

## 119 - EVALUATION OF THE PROCEDURAL TACTICAL KNOWLEDGE: KORA:OO. APPLICATION IN THE BASKETBALL

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The actions in spots (J.E.C.) are characterized for I appeal it to intelligence and one adjusted capacity adaptation in an environment permanent change (GARGANTA, 1998). The requirements imposed to the participant athletes to surpass the structural instability make with that the tactical capacity is the base of the declarative and procedural knowledge for the resolution of the problems that the athlete faces during a game (GARGANTA, 2002; SOUZA, 2002). Test KORA validated for MEMMERT (2002) allows to evaluate the procedural tactical knowledge (CTP) in the parameter: to offer themselves and to orient themselves (KORA:O.O). It consists of a set of game situations of three against three, in which the transport of the ball if executes with the hands and no finishing the goal or basket. Three experts specifically in the questions to be observed evaluate these situations of game. The evaluation presents a scale of punctuation of 0 the 10 points. The objective of the present study is to verify the level of CTP in question O.O., pertaining children the teams of participant basketball of the festivals of mini-basketball organized by the Federação Mineira de Basquetebol. The sample is composed in 33 children, ages 10 - 12 years (n = 33). In accordance with the values of the media, can be verified that for creativity (divergent) the gotten value was of two (2), and for intelligence (convergent) the gotten value was of three (3). In accordance with the gotten values can be affirmed that for this sample the levels of performance since the point of view of creativity and tactical intelligence had been low. One of the possible causes of this overhead could be related with the education processes - learning - training developed in the practical one of the modality and that it will be searched in posterior studies.

Words - keys: Procedural tactical knowledge, KORA,

### INTRODUCTION

The Sports are distinguished for the **imprevisible** and variability of behaviors, its **specific** is evidenced exactly when it observes the innumerable common elements that the same ones it withholds. Thus the actions and answers in the game if characterize for it appeal to intelligence and capacity adaptation to an environment in permanent change (GARGANTA, 1998). The ability to select answers adjusted in the requisite JEC of the athlete a tactical knowledge on the game and the actions (THOMAS et. al. 1986). The requirements imposed to the participant athletes to surpass the structural, together instability with the coordination of the actions between aggressors and defenders in relation to the objective of the game, make with that the tactical capacity if becomes in the base of the declarative and procedural tactical knowledge for the resolution of the problems that the athlete faces during a departure (GARGANTA, 2002; SOUZA, 2002). The cognition, and the underlying cognitive processes to the same one, more specifically the taking of decision and the knowledge, have been pointed for researchers (FARIAS e TAVARES, 1996; GARGANTA, 2002; GONZALEZ, 1996; GRECO, 1999; GRECO and BENDA, 1998; WILLIAMS and DAVIS, 1995;) as important variable for the explanation of the performance in the JEC. The capacity of tactical decision and the tactical knowledge in the JEC constitute parameters essential for understanding of the game, making possible to the practitioner to behave in intelligent way during a departure, what it strengthens the concept that these parameters occupy a central place in education - learning - training (E-a-t) process of sports modalities (PAULA, 2000; SOUZA, 2002; TAVARES, 1998; TENEMBAUM and BAR-ELI, 1993). The objective and valid evaluations of these psychological "construtos" if become basic for the development of the education - learning - training process in the JEC. In the sports field has a necessity of if developing methods and procedures that they make possible scientifically to evaluate the influence of the knowledge in the sports action in the domain technician - tatician (PAULA, 2000). The present study it considers the application of the protocol of evaluation of the procedural tactical knowledge in the parameter: to **offer themselves and to orient themselves** (OO) validated for MEMMERT (2002), as well as, to verify the level of procedural tactical knowledge used by the pertaining children to the participant teams of the festivals of mini - basketball in the city of Belo Horizonte organized by the FEDERAÇÃO MINEIRA DE BASQUETEBOL.

### CHARACTERIZATION OF THE TEST

The battery of tests KORA was developed by the group of studies of the University of Heidelberg, in Germany, under orientation of Prof. Dr. Klaus Roth. The tests are understood as procedures that allow evaluating the procedural tactical knowledge, considering the intelligence of game (convergent thought) and tactical creativity (divergent thought) in the parameters: to offer themselves and to orient themselves (KORA:OO) and to recognize spaces (KORA: RE). To offer themselves and to orient as KRÖGER AND ROTH (2002, 32p) are understood as a set of activities and games in which if the "tactical tasks where the important one is, at the accurate moment, to get an excellent position". Ahead of this definition, a game of 3x3 during 3 minutes in a field of 9mx9m, in which it is possible to observe and to evaluate the behavior carried through for the children before the requirements of the tactical behaviors in an offensive situation without the ball. The punctuation (answer sheet) follows the concepts considered for MEMMERT (2002). The internal consistency enters the participant a connoisseur of the evaluation was of an Alpha coefficient of 0,98. The battery of tests KORA validated for MEMMERT (2002) had been translated into the Portuguese language as procedure of back translation. The connoisseurs who had carried through the evaluation had participated of a course given in the city of Belo Horizonte in the laboratory of the group of cognition studios and action of the school of physical education, physiotherapy and occupational therapy of the Federal University of Minas Gerais, for the formation of connoisseurs in research, applying this procedure. The tactical parameter to offer themselves and to orient themselves can be evaluated in the different collective sports modalities, presenting game situations where the child must use the hands (basketball, handball), feet (soccer, futsal) and rackets (tennis, hockey).

### METHODOLOGY

Sample Considering that the objective of this study is the application of the protocol of evaluation of tactical knowledge KORA:OO, had been selected in random form a group of 33 children (n = 33) in the age 10 - 12 years of a total of 10 participant teams of festivals of mini basketball organized by the Federação Mineira de Basketball of each participant team the availability to participate six children was requested to the coach. Instrument For the accomplishment of the test of procedural tactical knowledge (KORA: OO): to offer themselves and to orient themselves, the practitioners are divided in two groups of three players each, with numbered vests of ordinal form. Each groups a vest with a different color for the posterior identification and evaluation. The test is carried through in a space (squared) of 9m x 9m. The test consists of the filming of the

actions of the citizens that carry through a game with tactical structure in system 3x3, playing with the hands and without finishing (without I hurl to the goal or basket). The movement is free inside of the demarcated area. The tactical actions are filmed per three minutes, for each group in ball ownership; soon after the time stipulated in the protocol of MEMMERT (2002) has exchange of functions, attack-defense between the groups. As the protocol, all time that the ball will be touched by the team that will be with the function to intercept the pass of the other group, the game will have to be interrupted being restarted in the center of the demarcated area. The tactical actions carried through by the practitioners during the game are recorded in images of video in VHS system and evaluated by three trained connoisseurs specifically to carry through this task. The process evaluation in the criterion established for MEMMERT (2002), that it presents a punctuation scale that varies enters the 0 10 points (It sees picture 1 and 2). The connoisseurs evaluate the performance of the citizens, establish the points in accordance with the tactical actions carried through in the question if to offer and if to guide, analyzing the underlying forms of divergent and convergent thought, in the executed tactical action. Better to visualize the protocol of test KORA:OO, he follows in the FIG. 1 example of the initial formation.

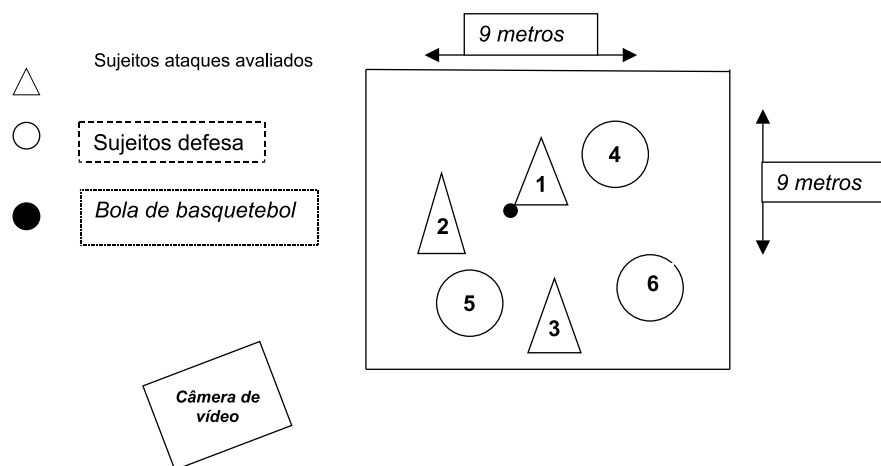


FIGURE 1 - protocol of evaluation of the tactical knowledge:  
Picture 1. Answer sheet for the establishment of points of divergent test KORA:OO

Originally Solutions in the Situation of game (use of the space or pass)	Flexibility in the solutions of the game situations	Point	Example
AMPLE above of the original media	Two or more (original actions)	10	The Player shows different original solutions, little common or little known/waited some times to decide the situation. The secular searches of excellent positions had been always (completely) excellent.
Ample above of media	Two or more (original actions))	9	The Player shows different original solutions/it are of the common one, or little known. The secular searches of excellent positions had been always very good.
Above of media	Two actions (original, rarity that do not appear little of frequent form)	8	The Player shows two different original solutions/are of the common one, or little known. The secular searches of excellent positions had been always good..
Good, in the average (some times of the common one, but that they appear).	Two new actions (that they appear little of frequent form)	7	The Player shows two different solutions that had not been original/are of sporadically form. The secular searches of excellent positions had been always surprises
In the average (still it makes new things)	Two actions (little frequent)	6	The Player shows two different solutions that had not been original, but that they appear of sporadically form. The secular searches of excellent positions had been always surprises.)
Sufficient, still (it obtains new things)	One action Little frequent	5	The Player shows a different solution that are not inside of the repertoire Standard, but that already they had appeared. The secular searches of excellent positions had had yes newness.
Poor (next to average)	One action (With few new things) Little frequent.	4	The Player shows a different solution that are not inside of the repertoire Standard, but that they appear frequently. The secular searches of excellent positions had still had yes newness.)
Poor Below of the average.	None	3	The Player shows in rule general solutions, inside of the repertoire Standard, that appear frequently. Occasionally the secular searches of excellent positions had had a little of newness
Insufficient (Almost standard)	None	2	The Player only shows almost only to solutions inside of the repertoire Standard, that always appears. Very the secular searches of excellent positions had occasionally had a little of newness.
Much Insufficient (only standard))	None	1	The Player only shows to solutions Standard, that always appears. The secular searches of excellent positions had not had newness.

**COLLECTS OF DATA:**

Test of Procedural Tactical Knowledge: to offer themselves and to orient - (KORA: OO) the athletes had received one brief explanation from the objective of the test and had been formed two groups of three players, having its numbered vests of ordinal form, had been accomodated in an area demarcated for cones and adhesive ribbons (9 9 m X m). Carried through some examples on movement and having no doubt to be clarified the test it was not initiated. The test fulfilled the protocol of writing of the tactical actions (3 minutes). After the necessary time the rotation of all the players the test was locked up, having for each group, after the established time (three minutes) the exchange of functions attack-defense.

### STATISTICAL TREATMENT OF THE DATA:

In this study to evaluate tactical knowledge procedural KORA: OO used quantitative and descriptive analysis of the tested group. The measure of central trend used for the presentation, analysis and quarrel of the data was medium, the this because the answer sheet for the establishment of points of divergent and convergent test KORA, presents an ordinal scale of 1 up to 10 points. Finally, the alpha coefficient for internal trustworthiness between appraisers was calculated.

### RESULTS

The total of gotten points was of 259 for convergent and 141 for divergent. In accordance with the presented values of the medium one in table 1, can be verified that for creativity (divergent) the gotten value was of two (2), in the KORA answer sheet: OO considers this value as insufficient in the originalidade and no flexibility in the solutions proposals for the different situations of game. One gives credit that the children since the point of view of the creativity do not present one adequate performance in the search of free spaces to receive the ball, in the use of displacements and the use of the space to create a situation of possible reception of the pass. Table 1. Values of medium, measured and shunting line standard for 33 KORA:OO (Convergent/Divergent) CONVERGENT DIVERGENT N 33 Medium Total 2 points 259 141 3 Alpha Coefficient 0,84 0,69 At the same time, can be verified that for intelligence (convergent) the gotten value was of three (3), in the KORA:OO answer sheet considers this value as poor in the quality of the solution, what it means that the participants almost never has looked the adjusted position to receive the ball. In sight of the gotten values it is observed that for this study the taking of decision of the children aiming at to adopt one adequate position to receive the ball, in the majority of the cases had not had success, propitiating the interception of the passes and loss in the ball ownership. The calculation of the Alpha coefficient for convergent was of 0,84 and for divergent of 0,69. Considering that in literature they are accepted values above of 0,30 it is confirmed internal consistency between appraisers for this study.

### CONCLUSIONS

With the accomplishment of this study can be affirmed that for this sample the levels of performance since the point of view of creativity and tactical intelligence had been low. The parameters of originality and quality of the solutions of game situations had not been points of prominence of the participants. In accordance with the cited one previously, can be considered that the methodology models of education - learning - training developed in the practical one of the modality do not contribute efficiently to the development of the procedural tactical knowledge in the children, evidencing the lack of activities that make possible motor experiences in a situation context. In the study of GRECO and MOREIRA (2005), it was determined that the type of training and the form proposal of the exercise / activity are directly on to the results in the development of the procedural tactical knowledge. A relation exists cause - effect enters the processes of learning as source of acquisition of experiences and the creative capacity and development of creativity (GRECO; ROTH; SCHÖRER, 2004). Finally, it is considered battery of tests KORA in the parameter to offer itself and to orient itself, a trustworthy procedure and of high ecological validity, which had its proximity to the reality of the situation of game, making possible one adjusted evaluation of the level of procedural tactical knowledge.

### EVALUATION DE LA CONNAISSANCE TATIQUE-PROCEDURAL: KORA:OO. APLICATION DANS LE BASKET-BALL

#### RESUMÉ:

Les actions dans les Jeux Sportifs Collectifs (J.E.C.) se caractérisent par l'appel à l'intelligence et une capacité adéquate de l'adaptation dans un environnement permanent de changement (GARGANTA, 1998). Les exigences imposés aux athlètes participants à fin de surmonter l'instabilité structurelle font que cette capacité tactique soit la base de la connaissance déclarée et procédural pour la résolution dont l'athlète est confronté au long du match (GARGANTA, 2002; SOUZA, 2002). Le texte KORA validé par Memmert (2002) permet d'évaluer les connaissances tactiques procédurales (CTP) dans le paramètre suivant: s'offrir et s'orienter (KORA: 0,0). Cela consiste dans un ensemble de situations de jeux de trois contre trois, dans lequel le transport du ballon s'exécute avec les mains et sans la finalisation au but ou au panier. Ces situations de jeu sont évalués par trois experts entraînés spécifiquement dans ces mêmes situations à être observées. L'évaluation présente une échelle de ponctuation de 0 à 10 points. L'objectif de la présente étude était l'application du protocole KORA:OO et vérifier le niveau de CTP dans le cas 0.0., chez les enfants appartenants à des équipes de basket-ball participants au festival de mini-basket-ball organisé par le Fédération de Basket-ball de Minas Gerais. L'échantillonnage était composé de 33 enfants, agés de 10 à 12 ans (n = 33). Selon les valeurs de la moyenne, nous pouvons vérifier que, pour la créativité (divergente), la valeur obtenue était de deux (2), et par l'intelligence (convergente) la valeur obtenue était de trois (3). Selon les valeurs obtenues, nous pouvons affirmer que, pour cette échantillonnage, les niveaux de performance, du point de vue de la créativité et de l'intelligence tactique, n'était pas élevés. Une des causes possibles de cette basse performance était le rapport avec le processus de l'enseignement apprentissage d'entraînements développés dans la pratique des modalités et qui serait évalués dans des recherches postérieures. La consistance interne entre évaluateurs a présenté un coefficient alfa > 0,60.

*Mots-clés: Connaissance tactique procédurale, KORA, s'offrir et s'orienter*

### EVALUACIÓN DEL CONOCIMIENTO TÁCTICO PROCEDIMENTAL:

#### KORA: OO. APLICACIÓN EN EL BALONCESTO

#### RESUMEN

Las acciones en los juegos deportivos colectivos (JDC) se caracterizan por la participación de la inteligencia y una adecuada capacidad de adaptación en un ambiente de permanente cambio (GARGANTA, 1998). Las exigencias impuestas a los atletas para superar la inestabilidad estructural hacen con que la capacidad táctica esté basada en el conocimiento declarativo y procedimental para resolver los problemas que el atleta enfrenta en el transcurso de un partido (GARGANTA, 2002; SOUZA, 2002). El test KORA validado por MEMMERT (2002) permite evaluar el conocimiento táctico procedimental (CTP) en el parámetro: ofrecerse y orientarse (KORA:OO). Consiste en un conjunto de situaciones de juego de tres contra tres, en el cual el transporte del balón se lleva a cabo con las manos y sin finalización a arco o cesta. Estas situaciones de juego son evaluadas por tres peritos entrenados específicamente en las cuestiones a ser observadas. La evaluación presenta una escala de puntuación de 0 a 10 puntos. El objetivo del presente estudio es la aplicación del protocolo KORA:OO y verificar el nivel de CTP en los parámetro O.O. en niños pertenecientes a equipos de baloncesto participantes de los festivales de mini baloncesto organizados por la Federación Minera de Baloncesto. La muestra está compuesta de 33 niños, con edades entre 10 y 12 años (n = 33). De acuerdo con los valores de la mediana, se verificó que para creatividad (divergente) el valor obtenido fue de dos (2), y para inteligencia (convergente) el valor obtenido fue de tres (3). De acuerdo con los valores obtenidos es válido afirmar que para esta muestra los niveles de desempeño desde el punto de vista de creatividad e inteligencia táctica fueron bajos. Una de las posibles causas de éste bajo desempeño estaría relacionada con los procesos de enseñanza aprendizaje entrenamiento en la práctica de la modalidad y que será investigado en estudios posteriores. La consistencia interna entre los evaluadores presentó un coeficiente alfa > 0,60.

*Palabras clave: conocimiento táctico, KORA, ofrecerse y orientarse.*

**AVALIAÇÃO DO CONHECIMENTO TÁTICO PROCESSUAL: KORA:OO. APLICAÇÃO NO BASQUETEBOL  
RESUMO**

As ações nos Jogos Esportivos Coletivos (J.E.C.) caracterizam-se pelo apelo à inteligência solicitando do participante uma adequada capacidade de adaptação em um ambiente de permanente mudança (GARGANTA, 1998). As exigências impostas aos atletas para superarem a instabilidade estrutural fazem com que a capacidade tática se apóie no conhecimento (declarativo e processual) para a resolução dos problemas que se defrontam no decorrer de uma partida (GARGANTA, 2002; SOUZA, 2002). O teste KORA validado por Memmert (2002) permite avaliar o conhecimento tático processual (CTP) no parâmetro: oferecer-se e orientar-se (KORA:O.O). O mesmo consiste em um conjunto de situações de jogo de três contra três, no qual objetiva-se o transporte da bola sem finalização a gol ou cesta. Peritos treinados especificamente com base em uma escala de pontuação de 0 a 10 pontos, avaliam o comportamento das crianças. A consistência interna entre avaliadores apresentou um coeficiente alfa  $> 0,60$ . O objetivo do presente estudo é a aplicação do protocolo KORA:OO para jogar com as mãos, e verificação do nível de CTP no quesito O.O., de crianças pertencentes a equipes de basquetebol participantes dos festivais de mini-basquete organizados pela Federação Mineira de basquetebol. A amostra compõe-se de 33 crianças, faixa etária 10-12 anos ( $n = 33$ ). De acordo com os valores da mediana, pode-se verificar que para criatividade (divergente) o valor obtido foi de dois (2), e para inteligência (convergente) o valor obtido foi de três (3). De acordo com esses valores pode-se afirmar que para esta amostra os níveis de desempenho desde o ponto de vista de criatividade e inteligência tática foram baixos. Uma das possíveis causas deste baixo desempenho poderia estar relacionada com os processos de ensino-aprendizagem-treinamento desenvolvidos na prática da modalidade, o que está sendo pesquisado em estudos paralelos.

Palavras-chaves: Conhecimento tático processual, KORA, Oferecer-se e Orientar-se.