

135 - THE RELATIONSHIP OF STRESS AND LEADERSHIP ON FEMALE VOLLEYBALL

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INTRODUCTION

Volleyball has its beginning in Holyoke, Massachusetts in the United States, created by William Morgan. With some modifications made by the FIVB, in some rules and in the points of the game, it improved the conditions of the players in physical, psychological, techniques and tactics.

It is important to perceive the importance of sports psychology during the process of sports training and competition. It made the researchers and coaches wake up to the importance of knowing how the psychological components can interfere in the performance.

Leadership and Stress are involved in Volleyball, and it is easy to understand its value to the individual and team performance.

The athletes in this sport are always involved in a situation of "danger" because every mistake from the team or individual will be a point to the opponent, because of this Stress control during practice and competition is so important.

According to Selye (1981) the use of the term **Stress** determines a number of reactions of the human body when it is submitted to a situation that requires adaptation.

According to Brandão (1995), Stress is a combination of situations that a person realizes how dangerous it can be, and it causes anxiety, the way the individual is capable to deal with this situation can lead him to good or bad result.

It is important to classify Stress causes because the impact of the same situation is different in to different people. And a fact can suffocate a person in some moment and stimulate him in other moment in the same day (ALBERT e URURAHY, 1997).

Levels of tolerance of Stress are different to each individual. People with more flexible limits can resist stress a little more. But when they are submitted to constant pressure, it is inevitable like any elastic that this person will break. As better is the stress reaction of an individual less stress symptoms it will feel (DELBONI, 1997).

In sports situation is easy to find many internal and external kinds of stress that can brake the athlete physical and psychologically, before and during competition (Samulski, 1992). External stress: hyper-stimulation through noise, light, pain, danger situations; it induces primary needs: alimentation, water, sleep, situation, temperature, climate; performance stressors: exigencies, failure, criticism, high responsibility; social stressors: social isolation, personal conflicts, habit changes, relatives death.

De Rose (1993) described that in competition stress can be caused by two factors:

1) Interpersonal: that belong to the people and are associated to old experience. Other factors are: self-perception, ability, cognition, capacity, psychological state and the perception of other people in the process.

2) Situational: those are specific competition factors, like: opponents, judges, coaches and partners, game situations, contusion, fear.

The individual and team tactics, and the decisions made by the coaches or by the athlete are going to show the presence of leadership component during practice and competition.

The leadership is a fundamental factor in a group performance in any area, professional, familiar and sportive.

Volleyball is not different, its determinant by the coaches or the athletes, to get results, and to have a good environment during competition and practice.

Leadership according Weinberg e Gould (2001, p.212) appud Barrow (1977), "the process of having influence people and groups in the direction of the goals".

Bass, 1990 appud Samulski (2002, p.220), develop a classification in leadership according to some definitions.

Bass, 1990, identify leadership as : The center of the process of a group; the effect of the personality, the art to induce submission; an exercise of influence; an act or behavior; a power relation; an instrument of goals realization; an interaction effect; an element of combination.

In a volleyball team leadership can be used by the coaches or the athlete, or more than one athlete. The coach is the one who is going to decide team tactics during practice and competition, and also given instructions to their athletes to achieve their goals of the season, an specific competition, and should also be able to give feedback, and to deal with group problems.

An autocratic style of leadership, is the one who take decisions without any influence of the group, been important to achieve the goals, having a emotional distance in the group. (SAMULSKI, 2002). The democratic leader doesn't concentrate power, but he distribute responsibility to make the group stronger. And united. (SAMULSKI, 2002).

Samulski (2002, p.235), tried to develop a model that would be adjustable to the group behavior and their situations.

Situational Leadership according to Samulski (2002, p.235) has three essential components:

Task behavior: The number of directions that the leader will offer..

Behavior Relationship: The help in social emotional power of the leader.

Maturity of the Group: The will of the group.

In the multidimensional model of leadership in sports developed by Chelladurai (1990) appud Samulski (2002, p. 239) and Weinberg e Gould (2001, p.218), the coach behavior is extremely important in the performance and satisfaction of the athlete.

"The result of the behavior of the leader is good when it represent the interest of the group, and the group will achieve a better performance and will be more satisfied. The performance of the group and their satisfaction is considered an harmony function in the leader behavior".

The way taken by the leader to lead his group to goals and to tasks, to Samulski (2001, p. 221), is "to make every one realize their goals is a complex task to the leader".

A good leader in sport context should keep good interpersonal relationship, it's important to have an interaction of the leader with the group, according to the expectations of the group, the situations, and the work that has to be done (in professional sport or any context). So it's not possible to define the personality of the perfect leader and that he will have effective success in any situation (Gould e Weinberg, 2001).

In the point of view of a interactive leadership, to have an effective leadership it's necessary to pay attention in four components (Weinberg e Gould, 2001):

- Leader Quality.
- Leadership Style.
- Circumstances Factors.
- Quality of the Group.

It's possible to see the great number of concern in volleyball, specially in technical, tactical and physical condition, but there is just a few coaches that worry about psychological condition, and it can interfere directly in the athletes performance.

Volleyball is a sport that demands of the athlete too many fast and precise decisions, and the athletes is always exposed. This study has the aim of quantify and identify the relation of the perceived stress level and leadership, in female volleyball and t describe this variables. If the leader has a higher control of the situation and of the game they will have a lower stress, and the stress will have a negative correlation with leadership.

METHODOLOGY

The research had correlation design. The participant of these study were female volleyball athletes from Paraná Clube, with age mean 14,7 years and pattern deviation of 1,59 from base categories.

The instrument used was, The leadership questionnaire for athletes (NELSON, 1966). With validation and reliability $r=0,96$. To establish the leaders of a certain group. The test give points to each athlete determining who is the leader.

To measure stress, it was used, the perceived stress scale (COEHN & WILLIANSON, 1988). The scale used gives results in ratio scale.

The NELSON questionnaire were attended to the athletes and explained verbally how to fill it and always individually.

Data were collected by the researcher, in September of 2003, in Curitiba, Paraná.

For statistical analyzes the data was correlated, stress and leadership. The correlation used was Pearson, with a significant level of $p<0,05$ HINKLE, WIERMA, JURIS, 1979; BARROS & REIS, 2003). The Data was also presented in a descriptive statistic to show leadership. To treat the variables it was used a statistical program for windows.

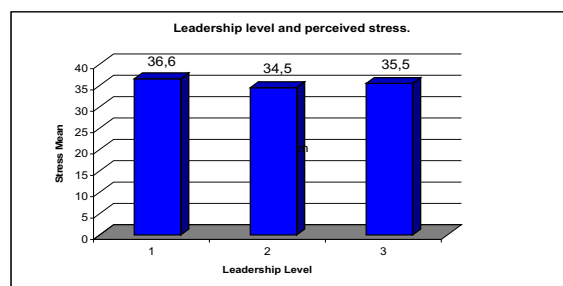
RESULTS AND DISCUSSION

Table 1 :

Correlation Stress x Leadership:			
	Valid N	Pearson R	Significant Level
Leadership x Stress	47	-0,108	0,469

The table 1 indicates the results of the correlation of leadership and stress. There was no significant statistics between the variables. So to this subjects, there was no correlation between stress and leadership.

Graph 1:



The graph 1 indicates the means of stress for leadership level. This results, indicate a tendency to leaders to have a low level of stress than the no leaders. It can be seen that athletes that had a low level of stress were in a intermediate level of leadership.

As it indicates there is direct correlation between stress and leadership, the same results founded by OKAZAKI et all 2004.

Through the questionnaire and results, we can see that the leaders are the ones that make the difficult decisions or have a determined posture during the game, but there are not always the ones that decide intern problems in the group.

The mean of stress was very similar for each level of leadership. This closely results can be explained by the fact that the non leaders can fell more threat during the games and the training process because they don't have a high performance as the leaders. The athletes in the intermediary level of leadership had a lower level of stress maybe because they have a good performance but they don't receive the same responsibility to decide the game or to exhibit a good performance.

The scores of stress according to Keller et all, (2004), has a correlation with the time of practice where young athletes (1 to 5 years of practice) had higher levels of stress than old athletes (5 to 10 years of practice) and of the experts (above the 10 years). And the old athletes presented a higher level than the experts.

CONCLUSION

The results of this study, concludes that there is no relation between leadership and stress. It also indicates that the leaders (the athletes that are more request in the game in moments of decision) don't have a higher level of stress than the non leaders.

Through the questionnaire it was indicated that the leaders are the ones that has a good performance, but is not than that solve some particulars problems of the group, like situations that don't involve performance.

The results also indicated that all the athletes were in a high level of stress, the same results founded by others studies involving stress and performance.

This factors lead to develop new researches about leadership, specially inn it's relation to the performance, and if the leader is able to be the best player and the best leader. Or if athletes of collective sports like volleyball prefer the leaders that can solve internal problems or the leaders that can lead than to a good performance.

Other suggestion is to develop studies with the stiles of leadership, and if this styles have any influence in stress and performance. Outro estudo a ser desenvolvido é se o estilo, bem como as formas de liderança exercida pelo treinador, pode gerar estresse ou não nos atletas, e se interferem na performance.

REFERENCES

- ALBERT, E. & URURAHY, G. **Como Tornar-se um Bom Estressador**. Rio de Janeiro: Salamandra, 1997.
 BRANDÃO, R. F. **Ansiedade em atletas**. Revista Movimento. V. 1, 24, 27, 1995.
 DELBONI, T. H. **Vencendo o Stress**. São Paulo: Makron, 1997.

- DE ROSE Jr, D. et al. **Situações de Estresse Específico do Basquetebol**. Revista Paulista de Educação Física. V. 7. 25-34, 1993.
- KELLER, B; OKAZAKI, F. H; LIMA, R. F; COELHO, R. W. **Relação dos sintomas de estresse e o tempo de prática no voleibol feminino**. Resumo apresentado na Semana de Pesquisa e Extensão do Departamento de Educação Física, UFPR, 2004.
- KELLER, B; OKAZAKI, F. H; OKAZAKI, V. H; LIMA, R. F; MEDINA, J; COELHO, R. W. **Nível de estresse percebido entre atletas titulares e reservas de diferentes desportos coletivos**. Resumo apresentado no Congresso Internacional de Pedagogia do Esporte, XVIII Semana de Educação Física da Universidade Estadual de Maringá-PR, 2005.
- OKAZAKI, F. H; KELLER, B; LIMA, R. F; SILVA, D. R; FITIMA, B; COELHO, R. W. **A relação entre os sintomas de estresse e a liderança**. II Fórum Brasileiro de Educação Física e Ciências do Esporte, VI Simpósio Mineiro de Ciência do Esporte, 2004.
- SAMULSKI, D. **Psicologia do Esporte: teoria e aplicação prática**. Belo Horizonte: Imprensa Universitária UFMG, 1992.
- SAMULSKI, Dietmar Martin. **Psicologia do Esporte**. 1º ed. Editora Manole. Barueri. 2002.
- SELYE, H. **Geschichte und Grundzüge des Stresskonzepts**. In: NITSCH, J. R. Stress: Theorie, Untersuchungen und Massnahmen. Bern/Stuttgart/Wien, 1981.
- WEINBERG, R. S; GOULD, D. **Fundamentos da Psicologia do Esporte e do Exercício**. Artimed Editora, Porto Alegre, 2001.

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THE RELATIONSHIP OF STRESS AND LEADERSHIP ON FEMALE VOLLEYBALL ABSTRACT

The leadership and stress are important factors to coaches in the process of training and performance of their teams. This Study has the objective to analyze the relation between leadership and stress in 47 athletes of volleyball of base categories of Paraná Clube, with age ($x = 14,7$ and $s.d. = 1,59$). It was used a Pearson correlation to leadership and stress with a significant level of $p < 0,05$, data were treated with a statistic program for windows. In the correlation of stress and leadership, there was no significance between the variables. In this study with these subjects, there were no significant correlation between leadership and stress. The leaders presented a low stress level than the no leaders and all the athletes were in a high level of stress.

Key-words: Volleyball, Leadership and Stress.

LE RAPPORT DE L'EFFORT ET CONDUITE SUR LA FEMELLE VOLLEYBALL ABSTRAIT

La psychologie de sports accroît chaque jour, et devient extrêmement important pour la formation de sports. La préoccupation des composants de psychologie, faites participer les chercheurs et les autocars pour lui estimportance en concurrence de sports. La conduite et l'effort sont des facteurs importants aux entraîneurs en cours de formation et exécution de leurs équipes. Cette étude a l'objectif pour analyser la relation entre la conduite et l'effort dans 47 athlètes de volleyball des catégories basses de Paraná Clube, avec l'âge ($x = 14,7$ et $p.d. = 1,59$). C'a été employé une corrélation de Pearson avec la conduite et l'effort avec un niveau significatif de $p < 0,05$, des données ont été traitées avec un programme de statistique pour des fenêtres. Dans la corrélation de l'effort et de la conduite, il n'y avait aucune signification entre les variables. Dans cette étude avec ces sujets, il n'y avait aucune corrélation significative entre la conduite et l'effort. Les chefs ont présenté un niveau bas d'effort que les chefs de nonet tous athlètes étaient à un niveau élevé d'effort.

Mots clés : Volleyball, Conduite et effort.

LA RELACIÓN DE LA TENSIÓN Y DE LA DIRECCIÓN EN HEMBRA VOLLEYBALL ABSTRAIT

La dirección y la tensión son factores importantes a los coaches en el proceso del entrenamiento y el funcionamiento de sus equipos. Este estudio tiene el objetivo analizar la relación entre la dirección y la tensión en 47 atletas de voleibol de categorías bajas de Paraná Clube, con edad ($x = 14,7$ y $p.d. = 1,59$). Fue utilizado una correlación de Pearson a la dirección y tensión con un nivel significativo de $p < 0,05$, los datos fueron tratados con un programa de la estadística para las ventanas. En la correlación de la tensión y de la dirección, no había significación entre las variables. En este estudio con estos temas, había en la correlación significativa entre la dirección y la tensión. Los líderes presentaron el nivel bajo de la tensión que en líderes y todo ellos atletas estaban en el alto nivel de la tensión.

Palabras claves: Voleibol, Dirección y tensión.

RELAÇÃO ENTRE O ESTRESSE E A LIDERANÇA DE ATLETAS DE VOLEIBOL FEMININO. RESUMO

A liderança e o estresse são fatores importantes para o treinamento desportivo. O objetivo do estudo foi analisar a relação da liderança e estresse em 47 atletas de voleibol feminino, com média de idade de 14,7 anos e $d.p. = 1,59$. Foi utilizada uma correlação de Pearson com nível de significância de $p < 0,05$. Na correlação das variáveis estresse e liderança, não houve diferença significativa entre as variáveis, e as líderes apresentaram um nível de estresse menor do que as não líderes e em todas as atletas foi observado níveis elevados de estresse.

Palavras-chave: voleibol, Liderança e Estresse.