaching-learning of the tennis involves several domains of the human behavior, favoring the pedagogic aspects.

Agreeing with Guedes & Guedes (1997), the experience can alter or to modify the appearance of some characteristics established genetically, through the teaching-learning process.

Beltrão (2000), affirms that any technical and scientific proposal of education stamp, priority factor of social intervention is constituted and of cultural formation.

Leaving of the premise that any sport pedagogic process demands the professionals' of physical education presence and specialists with appropriate praxis.

### Objective

The objective is the indication than intends to reach with the research (THOMAS & NELSON 2002).

The objective of the present study was to analyze the experience in the modality and the initial phase in cognitive and motor level in adolescents of municipal public school of the area west of Rio de Janeiro.

### Methodology and Procedures

The field study with almost experimental characteristic developed of interpretative form starting from a sample constituted by 32 students in the age group from 13 to 16 years of both kinds of the fundamental teaching of the Municipal School Sérgio Buarque from Holland - Barra de Tijuca - Municipal district of Rio de Janeiro - RJ.

The existence instrument (NUNES, 2004): a questionnaire was used, in which the students answered to 11 subjects regarding his experience in the sport, with the answer options they were yes or no, when affirmatives demanded a specification.

The cognitive test (NUNES, 2004) it was an inquiry, where it consisted of 5 specific questions regarding the 6 basic phases of one of the blows of the tennis, in a total of 30 questions, the answers were given in an individual way for not suffering influences of other students and they were based in right or wrong in agreement with the student's understanding.

The motor test had as reference the form of classification of the forehand blows and backhand (HENSLEY, 1989), where the evaluation bases on a fixed scale, the motor acting is compared with a certain pattern, in other words, analysis only of the motor of the blow of the sport (MORROW & JAMES, 2003 the bold is ours).

Through a video camera enrolled 10 executions of the blow of each student's forehand, where the first 3 blows were for the adaptation and the remaining 7 for validation of the observation.

Determined that the collaborating teacher did the releases in temporary intervals, for the facilitation of the evaluation on the part of the specialists and simultaneously to take the student to execute the blows in a calculated way and well guided.

That test of the motor acting was accomplished in a polish-sporting block of the own in subject with the use specific materials of the tennis (rackets, balls and net), a camcorder JVC to register in video the executions of the blow and 32 vests of 8 types of numbered colors from 1 to 4 to differentiate the teams one of the other ones.

As for the analysis of the students' motor acting they were done by three specialist professionals of the sport field tennis in different days for there not being influence in the determination of the individual values. The values were given starting from the understanding of the same ones with base in an acceptable motor model.

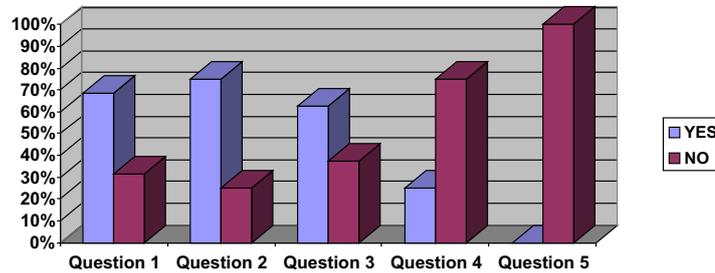
The motive qualification used of a scale (THOMAS & NELSON, 2002), in that the approach is not affected by the group in that the student this being tested, where it can have several students with the same classification and/or you value.

The 5 specific subjects of each basic phase of the blow had a value from 1 to 6, formalizing the following climbs of values:

VALUES:	Weak (1 a 6)	Reasonable (7 a 12)	Regular (13 a 18)	Good (19 a 24)	Excellent (25 a 30)
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**Results**

**Graphic I:** questionnaire of experience of the tennis



In the first subject, 68,75% of the sample knew the court tennis through the media, specifically for television, and 31,25% of the sample didn't know the court tennis.

In the second subject, 75% of the sample knew at least some player of Brazilian tennis, where, the same ones 75% mentioned Gustavo Kuerten's name (Guga). However, 25% of the sample didn't know any player of Brazilian tennis.

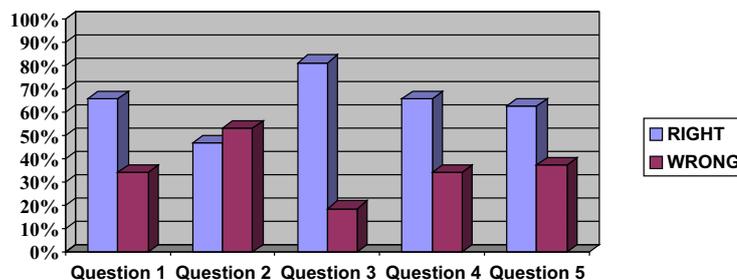
In the third subject, 62,50% of the sample already had of some form contact with the specific materials of the court tennis (racket, net and official balls). In which, 25% answered that this contact was in some club with official block.

37,50% of the sample never had contact with the specific materials of the court tennis (racket, net and official balls).

In the fourth subject, 25% of the sample in some moment already had the opportunity to play and/or to practice the tennis with the rules officials. 75% of the sample answered that it never played with the rules officials of the sport.

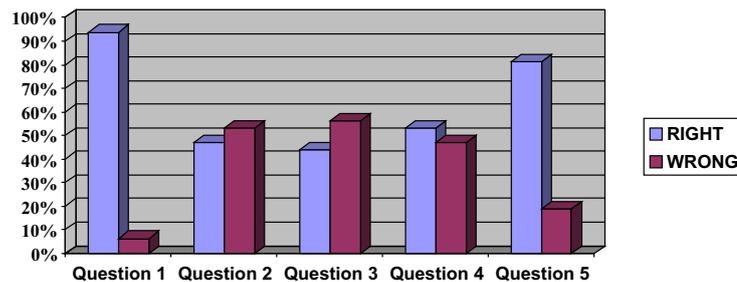
In the fifth subject, 100% of the sample never made class of court tennis.

**Graphic II:** test cognitive - expectation position



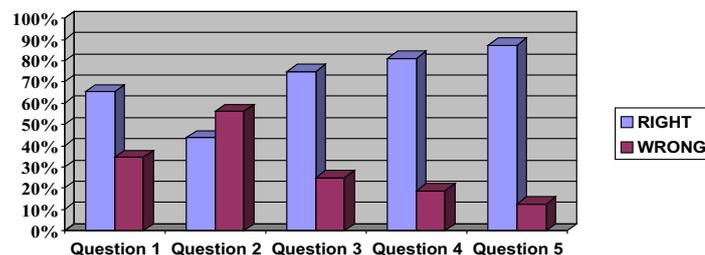
Of the 32 students of the sample inquired as for the phase 1 - expectation position, of the sample answered affirmatively: 1) position of the feet in the width of the shoulders 65,62%; 2) symmetrical feet 46,88%; 3) the knees lightly inflected 81,25%; 4) trunk tilted 65,62% and 5 forward) the fixed eyes in the opponent 62,50%. Answered the negatively: 1) position of the feet in the width of the shoulders 34,38%; 2) symmetrical feet 53,12%; 3) the knees lightly inflected 18,75%; 4) trunk tilted 34,38% and 5 forward) the fixed eyes in the opponent 37,50%.

**Graphic III:** test cognitive hilt



As for the phase 2 - footprint (forms of handling), of the sample answered affirmatively: 1) to hold the firm racket 93,75%; 2) to put the moved away index finger of the middle finger 46,88%; 3) to support the racket with the opposite hand 43,75%; 4) arms ahead of the body 53,12% and 5) head of the racket lightly high in relation to the fist 81,25%. Answered negatively: 1) to hold the firm racket 6,25%; 2) to put the moved away index finger of the middle finger 53,12%; 3) to support the racket with the opposite hand 56,25%; 4) arms ahead of the body 46,88% and 5) head of the racket lightly high in relation to the fist 18,75%.

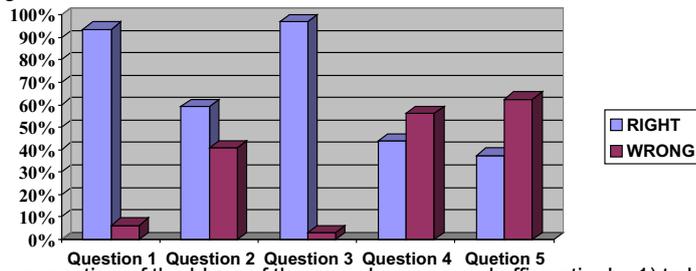
**Graphic IV:** test cognitive preparation of the blow



As for the phase 3 - preparation of the blow, of the sample answered affirmatively: 1) to begin with the turn of shoulders

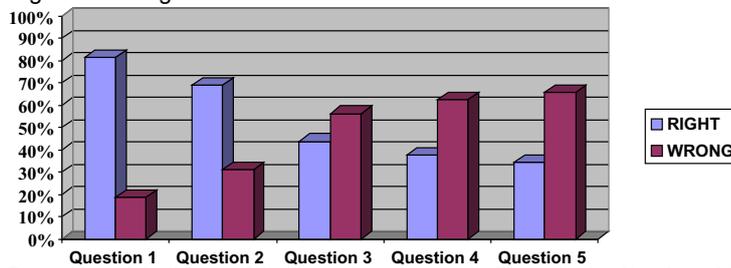
62,62%; 2) to do a turn with the racket behind the body 43,75%; 3) to do a rotation interns of the forearm (pronação) 25%; 4) leg opposed ahead to position 81,25% and 5) knees inflected for the positioning 87,50%. Answered negatively: 1) to begin with the turn of shoulders 37,38%; 2) to do a turn with the racket behind the body 56,25%; 3) to do internal rotation of the forearm 75%; 4) leg opposed ahead to position 18,75% and 5) knees inflected for the positioning 12,50%

**Graphic V:** test cognitive execution of the blow



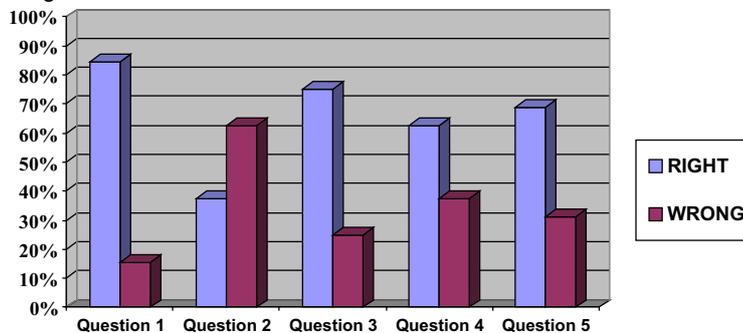
As for the phase 4 - execution of the blow, of the sample answered affirmatively: 1) to look fixedly for the ball 93,75%; 2) to post of side for execution of the blow 59,37%; 3) to hold the racket strong in the impact 96,88%; 4) to beat the ball ahead of the body (I contact) 43,75% and 5) transfer of the weight of the body forward in the moment of the beat 37,50%. he/she Answered negatively: 1) to look fixedly for the ball 6,25%; 2) to post of side in the execution of the blow 40,63%; 3) to hold the racket strong in the impact 3,12%; 4) to beat the ball ahead of the body (I contact) 56,25% and 5) transfer of the weight of the body forward in the moment of the beat 62,50%.

**Graphic VI:** test cognitive ending of the blow



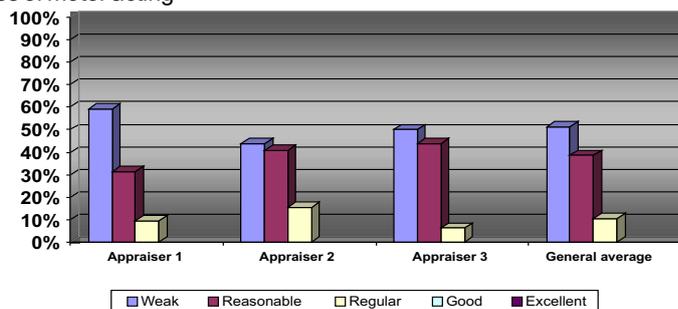
As for the phase 5 - ending of the blow, of the sample answered affirmatively: 1) to impel the racket forward (I balance) 81,25%; 2) to do the relaxed movement 68,75%; 3) to do internal rotation of the forearm 43,75%; 4) to finish above the shoulder opposite 37,50% and 5) to hold the racket with the opposite hand in the end 34,38%. Answered negatively: the) to impel the racket forward 18,75%, b) to do the relaxed movement 31,25%, c) to do the rotation interns of the forearm 56,25%, d) to finish above the opposite shoulder 62,50%, and) to hold the racket with the opposite hand in the end 65,62%.

**Graphic VII:** test cognitive movement



As for the phase 6 - displacement, of the sample answered affirmatively: 1) to balance before the opponent's blow (split step) 84,38%; 2) to be with the lifted up heels 37,50%; 3) to move (to run) in front of catching the distant ball 75%; 4) to stop the displacement to beat the ball 62,5% and 5) to do lateral displacement for the position of base 68,75% to return. Answered negatively: 1) to balance before the opponent's blow (split step) 15,62%; 2) to be with the lifted up heels 62,50%; 3) to run in front of catching the distant ball 25%; 4) to stop the displacement to beat the ball 37,50% and 5) to do lateral displacement for the position of base 31,25% to return.

**Graphic VIII:** values of motor acting



For the **appraiser 1** 59,37% of the sample was in the scale of weak value, 31,25% in the reasonable scale and 9,38% in the satisfactory scale. For the **appraiser 2** 43,75% of the sample was in the scale of weak value, 40,63% in the reasonable scale and 15,62% in the satisfactory scale. For the **appraiser 3** 50% of the sample was in the scale of weak value, 43,75% in the reasonable scale and 6,25% in the satisfactory scale.

### Conclusion of the Study

The reached results point just some references of a small group of students of a public school of the municipal of Rio de Janeiro. In which, it was reached the following conclusions: in the existence questionnaire: the sport tennis and his/her largest Brazilian representative Gustavo Kuerten (Guga) they are known by 68,75% of the sample through the media, being an important way of diffusion. But, it is not the access warranty to the initiation; the contact with the tennis was in some way in clubs; 100% of the sample never made tennis class and they presented a pré-disposition in learning.

In the cognitive evaluation of the 30 subjects, 20 were answered in an affirmative way, where it showed to be a high result in municipal school level, for the fact of the tennis not to consist in the curriculum of the Physical education; the subphases: to hold the firm racket and to look fixed for the opponent they were the one of larger index of successes (93,75%); of the 10 answered subphases in way negatives 6 they didn't present significant difference; the cognitive test presented a satisfactory result.

Evaluation of the motor acting was inside of a normality scale, soon with the facilitation of the practice it can be obtained good results in the learning of the sport in subject in school context.

### Bibliographical References

- BELTRÃO, F.B.; BERESFORD, H. & MARCÁRIO, N.M.** *Produção em Ciência da Motricidade Humana*. 2ª Ed. Rio de Janeiro: Shape Editora, 2002.
- GALLAHUE, D.L. & OSMUN J.C.** *Understandings motor development: infants, children, adolescences and adults*. Brown & Benchmark Publishers, 570, 1995.
- GUEDES, D.P. & GUEDES, J.E.R.P.** *Crescimento, composição corporal e desempenho motor de crianças e adolescentes*. São Paulo: Bralheiro Editora. 1997.
- LÜDORF, S.M.G.** *Tênis para crianças: uma abordagem científico-pedagógica*. Kinesis, Santa Maria, n.21, 207-222, 1999.
- MORROW Jr. & JAMES, R.** *Medida e avaliação do desempenho humano*. 2. Ed. Trad. Maria da Graça Figueira da Silva. Porto Alegre: Artmed Editora, 2003.
- NUNES, W.J.** *Análise de duas metodologias de ensino na aprendizagem com um gesto desportivo. Estudo das variáveis mediacionais, cognitivas, afetivas e motoras associadas aos alunos*. Tese (doutorado) - F M H - Universidade Técnica de Lisboa - Portugal, 2004.
- NUNES, W.J.** *Tênis de Campo: da elitização à popularização a nível escolar*. Dissertação de mestrado da Universidade Gama Filho, Rio de Janeiro, 1990.
- ROSE Jr, D.** *Esporte e atividade física na infância e na adolescência*. Uma abordagem multidisciplinar. Porto Alegre: Artmed Editora, 2002.
- SCAGLIA, A.J.** *Pedagogia dos esportes*. Campinas, SP: Papyrus Editora. 1999.
- THOMAS, J.R. & NELSON, J. K.** *Métodos de pesquisa em atividade física*. 3ª Ed. Porto Alegre: Artmed editora, 2002.
- TUBINO, M. J.G.** *Dimensões sociais do esporte*. 2ª Ed. São Paulo: Cortez Editora, 2001.
- TUBINO, M.J.G.** *As teorias da educação física e do esporte. Uma abordagem epistemológica*. Barueri, SP: Manole Editora Ltda. 2003.

### ANALYSIS OF THE COGNITIVE AND MOTOR TEST OF THE TENNIS IN ADOLESCENTS OF PUBLIC SCHOOLS

#### ABSTRACT:

**Introduction:** the sport pedagogy has presented significant scientific approaches for the humanity and the court tennis under that prism has the obligation of giving its contribution in the school dimension. **Objective:** to analyze the experience in the modality and in the initial phase of cognitive and motor levels in adolescents of municipal public schools of the area west of Rio de Janeiro. **Methodology:** a field study with almost experimental characteristics was conducted in interpretative form, taking as starting point a sample constituted by 32 students in the age group from 13 to 16 years old of both sexes. **Procedures:** a questionnaire in which the students answered to 11 questions (in the yes or no format) pertaining to their sportive experience was used. Also a cognitive test (NUNES, 2004); with 5 specific questions regarding the 6 basic phases of one of the blows of the tennis; was answered (in the right or wrong format) individually by each student according to his comprehension of the subject. Furthermore, a motor test (HENSLEY, 1989), which consisted of the individual executing 10 tennis blows, the first 3 for adaptation and remaining 7 for validation, was conducted. Three specialists analyzed their motor proficiency. **Results:** in the sportive experience 68,75% of the sample had the same knowledge and of the idol through the media; in the cognitive test 62,50% of the sample answered in a correct form the specific subjects; and in the motor test 51,04% of the sample were classified as being at the moment proficiently weak. **Conclusion:** there was a significant influence of the media in what refers to the knowledge of the sport and of the idol, demonstrating that it is an important manner of diffusion of the sport; in the cognitive test the index of correct answers were considered high for their school level; and the motor test the results obtained were completely normal; thus if we implement the practice of this sport good results can be obtained.

Key Words: Tennis, adolescent, experience, cognitive and motor.

### L'ANALYSE DE L'ÉPREUVE COGNITIVE EST MOTEUR DU TENNIS DANS ADOLESCENTS D'ÉCOLE PUBLIQUE

#### RÉSUMÉ:

**Introduction:** la pédagogie du sport a présenté des approches du scientifique considérables pour l'humanité et le tennis de cour sous ce prisme ne peut pas partir de lui donner la contribution dans la dimension scolaire. **Objectif:** analyser l'expérience dans la modalité et la phase initiale dans cognitif et niveau du moteur dans adolescents d'école publique municipale de la région ouest de Rio de Janeiro. **Méthodologie:** l'étude de champ avec caractéristique presque expérimentale développée de forme interprétative qui commence d'un échantillon constituée par 32 étudiants dans la tranche d'âge de 13 à 16 années des deux genres. **Procédure:** un questionnaire a été utilisé dans lequel les étudiants ont répondu 11 sujets qui regardent son expérience dans le sport, avec les options de la réponse oui ou pas; épreuve cognitif (NUNES, 2004) avec 5 questions spécifiques concernant les 6 phases de base d'un des coups du tennis, a répondu avec droit ou lèse individuellement en accord avec l'étudiant comprend; testez le moteur (HENSLEY, 1989) il a consisté dans l'exécution individuelle de 10 coups, le premier 3 pour l'adaptation et 7 qui restent pour validation. Trois spécialistes ont analysé le suppléant du moteur. **Résultat:** dans l'expérience du sport 68,75% de l'échantillon savaient le même et l'idole à travers les médias; dans le cognitif 62,50% de l'échantillon ont répondu dans une forme correcte les sujets spécifiques et dans l'épreuve du moteur 51,04% de l'échantillon étaient dans le niveau faible. **Conclusion:** il y avait une influence considérable des médias dans ce qui fait référence à la connaissance du sport et de l'idole, être une manière importante de diffusion; dans le cognitif l'index de succès a été considéré

bryant dans niveau d'école dans le moteur était dans une échelle de la normalité, bientôt avec la facilitation de l'entraînement il peut être obtenu de bons résultats dans l'érudition du sport dans sujet.

Les mots Accordent: Tennis, adolescent, expérience, cognitif et moteur.

## EL ANÁLISIS DE LA PRUEBA COGNOSCITIVA ES DE MOTOR DEL TENIS EN LOS ADOLESCENTES DE ESCUELA PÚBLICA

### RESUMEN:

**La introducción:** la pedagogía deportiva ha presentado los acercamientos científicos significantes para la humanidad y el tenis judicial bajo ese prisma tiene la obligación de dar su contribución en la dimensión escolar. **El objetivo:** para analizar la experiencia en la modalidad y en la fase inicial de niveles cognoscitivos y de motor en los adolescentes de escuelas públicas municipales del oeste del área de Río de Janeiro. **La metodología:** un estudio del campo con las características casi experimentales se dirigió en el formulario interpretativo, toma como el punto de partida una muestra constituyó por 32 estudiantes en el grupo etario de 13 a 16 años viejo de ambos sexos. **Los procedimientos:** una encuesta en que los estudiantes contestaron a 11 preguntas perteneciendo a su experiencia juguetona fue usado. También una prueba cognoscitiva (NUNES, 2004); con 5 preguntas específicas con respecto a las 6 fases básicas de uno de los soplos del tenis; se contestó individualmente por cada estudiante según su comprensión del asunto. Además, una prueba de motor (HENSLEY, 1989) que consistió del ejecutar individual 10 tenis sopla, el primero en 3 para la adaptación y siguiendo siendo 7 para la aprobación, se dirigió. Tres especialistas analizaron su habilidad de motor. **Los resultados:** en la experiencia juguetona 68,75% de la muestra tenían el mismo conocimiento y del ídolo a través de los medios de comunicación; en la prueba cognoscitiva 62,50% de la muestra contestaron en un formulario correcto los asuntos específicos; y en la prueba de motor 51,04% de la muestra eran clasificados como estar expertamente en el momento débil. **La conclusión:** había una influencia significativa de los medios de comunicación en lo que se refiere al conocimiento del deporte y del ídolo, demostrando que es una manera importante de difusión del deporte; en la prueba cognoscitiva el índice de respuestas correctas fue considerado alto para su nivel escolar; y la prueba de motor los resultados obtenidos eran completamente normales; así si nosotros llevamos a cabo que la práctica de este resultados buenos deportivos puede obtenerse.

Las Palabras de la llave: El tenis, el adolescente, la experiencia, cognoscitivo y de motor.

## ANÁLISE DO TESTE COGNITIVO E MOTOR DO TÊNIS EM ADOLESCENTES DE ESCOLA PÚBLICA

### RESUMO:

**Introdução:** a pedagogia desportiva tem apresentado significativas abordagens científicas para a humanidade e o tênis de campo sob esse prisma não pode deixar de dar a sua contribuição na dimensão escolar. **Objetivo:** analisar a experiência na modalidade e a fase inicial em nível cognitivo e motor em adolescentes de escola pública municipal da zona oeste do Rio de Janeiro. **Metodologia:** o estudo de campo com característica quase experimental, desenvolveu-se de forma interpretativa a partir de uma amostra constituída por 32 alunos na faixa etária de 13 a 16 anos de ambos os gêneros. **Procedimento:** utilizou-se um questionário, no qual os alunos responderam 11 questões referentes à sua experiência no desporto, com as opções de resposta sim ou não; teste cognitivo (NUNES, 2004) com 5 perguntas específicas referentes às 6 fases básicas de um dos golpes do tênis, respondidas com certo ou errado individualmente de acordo com a compreensão do aluno; teste motor (HENSLEY, 1989) constou na execução individual de 10 golpes, os 3 primeiros para a adaptação e 7 restantes para validação. Três especialistas analisaram o desempenho motor. **Resultado:** na experiência do desporto 68,75% da amostra conhecia o mesmo e o ídolo por meio da mídia; no cognitivo 62,50% da amostra respondeu de forma correta as questões específicas e no teste motor 51,04% da amostra encontrava-se no estágio fraco. **Conclusão:** houve uma significativa influência da mídia no que se refere ao conhecimento do desporto e do ídolo, sendo um meio importante de difusão; no cognitivo o índice de acertos foi considerado alto em nível escolar no motor ficou dentro de uma escala de normalidade, logo com a facilitação da prática pode-se obter bons resultados na aprendizagem do desporto em questão.

Palavras Chave: Tênis, adolescente, experiência, cognitivo e motor.