### 165 - BRAZILIAN OLYMPIC WOMEN'S HANDBALL TEAM PSYCHIC HEALTH

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### INTRODUCTION

Modern sport becomes more competitive every year and is characterized by the fast growth of its results. It involves many interests and with the advances of technology, technical, tactic and physical training are becoming closely linked. This growth and these results create high demands on the psychic of sportsmen/women. The handball athletes should have a high level of Psychic Health so they'll have resistance against any kind of stress, high persistence in reaching success, self-control in complex and unexpected situations and adequate decision-with the Psychic Health so the training are becoming closely linked. This

In complex and unexpected situations and adequate decision-making in these situations.

The subject of this research is the preoccupation with the Psychic Health of the athletes in the Brazilian Female Olympic Handball Team. The Psychic Health is the perfect working of the Central Nervous System and its capacity in maintaining balance (KALININE, 2004). According to Kalinine (2002), the Psychic Health of the athlete in high-performance sport is determined through its psychic efficiency in events of greater importance and is determined through the function of the Central Nervous System of the athlete which is based, according to (PAVLOV; 1951); (VIATKIN, 1978); (ILHIN, 2001), in their basic typological particularities. Brandão (1996) considers the sporting group as a dynamic system, and for the improvement of its function should be observed in a social-psychological context because it depends on the different kinds of people in the group, on the way that these activities are developed, the roles performed by the components of the group and by the form of inter-relations of the members. So, observing the above mentioned, desiring a better preparation of the Brazilian Female Olympic Handball Team for the Olympic Games in Athens and considering immoral to put athletes, even talented ones, facing stress-factors that can lead to failure and cause psychosomatic illnesses, it was established as a target to determine the levels of Psychic health of the athletes from the Brazilian Female Olympic Handball Team.

### **METHODOLOGY**

The study group of the research was made up of 15 athletes taking part in the Olympic Games in Athens-Greece/2004 of the Brazilian Female Olympic Handball Team.

In the first phase of the research, typological peculiarities were detected from the personality of the athletes,

CPL- Capacity of Logic Thought (Raven graphic tests);

FPE- Force of the Process of Excitement of the nervous system, FPI Force of the Process of Inhibition of the nervous system, E-Balance of in the process of excitement and inhibition of the nervous system, M-Mobility of the

Nervous system (Strelau methodology);

CC-Communication Capacity, CO Organization Capacity (Methodology of Orlov);

NCSG Level of General Subjective Control in the Failure Field (methodology of Bagin).

NCSI - Level of General Subjective Control in the Failure Field (methodology of Bagin).

The 'Softwares Diagnóstica GBYK-1' was used to analyze these typological peculiarities.

T-Time of reaction in strong stimulus and FSN Force of the Nervous System (methodology of Nebylitsin);
The 'Neurocronômetro NCTRFSN' was used to determine these typological peculiarities.

AT-Anxiety trace analyses (methodology of Hanin-Spielberger);

EE Emotional Stability and Ex-Int - Extroversion Introversion (methodology of Eysenck).

In the second phase of the research, the Psychic Health Level of the subjects of the sample was calculated using the Kalinine methodology (Kalinine, 2002).

The level of Psychic Health (NSP) was determined using the equation:

# NSP=2Ncpl+Ntr+2Nfsn+Nfpe+Nfpi+2Nm+0,5Ncc+0,5Nco+Ncsg+0,5Ncss+0,5Ncsi+Nee+Ne-i+Nat

Each total level can have the value of 1 to 5 points and the NSP can have the value of 17 to 85 points. The level of each of the researched typological peculiarities is determined in comparison to the same typological peculiarities of the female population in Brazil as follows: 1. The level of the typological peculiarity of the athlete gains 5 points when it belongs to the 20% highest indexes of the Brazilian female population. 2. The level of typological peculiarity of the athlete gains 1 points when it belongs to the 20% lowest indexes of the Brazilian female population. 3. The level of typological peculiarity of the athlete gains 3 points when it belongs to the 20% intermediate indexes in the Brazilian female population 4. The level of typological peculiarity of the athlete gains 4 points when it belongs between the highest and intermediate indexes of the Brazilian female population.5. The level of typological peculiarity of the athlete gains 2 points when it belongs between the lower and intermediate indexes in the Brazilian female population. The 'Software Diagnóstica GBYK-1' was used to obtain these all the calculations.

# RESULTS AND DISCUSSIONS

**Table 1-** The level of the typological peculiarities of the personality of athletes in the Brazilian Female Olympic Handball Team - 2004

	Ncc	Nco	Ncsg	Ncss	Ncsi	Nat	Ne-i	Nee	Ncc	Nco	Ncsg	Ncss	Ncsi	Nat	Ne-i	Nee
1	b	ma	m	а	b	m	а	m	b	ma	m	а	b	m	а	m
2	m	а	ma	а	ma	m	а	m	m	а	ma	а	ma	m	а	m
3	а	b	m	m	а	m	а	m	а	b	m	m	а	m	а	m
4	а	а	а	а	m	m	а	m	а	а	а	а	m	m	а	m
5	ma	m	ma	ma	а	b	а	а	ma	m	ma	ma	а	b	а	а
6	ma	ma	ma	а	а	m	m	m	ma	ma	ma	а	а	m	m	m
7	m	m	m	m	а	b	m	m	m	m	m	m	а	b	m	m
8	m	m	ma	а	ma	b	m	а	m	m	ma	а	ma	b	m	а
9	m	а	ma	m	ma	b	а	m	m	а	ma	m	ma	b	а	m
10	а	а	ma	а	m	m	а	m	а	а	ma	а	m	m	а	m
11	ma	ma	m	m	mb	m	m	m	ma	ma	m	m	mb	m	m	m
12	а	m	m	а	mb	b	m	а	а	m	m	а	mb	b	m	а
13	а	а	m	m	m	b	m	а	а	а	m	m	m	b	m	а
14	ma	ma	m	а	а	а	m	m	ma	ma	m	а	а	а	m	m
15	b	а	ma	а	а	b	а	m	b	а	ma	а	а	b	а	m

Through the results shown in Table 1, it can be observed that the athletes of the Brazilian Female Olympic Handball Team 2004 have high or very high Psychic Health levels, not existing athletes with medium, low or very low levels. However, it's

considered that all of the athletes were prepared and psychologically capable to compete in the Olympic Games.

According to Kalinine (2002), athletes who have very high or high Psychic Health levels tend to have stronger resistance against stressing factors because they develop abilities to deal with these pressure factors, decreasing considerably the psychological barriers that could harm their performance. Athletes with these characteristics also show determination, willpower and perseverance in reaching targets through individual performance. They also show capability to concentrate, stability and self-control in unpredictable and complex situations, maximizing their sport performance through efficient decision-making in these situations. It's stressed that in moments where more mature athletes are needed and higher competitive levels are required to solve critical situations of the game, it's indispensable to have athletes with very high level of Psychic Efficiency

In relation to the Capacity of Logic Thought, which characterizes the capability of logic thinking and the perception of reality of each Human Being (Maristschuk et.al 1990), the athletes showed high and very high levels of this capacity, which in sport can mean more efficiency in their actions parties the appropriate the response of the present of the present in the response of the present in the re

and in the understanding and in the intelligence of the game.

The level of Time for Simple Reactions of the athletes of the Brazilian Female Olympic Handball Team observed in this research was, in twelve cases, very high, with three athletes showing high levels. This means that these athletes have the

pre-required reaction to stimuli in the necessary speed for the dynamic of the game, allowing decisions to be made using the ability to select more adequate means to maximize their performance with great efficiency levels.

As for the Nervous System Force, the athletes showed high and very high levels except in two of them who showed medium level force. Pavlov characterizes the Nervous System Force as the limit of the working capability of nervous cells in the cortex and in the encephalon, in other words, of its capacity to bear, without inhibition, strong excitement or not so strong excitement, but for a long period of time (PAVLOV, 1979). According to him, when the Human Being has more Force of the Nervous System, they're more resistant to any kind of stressing factors.

The levels of Force in Excitement Processes showed by the athletes researched were high and very high, characterizing the people in the group as self-confident, determined, active, brave and optimistic.

In relation to the Level of Force in Inhibition Processes in the researched group, two athletes showed medium levels and the rest showed high or very high levels. According to Rodionov (1973) and Peissacov (1976), the Force of these processes characterizes the capacity to be discreet in their behavior, emotions, actions and relations.

The level of mobility, which represents to the same authors, the aptitude to go from one activity to another and the adapting speed to these new conditions, showed high and very high levels with the exception of one athlete which showed medium levels.

The level of Communication capacity indicates the conditions of acquaintance between people and establishing and maintaining stable relationships with those around them. The researched athletes showed different levels of this capability, two of the athletes showed good levels, four showed medium levels and five showed high levels and four very high levels. It can be said that in sport, it's through communication that relationships are strengthened between the members of the team, that existing conflicts are solved, information is transmitted inside and outside the court and responsibilities are shared in the constant quest for excellence.

In relation to Organization Capacity, an athlete showed a low level, four athletes showed a medium level, six showed a high level and four showed a very high level. This level, according to Rodionov (1973); showed the capacity of the athlete in organizing daily activities in groups, in their family or in society.

In relation to General Subjective Control, seven athletes showed a medium level, one showed a high level and seven showed a very high level. Maristschuk points out that this level shows the capacity of the human being to correctly evaluate the activities which go on in their lives and to make decisions based on this evaluation. In sport, this capacity is characterized in the reading of the actions which happen during a game, and depending on this reading, the decisions which define the degree of competitiveness and efficiency (MARISTSCHUK et al, 1990).

It can be also pointed out that that people that have a high level of Subjective Control feel responsible, at all times, for what happens in their lives, demonstrating firmness in obtaining success in their targets and people who show a low level tend to think that what happens in their lives are coincidences, that happen by chance or because of actions from other people, giving up on their targets because of difficulties or obstacles found on the way.

People who show a high level of subjective control in the success field have the conviction that all they have conquered in life in due to their competence and capability. From the athletes researched, five showed medium level, nine showed high level and one showed very high level.

In relation to the level of subjective control in the failure field, two athletes from the Brazilian Female Olympic Handball Team showed a very low level, one showed low levels, three presented medium levels, six presented high levels and three presented very high levels. According to Bagin (apud MARISTSCHUK et al, 1990), people who show a high levels consider themselves to blame for bad things and sufferings which happen to them; on the other hand, those who show low levels consider that these bad things and sufferings which happen to them are the result of other people's actions or bad luck.

Accoding to Spilberger (1981), the anxiety-trace characterizes the way people understand life. People who have a high level of anxiety-trace tend to sense situations as more threatening than people with low anxiety-trace. In sport, because athletes develop complex and dangerous activities, a high or very high anxiety-trace causes a reduction in the athletes performance. From the athletes researched, only one showed high levels, seven showed medium levels and seven presented low levels.

The Extroversion-introversion of the human-being, according to Karpenko (1985), characterizes the predomination of these relations between the inner and outer worlds. Seven athletes showed medium levels and eight showed high levels.

To end the analyses of levels of typological Peculiarities Of the Nervous System of the athletes of the Brazilian Female Olympic Handball Team show levels of Emotional stability that, according to Karpenko (1985), represent the capability to maintain their performance in disturbing and difficult situations during activities as well as actions that can happen during the game. Eleven athletes showed medium levels and four presented high levels.

# CONCLUSION

Based on the results of this research, it 's concluded that in relation to the Psychic Health of the Brazilian Female Handball team that took part in the Olympic Games in Athens 2004 showed high or very high levels of Psychic Health, affirming that the team was capable, from the psychological point of view, to compete in the Olympic games.

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## BRAZILIAN OLYMPIC WOMEN'S HANDBALL TEAM PSYCHIC HEALTH

The Human being's health depends 80% on the satisfaction of life itself, which means that the psychic health and the social health of the Modern person has a bigger influence on him /her than their somatic health. In sport, the conquests, the intensive training increase the worry with the athlete's psychic health. It can be affirmed that the psychic health is an essential component in relation to the general health of the athletes. A disturbance or lack of balance in the psychic health can lead to functional and biological changes, which reflect in the social health and implicate the general health and efficiency the of the team. The target of this research was to determine the athlete's psychic health level of the Brazilian Olympic women's handball team. The study group was made up of 15 athletes from the Brazilian Olympic women's handball team taking part in the 2004. Olympic Games held in Athens. The Kalinine methodology, which bases its analysis on typological peculiarities of the personality, was used to determine the levels of the psychic health of the athletes. To detect the typological peculiarities of the personalities if the athletes, the following tools were used: the "BGYK-I diagnostic software", the "NCTRFSN Neurocronometer", the EYSENCK questionnaire and the HANYN-SPILBERGER questionnaire. The results of the research show us that the level of psychic health of the athletes was high and very high. Conclusion: From the psychological point of view, the Brazilian Olympic women's handball team were ready to compete in the Olympic games in Athens.

## LA SANTÉ PSYCHIQUE DE L'EQUIPE OLYMPIQUE DU HANDBALL FEMININ DU BRÉSIL

La santé psychique humain dépend 80% de la satisfaction du vivre elle-même, où la santé psychique et sociale de l'homme contemporain exerce une grande influence sur leur santé somatique. Il y a plus de souci dans le sport avec les conquêtes, des intensive charges d'intraînement par rapport la santé psychique de l'athlète. Il peut être affirmé que la santé psychique est un composant essentiel par rapport à la santé générale des athlètes. Un trouble ou manque dans la santé psychique peut mener à changements utilitaires et biologiques qui renvoient dans la santé sociale et impliquent la santé psychique peut mener a changements utilitaires et biologiques qui renvoient dans la sante sociale et impliquent la sante générale et efficacité de l'équipe. La cible de cette recherche était déterminer le niveau de la santé psychique de l'athlète de l'équipe olympique du handball féminin du Brésil. Le groupe de l'étude a été composé de 15 athlètes de l'équipe olympique du handball féminin du Brésil qui a participé aux jeux olympiques en Athènes/2004. La méthodologie Kalinine qui base son analyse sur particularités typologiques de la personnalité a été utilisée pour déterminer les niveaux de la santé psychique des athlètes. Les outils suivant : "BGYK-JE logiciel " diagnostique, le " NCTRFSN Neuro-cronometer", le questionnaire EYSENCK et le questionnaire HANYN-SPILBERGER. ont été utilisés pour determiner les particularités typologiques de personnalités de les athlètes. Dans ces conditions, les résultats de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des athlètes de la recherche nous montrent que le niveau de santé psychique des était haut et très haut. Sur l'aspect psychologique, nous avons observé que l'équipe olympique du handball féminin du Brésil étaient prêt à rivaliser dans les jeux olympiques dans Athènes.

### SALUD PSÍQUICA DE LAS DESPORTISTAS DE LA SELECCIÓN OLÍMPICA FEMENINA DE BALONMANO DEL BRASIL.

La salud humana depende 80% de la satisfacción por la própria vida, o sea, la salud psíquica y la salud social del hombre moderno tiene mayor influencia sobre él de que su salud somática. En el deporte las conquistas, las intensas cargas de entrenamiento, llevan a la creciente preocupación com la salud psíquica de los deportistas. Se afirma que la salud psíquica es un componente primordial en relación a la salud general, y que un distúrbio o un desequilíbrio en esa puede ocasionar modificaciones funcionales y biológicas, que se refliten en la salud social y comprometen la salud general y el rendimiento del equipo. El objetivo de este estudio fue determinar los niveles se la salud psíquica de las deportistas del Grupo de Estudio. El grupo de Estudio fue compuesto por quinze deportistas de la Selección Olímpica Femenina de Balonmano del Brasil participantes de los Juegos Olímpicos de Atenas/2004. Para determinar los niveles de la salud psíquica de las deportistas se utilizo la metodologia de Kalinine, que se basa en el analisis de las peculiaridades tipológicas de la personalidad detectada por los siguientes instrumentos: "Softwares diagnostica GBYK-1" "Neurocronometro NCTRFSN", Cuestionario de EYSENCK y Cuestionario de HANYN-SPILBERGER. En los resultados del trabajo lás deportistas de la Selección Olímpica Femenina de Balonmano del Brasil presentaron niveles de Salud Psíguica alto y muy alto.

Conclusión: desde el punto de vista psicológico, la Selección Olímpica Femenina Balonmano del Brasil estaba lista para competir en los Juegos Olímpicos de Atenas.

# SAÚDE PSÍQUICA DAS ATLETAS DA SELEÇÃO OLÍMPICA FEMININA DE HANDEBOL DO BRASIL

A saúde humana depende 80% da satisfação pela própria vida, ou seja, a saúde psíquica e a saúde social do homem moderno têm maior influência sobre ele do que sua saúde somática. No esporte as conquistas, as intensas cargas de treinamento, levam a crescente preocupação com a saúde psíquica de atletas. Afirma-se que a saúde psíquica é um componente essencial em relação à saúde geral, e que um distúrbio ou um desequilíbrio nessa pode acarretar alterações componente essencial em relação a saude geral, e que um disturbio ou um desequilibrio nessa pode acarretar alterações funcionais e biológicas, que se refletem na saúde social e comprometem a saúde geral e o rendimento da equipe. O objetivo desta pesquisa foi determinar os níveis da saúde psíquica das atletas do Grupo de Estudo. O grupo de estudo foi composto por quinze atletas da Seleção Olímpica Feminina de Handebol do Brasil participantes dos Jogos Olímpicos de Atenas/2004. Para determinar os níveis da saúde psíquica das atletas utilizou-se a metodologia de Kalinine que se baseia na análise das peculiaridades tipológicas da personalidade, detectada através dos seguintes instrumentos: "Softwares diagnóstica GBYK-1", "Neurocronômetro NCTRFSN", Questionário de EYSENCK e Questionário de HANYN-SPILBERGER. Nos resultados da pesquisa as atletas da Seleção Olímpica Feminina de Handebol do Brasil apresentaram níveis de Saúde Psíquica alto e muito altos. Conclusão: do ponto de vista psicológico, a Seleção Olímpica Feminina de Handebol do Brasil estava pronta para competir nos Jogos Olímpicos em Atenas.