

**61 - PSYCHOLOGICAL PROFILE IN PERFORMANCE OF BRAZILIAN DIVERS**

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**INTRODUCTION**

The diving is a standalone activity held in harsh environment, is the immersion of the individual into the water without communication with the surface to fill the air and allowing complete freedom of movement only limiting its extension by the consumption of available air and the physiological variables on the partial pressures of the gases involved in breathing. These physiological variables are widely studied by the diving physiology and are clearly influenced of the diver's attitude, such as a physical exaltation leads to elevation of the heartbeat influence in the higher air consumption as shown by Fontoura (2006).

Apart from the physiological factors are indications that psychological factors influence and are influenced by physical activities. In ancient Greece, the athletes were subjected to deprivation of psychological training in order to increase their resistance in future competitions already applying rudimentary principles of interaction between the psychological training for the outcome of the general performance (Tubino, 1984).

Some performance characteristics of personality were selected to draw this psychological profile as described by Loehr (1982), namely: self-control of negativism, focus atencional, mental visualization, motivation, good thoughts and attitudes of control. Studies with this inventory were used by Mahl (2005) to describe the psychological profile in the provision, guidance and cognitive negativism of the Brazilian professional soccer players training and by (Costa, 2007) to athletes for guidance walking.

Of the variables which is the first that is the self, know that the task can develop successfully is a simple way of defining self confidence, considering that any coach knows the importance of the quality for success as sports says Viana (1996).

The negativism energy is the attitude to relate successfully with emotions such as fear, anger, frustration and not let them affect your competitive success (Loehr, 1982).

The attention control is where the mind prioritizes your attention and this goes for information for information depending on the priorities that they acquire during the interactive process of decision which take into account the binomial "stimulus external stimulus internal +" (Singer, 1993). Stimuli is any kind of information that reaches the body through the senses causing then a response that is the temporary or permanent change of behavior (Horn, 1992). These incentives will occur and be prioritized according to a number of general and specific factors that vary from individual to individual and from time to time.

The Preview also known as visual and Imagery control (Hall, 2003), cited by Viana (1996) and defined as the recreation of mental images and mental practices, can be used for training aimed at optimizing the sports training (Weinberg and Gould, 2001).

The motivational level is other variable set to be examined, can be defined as the intensity and direction of our efforts and can be basically divided into intrinsic and extrinsic motivation (Weinberg and Gould, 2001).

The positive energy are under Loehr (1982) a source of energy that provides the athlete, high levels of both activation and the ability to maintain the attention control, calm and relaxation. The control of attitudes reflects the ability to think cognitively and emotionally to keep allowing these thoughts positive act.

This research is intended to track the psychological profile on the performance of the Brazilian divers, will be observed that there is a correlation between variables, in order to understand how they interact.

**METHODOLOGY**

In this descriptive study, the type quasi-experimental participants were contacted and asked to answer the research via internet voluntarily. All consented electronically and procedures have been implemented within the ethical standards laid down in the Declaration of Helsinki of 1975. A random sample of individuals who answered the questionnaire by mail consists of 136 volunteers divers (n minimum sample of 100 subjects - Barbosa, 2003). It was a research in which the transcription of data to a quantitative analysis in which the psychological profile was investigated in the performance of the Brazilians divers.

In order to characterize the sample, contributing to understanding of its ecological validity, some data were collected and arranged, they are: the position in the family, the level of dedication and expertise. Corroborating for the correct analysis of the results has been developed an observation of field dive operations.

In possession of the results, the dependent variables which are the self-confidence, self-control of negative energy, attention control, visual & imagery control, motivational level, positive energy, attitudes and control and mental strength, which is the sum of all of them, suffered a descriptive analysis (average and standard deviation) and a study was conducted on the relationship between them is using the Correlation of Pearson.

To obtain the profile was used an questionnaire created by James E. Loehr (1982) and translated into Portuguese by Vasconcelos Raposo (1993), which aims to identify seven psychological variables of performance through the 42 questions that are answered in a kind likert scale of 5 points (1 - almost-2- Often 3 - The Times Rarely 4 - 5-Almost Never) that on some issues reverse its score values. On this scale are six items related to each variable is psychological and held the sum of the available scores.

When the values are below 19, it is a variable low or even nonexistent, between 20 and 25 is that even though there are not occur in a systematic way and above 26 are consistent psychological variables which will be present at all times the activity. The sum of the values obtained in 07 scales gives us a new variable called mental strength that varies from 42 to 210 (Loehr, 1982).

**RESULTS**

Of the total of divers in the research 15% were female gender and 85% of the male gender, but counting only the self proclaimed exclusive dedication activity 93% were the male gender and only 7% of the female gender.

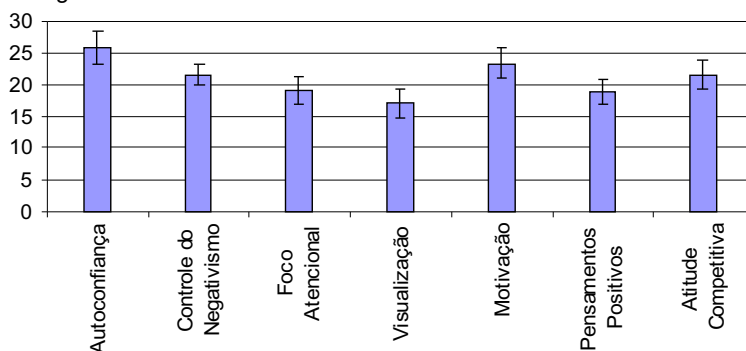
As for the level of dedication were asked if considered his dedication exclusive activity, whether it was shared with other professional activity which would be the main source of livelihood or if it is considered amateurs, 10% answered informing

exclusive dedication activity, 32% informing have the professional activity of diving shared with another activity, and 58% reported being amateurs.

As for interrogations of certifications of technical level that wore for the activity, which were considered the categories: basic, advanced, expert, rescue, dive master and instructor, responded as table 1.

Básic s	Advanced	Especialists	Rescue	Dive Masters	Instrutors	Tabela 1
19	35	9	11	21	41	Indivíduos
14%	26%	7%	8%	15%	30%	Percentual

Histogram 1: Psychological issues



Mental Strengths : 147,79 ±7,69

Pearson Correlation

Tabela 2		Negat	Attencio	Visual	Motiv.	Pens. Posit.	Atit. Comp	Mental Strength
Autoconfidence	r	0,239	0,198	-0,207	<b>0,409</b>	0,197	<b>0,451</b>	<b>0,690</b>
	p	0,005	0,021	0,016	<b>0,000</b>	0,022	<b>0,000</b>	<b>0,000</b>
Negat	r	1,000	0,311	-0,186	0,152	0,091	0,064	<b>0,413</b>
	p		0,000	0,030	0,077	0,291	0,457	<b>0,000</b>
Foco Atenc.	r		1,000	-0,158	0,075	0,034	0,094	<b>0,428</b>
	p			0,066	0,387	0,695	0,278	<b>0,000</b>
Visualization	r			1,000	0,195	0,052	-0,134	0,174
	p				0,023	0,548	0,120	0,042
Motivation	r				1,000	0,273	0,269	<b>0,697</b>
	p					0,001	0,002	<b>0,000</b>
Posit.Tought	r					1,000	0,170	<b>0,506</b>
	p						0,048	<b>0,000</b>
Attitude	r						1,000	<b>,568</b>
	p							<b>0,000</b>

**DISCUSSION**

The results of this study, variables such as visual and Imagery control, appear as a little used factor by divers which leads to the understanding that it must be better worked in courses of diving thereby increasing mental strength of divers. Moreover, the lack of visual and Imagery control is evident when seen on the field the attitude of displeasure that most divers dedicated to the planning of diving moments before immersion and the equipment checking. These habits are learned or not when they come in activity and about the fact the impression that hardly passes are purchased after already are at the same time (Werneck, 2007).

The interaction there between sport and features psychological influences constantly switching between them. This can be observed in the data that they accommodate the activity showing high self-esteem, motivation and control of negativism as the histogram 1.

An interesting factor in the histogram 1 is the special condition of the self, and developed in activity, obtaining the highest average (25.90; ± 1.619), followed by motivation (23.47; ± 2.283) and linked to all other characteristics of the psychological profile in the performance. However, the visual and Imagery control had the lowest average in the survey (17.11; ± 2.276) and the field observation apparently perceives that individuals not provided moments of introspection to develop this process also known as imagery (Hall, 2003 ). Since observe, the self-confidence (r = 0.207; P = 0.016) and the negative energy (r = 0.186; P = 0.030) had an inverse relationship, which encourages the idea that divers have a low self and difficulty in control of negativism use of the resources of the view to circumvent the situation, this led to a good relationship with the mental strength (r = 0.174; p = 0.042).

According to the present study perpetrators of this activity develop greater attention in form while verify in their minds all the variables that can occur from wrong, exactly when they feel, little can confront the situation, not as a condition that contributes to decreasing the levels of performance, but with condition that increases the level of security by increasing the number of situations to be planned and controlled. This increased attention in the variables that can pose danger are the psychological tools to combat the trends arising from the mind of natural preservation and work together for safety as our attention selectively allows us to focus important details (Jounieaux, Duran et al. , 1994).

Thus it appears that the activity of the autonomous diving is an activity that brings together people who tend to develop more positive attitudes, greater confidence and are holders or are in a state of development of a profile for greater mental strength, causing the activity is perceived as an excellent condition for the establishment of good emotional habits thus promoting the emotional reeducation as postulates Fontoura (2005).

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### PSYCHOLOGICAL PROFILE IN PERFORMANCE OF BRAZILIAN DIVERS ABSTRACT

The diving is a standalone activity held in wild environment. There are indications that psychological factors influence and are influenced by physical activities, creating therefore influence over the operation of diving. This research was aimed at mapping out the psychological profile of divers standalone during their performance in order to better understand what type of individual is dedicated to the activity. For the analysis of this profile, was used an inventory developed by Loehr (1982) and validated by Raposo (1993) which aims to identify seven psychological variables of performance through the 42 questions that are answered in a kind likert scale of 5 points. In descriptive analysis of the psychological variables has been observed: self confidence ( $25,90 \pm 2,62$ ); Control of negativism ( $21,63 \pm 1,62$ ); Focus atencional ( $19,09 \pm 2,19$ ); View ( $17,11 \pm 2,27$ ); motivation ( $23,47 \pm 2,83$ ); good thoughts ( $18,97 \pm 2,03$ ); attitude competiive ( $21,63 \pm 2,22$ ). The strongest feature of the personality of individuals in the group was a self confidence. KEY WORDS: Diving Autonomous; Psychological Profile in performance, mental strenght.

### PROFIL PSYCHOLOGIQUE DANS L'EXERCICE DE PLONGEURS BRÉSILIENNE RÉSUMÉ

La plongée est une activité autonome qui s'est tenue en milieu sauvage. Il ya des indications que les facteurs psychologiques influencent et sont influencées par l'activité physique, en créant donc une influence sur le fonctionnement de la plongée sous-marine. Cette recherche visait à tracer le profil psychologique des plongeurs autonome au cours de leur exécution, afin de mieux comprendre quel type de personne est consacré à l'activité. Pour l'analyse de ce profil, un inventaire a été utilisé mis au point par Loehr (1982) et validées par Raposo (1993), qui vise à identifier sept des variables psychologiques de la performance à travers les 42 questions qui sont traitées dans une sorte similaires échelle de 5 points. En analyse descriptive de la structure psychologique variables a été observée: la confiance en soi ( $25,90 \pm 2,62$ ); Contrôle de négativisme ( $21,63 \pm 1,62$ ); Focus atencional ( $19,09 \pm 2,19$ ); Voir ( $17,11 \pm 2,27$ ); La motivation ( $23,47 \pm 2,83$ ); Bien pensées ( $18,97 \pm 2,03$ ); L'attitude compétitive ( $21,63 \pm 2,22$ ). La plus forte caractéristique de la personnalité des individus dans le groupe a été la confiance en soi.

MOTS CLES: Plongée autonome; Profil psychologique de la performance, force mentale.

### PERFIL PSICOLÓGICO EN EL RENDIMIENTO DE LOS BUZOS BRASILEÑOS RESUMEN

El buceo es una actividad independiente que tuvo lugar en medio silvestre. Hay indicios de que los factores psicológicos influyen y son influidos por la actividad física, creando, por lo tanto, influir en la operación de buceo. Esta investigación tenía por objeto trazar el perfil psicológico de buceadores independientes durante su desempeño con el fin de entender mejor qué tipo de persona se dedica a la actividad. Para el análisis de este perfil, se utilizó un inventario elaborado por Loehr (1982) y validada por Raposo (1993), que tiene por objeto identificar siete variables psicológicas de los resultados a través de las 42 preguntas que se responden en una escala tipo likert de 5 puntos. En el análisis descriptivo de las variables psicológicas se ha observado: auto confianza ( $25,90 \pm 2,62$ ); Control de negativismo ( $21,63 \pm 1,62$ ); Foco atencional ( $19,09 \pm 2,19$ ); Ver ( $17,11 \pm 2,27$ ); Motivación ( $23,47 \pm 2,83$ ); Buenos pensamientos ( $18,97 \pm 2,03$ ); Actitud competitiva ( $21,63 \pm 2,22$ ). La característica más fuerte de la personalidad de los individuos en el grupo era un auto confianza.

PALABRAS CLAVE: Buceo Autónoma; Perfil psicológico en el rendimiento, la resistencia psíquica.

### PERFIL PSICOLÓGICO NA PERFORMANCE DE MERGULHADORES BRASILEIROS RESUMO

O mergulho autônomo é uma atividade realizada em meio ambiente agreste. Existem indicações de que fatores psicológicos influenciam e são influenciados pelas atividades físicas, criando influência conseqüentemente durante a operação de mergulho. Esta pesquisa teve por objetivo traçar o perfil psicológico de mergulhadores autônomos durante sua performance, a fim de entender melhor que tipo de indivíduo se dedica à atividade. Para a análise deste perfil, foi utilizado um inventário desenvolvido por Loehr (1982) e validado por Raposo (1993) que visa identificar sete variáveis psicológicas de performance através de 42 perguntas que são respondidas em uma escala tipo likert de 5 pontos. Na análise descritiva das variáveis psicológicas, foi observado: auto confiança ( $25,90 \pm 2,62$ ); controle do negativismo ( $21,63 \pm 1,62$ ); foco atencional ( $19,09 \pm 2,19$ ); visualização ( $17,11 \pm 2,27$ ); motivação ( $23,47 \pm 2,83$ ); pensamentos positivos ( $18,97 \pm 2,03$ ); atitude competitiva ( $21,63 \pm 2,22$ ). A característica mais forte da personalidade dos indivíduos do grupo foi a auto confiança.

PALAVRAS CHAVES: Mergulho Autônomo; Perfil Psicológico na Performance.