

134 - PROFILE OF THE BODY COMPOSITION, OF THE SOMATOTYPE AND BASIC PHYSICAL QUALITIES OF SURFERS OPEN CATEGORY OF THE PARAÍBA

JOSÉ EDNALDO ALVES DE SENA¹;
URIVAL MAGNO GOMES FERREIRA¹;
LUCIANO MEIRELES DE PONTES²;
JOSÉ FERNANDES FILHO³.

¹Programa Euro-americano de Pós-graduação *Stricto Sensu* em Saúde - Medicina do Esporte - Universidad Católica Nuestra Señora de la Asunción - UC - Asunción - Paraguai;

²Programa de Pós-graduação *Stricto Sensu* em Saúde da Criança e do Adolescente - Deptº. Materno Infantil - Universidade Federal de Pernambuco - Recife - Pernambuco - Brasil;

³Universidade Federal do Rio de Janeiro - RJ, Brasil
ed.alves@terra.com.br

INTRODUCTION

Surf is a sport that although has been born in the Polynesian, it is had dispersed for everyone. In 1987, Renneker (apud CORRÊA et al., 2006), it already appeared more than 5 million apprentices all over the world. In 1992, the surf was already considered as one of the sports of larger growth in Brazil, one of the five of the Brazilian citizen's larger interest and country acquired the position of third world potency, being only behind the United States and of Australia (REVISTA SURFER MAGAZINE DO BRASIL, 1992). In terms of Paraíba, she have been developing since 1976, arriving now to great performances so much at level national, as international (NASCIMENTO, 2006). Although Surf has grown a lot, few were the scientific works that you focused that modality all over the world. Of the few scientific works, approaching the surf, great part links to incidence of lesions (ALLEN et al., 1977; LOWDON et al., 1987; RUDOLPH, 1989). Now, in spite of some efforts if they address to his/her study, a lack of studies and researches that approach still stays, among other aspects, the concerning ones to the physical parameters (CORRÊA et al., 2006). It is a sport, that with his/her tactical technical development and physicist has request of the teams physical qualities specify excellent so that one can obtain good results (STEINMAN, 2003). Like this being, inside of the need of development of the sport and of the improvement of the athletes' competitive levels he becomes necessary the search of information that you/they solidify this work and enlarge the knowledge little by little already acquired.

Before what above was approached, it is that was done necessary to accomplish the selection of protocols with equations specific predictive and a battery of tests that measured inside of criteria of scientific authenticity, the particularities of the corporal composition, of the somatotype and of the physical qualities of athletes paraibanos of both goods, of the Surf category Open, in way to allow the establishment of a profile that serves as embossment for the obtaining of a reliable prognostic in the sporting orientation, bringing larger probabilities of success to the athletes and collaborating like this with the professionals that act in this area.

MATERIAL AND METHODS

It's a study of traverse character, developed inside of a model of descriptive research, being the type of used study the one of Profile.

The sample was constituted by 33 athletes amateur paraibanos, of both sexes, of Surf, that belong to the category Open. The study was accomplished in the Academia MGM, established in the neighborhood of Manaira in the Municipal district of João Pessoa - PB. Being the selection process accomplished through simple casual sampling. It is important to stand out that all of the integral individuals of the sample possess experience in competitions of Surf at regional and national level.

Variables and instruments used in the study

Body mass and stature: To measure the body weight, a scale anthropometric of the mark was used Filizola, model Personal, with capacity for 180 kg and with division of 100/100 grams. The weight was registered in kilograms (Kg) and a decimal house. For the measure of the stature, a portable estadiometer was used model Sanny (America Medical of Brazil - maximum capacity of 204cm). THE accomplished measure was made with the individual in breathing apnea (BARBANTI, 1983; PITANGA, 2004; FERNANDES FILHO, 1999).

Cutaneous folds: The measures of the Breastplate, Abdominal cutaneous folds and Thigh for the men and Triceps, Suprailiaca and Thigh for the women as well the measures Bicipital, Triceps, Subscapular and Suprailiaca for adolescents they were obtained through an adipometer of the mark Sanny - AMB, accurately of 0,1 mm (PETROSKI, 1999).

Perimeters: To measure the arm perimeters and leg, a ribbon was used of measured anthropometrics marks Mabis - Model Gulick - made in fiberglass, with 150 cm of length and graduate in millimeters (FERNANDES FILHO, 1999).

Diameters: To measure the diameters of the humerus (elbow) and epicondiliano of the femur (knee) a Paquimetro was used marks WCS with 15 cm of length and division of 1/1mm (ROCHA, 1995).

Body composition

The global morphologic characteristics were delineated through BMI - Body Mass Index. The points of cuts were made according to classification of WHO (1995).

The percentile of fat obtained was calculated through the protocol of Jackson, Pollock and Ward (1978/1980) for adults and the Protocol of Deurenberg (1980) for adolescents, after the mensuration of the measures of the cutaneous folds (FARINATTI; MONTEIRO, 1999; HEYWARD; STOLARCZYK, 2000).

Somatotype of Heath-Carter: The obtaining of the somatotype was accomplished through the determination of the components: Endomorphy; Mesomorphy and Ectomorphy (ISAK, 2000).

Protocols of Characteristics of the Physical Quality:

Aerobics Resistance (VO² máx.): the aerobics resistance was obtained through the Step test of Katch & McArdle, for the adult individuals (PITANGA, 2004; MARINS; GIANNICHI, 1998). Para the adolescents the Test of Jogging of 12 minutes was used (MARINS; GIANNICHI, 1998).

Flexibility: To evaluate the flexibility, the test was used to sit down and to reach of Johnson and Nelson that it is one of the indirect methods more used (PITANGA, 2004; MARINS; GIANNICHI, 1998).

Agility: With the objective of measuring the agility, the test was used Shuttle Run of Jonhson and Nelson (MARINS; GIANNICHI, 1998).

Explosive forces: To measure the potency of the inferior members in the vertical plan, the vertical jump was used and for the mensuration of the potency of the inferior members in the horizontal plan, it was used the horizontal jump, both of Johnson and

Nelson (MARINS; GIANNICHI, 1998; ROCHA, 1995).

Located muscular resistance: For the evaluated of the located muscular resistance it was used the abdominal tests and flexing of arms, being measured the number of correct repetitions accomplished in 1 minute for both tests (FARINATTI; MONTEIRO, 1999).

Procedures of statistical analyses: After they be tabulated, the obtained data were submitted to the descriptive statistical analyses, for which the programs were used SPSS (Statistical Package is Social Sciences) Version 14.0 goes Windows and the spreadsheet of the program Excel 2007, to determine averages, deviation-patterns, test "t" of Student, illustrations and tables, defining the level of statistical significance in 95% ($p < 0,05$).

RESULTS

In table 1 can be observed regarding the medium values of the age, of the weight and of the stature, among the sexes, that there was not significant difference among the same ones ($p > 0,05$).

Table 1 - Distribution of the medium values, divert pattern and adolescents surfers' of the category statistical meaning Open of Paraíba.

Anthropo metric	Adolescentes (male) (n = 3)			Adolescentes (female) (n = 3)			Test t e significance $\alpha = ,05$	
	x ± sd	min	max	x ± sd	min	max	t	p
age	15,6 ± 0,57	15	16	14 ± 1,73	12	15	1,581	0,189
Mass	61,4 ± 12,70	52,6	76,0	53,2 ± 7,90	46,70	62,00	0,953	0,395
Stature	163,5 ± 3,06	160,0	165,40	164,5 ± 5,22	159,60	170,0	-0,286	0,789

The Table 2 display the relationship of the medium values of BMI and of % fat with the respective reference values. It was observed that the values of BMI % fat of both sex, are inside of the patterns of references stipulated in the literature.

Table 2 - Relationship of the medium values of BMI and of % Fat with the respective values of surfer's of the category reference Open of Paraíba.

Body Composition	Adolescents (male) (n = 3)		Adolescents (female) (n = 3)	
	x	reference	x	reference
BMI	23,0	18,5 ≤ IMC < 25 (Normal)	19,5	18,5 ≤ IMC < 25 (Normal)
%fat	11,5	10,01 a 20,00 (Appropriate)	19,4	15,01 A 25,00 (Appropriate)

In what concerns the somatotype, the boys presented a somatotype balanced mesomorfo (2,4 - 6,3 - 2,4), while the girls presented a central somatotype (3,3 - 3,8 - 3,5).

The Table 3 display the relationship of the medium values of the physical qualities with the respective reference values. In what it consists RML was observed the girls presented proportionally in relation to the sex, a better performance in that variable. Already in relation to the Flexibility (FLEX), it is noticed in both sexes an appropriate value. In relation to the explosive force (FAITH), it was observed that the feminine sex presented a horizontal impulse (IH) proportionally above the boys' average. The agility presented below the average in both sexes, as well as the resistance aerobics (RAER).

Table 3 - Relationship of the medium values of RML, FLEX, FAITH, AGILE and RAER with the re spective values of surfers' of the category reference Open of Paraíba.

Qualidades físicas	Adolescents (male) (n = 3)		Adolescents (female) (n = 3)		
	x	reference	x	reference	
RML	AF	24,0	Mean	26,3	Good
	ABD	34,3	Low mean 37	29,3	High mean 23
FLEX	SA	27,36	Regulate	29,66	Regulate
	IV	39,1	Low mean 43,53	28,1	Low mean 28,38
FE	IH	196,0	Low mean 211,7	175,0	Low mean 158,9
AGIL	SR	12,16	Low mean 10,53	15,52	Low mean 12,26
RAER	CP	32,97	Very Weak	27,82	Weak

RML = located muscular resistance (AF = front support; ABD = abdominal); FLEX = flexibility (HEALTHY = to sit down and to reach); FAITH = it forces explosive (IV = vertical impulse; IH = horizontal impulse); AGILE = agility (SR = suttle run); RAER = resistance aerobics (CP = Jogging of 12 minutes).

In table 4 it can be observed regarding the medium values of the age, among the sexes, of the adult individuals, that there was not significant difference among the same ones ($p > 0,05$). That fact was not observed in relation to the weight and to the stature, since in the same ones it was observed differentiates significant estatisticament in the medium values among the sex with ($p < 0,05$).

Table 4 - Distribution of the medium values, I divert pattern and adults surfer's of the category statistical meaning Open of Paraíba.

Anthropo metry	Adults (male) (n = 20)			Adults (female) (n = 4)			Test t e significance $\alpha = ,05$	
	x ± sd	min	max	x ± sd	min	max	t	p
age	29,9 ± 10,1	18	47	24,0 ± 2,44	21	26	1,146	0,264
Mass	70,7 ± 6,54	59,10	85,50	60,7 ± 7,44	54,60	70,70	2,720	0,012
Stature	174,0 ± 5,89	168,0	187,5	164,5 ± 4,50	160,50	171,0	3,022	0,006

Table 5 display the relationship of the medium values of BMI and of % fat with the respective reference values. It was observed that the values of BMI and % fat of both sex, are inside of the patterns of the references stipulated in the literature.

Table 5 - Relationship of the medium values of BMI and of % fat with the respective values of adult surfers' of the category reference Open of Paraíba.

Body Composition	Adults (male) (n = 20)		Adults (female) (n = 4)	
	x	reference	x	reference
BMI	23,2	18,5 ≤ BMI < 25 (Normal)	22,4	18,5 ≤ BMI < 25 (Normal)
%fat	7,94	5 a 13 % ¹	21,1	12 a 22 % ²

(1) percentile of fat for most of athletes men; (2) percentile of fat for most of the athletes women (FOSS & KETEYIAN, 2000).

In what concerns the somatotype, it was observed that the men presented a somatotype balanced mesomorphy (2,1 - 4,9 - 2,2), while the women presented a somatotype mesomorphy-endomorphy (4,2 - 4,7 - 2,3).

The Table 6 displays the medium values of the physical qualities with the respective reference values. In relation to the masculine sex, a smaller classification is only observed in the explosive Force (FAITH). While in the women, it was observed that the values in relation to IH and TB are below the patterns of the references stipulated.

Table 6 - Relationship of the medium values of the physical qualities with respective values of surfers' of the category reference Open of Paraíba.

Physical Quality	Adults (male) (n = 20)		Adults (female) (n = 4)	
	x	reference	x	reference
RML	AF	27,6	God	29,0
	ABD	34,5	God	31,2
FLEX	SA	35,3	God	48,0
	IV	42,80	Low mean 45,8	37,50
FE	IH	236,0	Regulate	215,0
	RAER	48,3	Excellent	35,7
TB			Regulate	

RML = located muscular resistance (AF = front support; ABD = abdominal); FLEX = flexibility (HEALTHY = to sit down and to reach); FAITH = forces explosive (IV = vertical impulse; IH = horizontal impulse); RAER = resistance aerobics (TB = Bank Tests of Katch & McArdle).

It could be observed that 45,0% of the male athletes in the agility were classified between weak and very weak. Regarding the feminine sex, the half is classified between weak and very weak.

DISCUSSION

It was observed in the present study a male prevalence of surfers. Possibly this fact is due to the prejudice happened in that sport in relation to feminine sex, as well as that phenomenon can be attributed possibly to the fact of, according to Orey (2003), the surf to be a difficult sport, maybe the most difficult of all, what would take the that feminine escape. In that sense, historically, in the decade of 70, with rare exceptions, there were not women in the surf. However, thirty years later that sport also began to fascinate the women (OREY, 2003), although stays above in the current days the fact mentioned.

In relation to the age, a prevalence of surfers was observed in the age group among 15 to 47 years, what characterizes a population in the phases of the "adolescence" and in the "young adult phase" (MOREIRA, 2001). That age group is in agreement with what asks the category Open.

In relation to the medium stature among the sex, the difference among their values is due to inherent constitutional characteristics to each sex (Table 5). on average, the adult women are 10-15 cm minor than the adult men, what is due to the fastest maturation of the skeleton and the most precocious closing of the growth disks (NEUMANN and BUHL apud WEINECK, 2000; ASIMOV, 1980?).

In what refers them to the corporal weight, it was observed, although no significant estatisticament, for the adolescents or in a statistical way, for the adults, a difference in the medium values among the sexes. On average the women are 10 - 20 lighter kilos than the men (NEUMANN; BUHL apud WEINECK, 2000). According to researches, that difference is due to the endocrine alterations that, under the influence of the estrogen and of the testosterone, they take the women to have a weight corporal smaller total than the one of the men (WILMORE; COSTILL, 2001). There was significant difference in the medium values of the percentile of fat, among the sexes, so much in the adolescents, as in the adult individuals. In general the woman presents a percentile of larger fat than the man, fact that is due to the specific morphologic characteristics to that sex. Research accomplished by Wilmore and Costill (2001), it indicates that the medium difference of corporal fat between women and young men, is of approximately 6 to 10%, in other words, the women tend to accumulate more corporal fat.

In what it consists to the body composition, the average of the Index of corporal mass, and of the percentile of fat, classified inside of the normality pattern, for adolescents and for adults, it identifies the benefits morphologic advents of the practice of that sport.

The somatotype balanced mesomorphy presented so much by the male adolescents, as for the adults, it evidences the predominance of the muscular component and low adiposity and linearity e, inherent characteristics to this sex. On the other hand, the corporal type presented by the female adolescents, a central somatotype, evidences a harmonic development of the components, and introduced him/it by the adult women, a somatotype mesomorphy-endomorphy, evidences the combination of the muscle mass with body fat in a moderate value and low linearity.

Regarding the physical qualities, although adolescents and adults have had values below the references, a better performance was observed in those varied in the adults, evidencing a better physical fitness for part of those. Inside of the physical valences, a fact that it deserves registration it is the difference significant estatisticament in the medium values of the resistance aerobics (RAER) among the sexes. The significant difference among the capacity aerobics among the sexes, is due to the fact of, during the exercises aerobics the woman to possess a smaller VO2máx, and the main mechanism involved homodynamic is the heart debit due to smaller systolic volume, that happens because it is smaller the mass and volume ventricular in women (MACEDO et al. 1987).

As the study showed although the athletes, so many adolescents, as adults, on average, have presented an appropriate corporal composition, several physical qualities were observed below the standard values preset in the literature. These facts evidence a preoccupying physical fitness, because it makes possible a negative influence on the health and those sportsmen's athletic performance, deserving, therefore, a training program in that one can give larger attention the those varied.

CONCLUSION

The adolescents, of both sex, presented, on average, an appropriate body composition. In the somatotype, the male adolescents presented a somatotype balanced mesomorphy, evidencing the predominance of the muscular component and low adiposity and linearity, while the one of the feminine sex presented a central somatotype, evidencing a harmonic development of the components. As for the physical qualities, the male adolescents presented ABD, IV, IH, AGILE and RAER below the average while the female presented IV, AGILE and RAER. The adult athletes presented, in both sexes, an appropriate corporal composition. In the somatotype, the male adults presented a somatotype balanced mesomorphy, the same corporal type presented by the male youths, while the female a somatotype mesomorphy-endomorphy, evidencing the combination of the muscle mass with corporal fat in a moderate value and low linearity. In relation to the physical qualities, the male adults presented IV below the average and AGILE weak, while the female presented IH and AGILE weak. Although the athletes present an appropriate body composition, physical qualities were observed below the standard values preset in the literature. These facts evidence that should have a training program in that can give larger attention the varied.

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Rua Bacharel Manoel Pereira Diniz - nº 522 - Apto 301 - Condomínio Coral das Águas
 Jardim Cidade Universitária - CEP. 58.052-520 - João Pessoa - Paraíba - Brasil
 Tel. (083) 3235-1306 - Cel. 8851-2538
ed.alves@terra.com.br

PROFILE OF THE BODY COMPOSITION, OF THE SOMATOTYPE AND BASIC PHYSICAL QUALITIES OF SURFERS OPEN CATEGORY OF THE PARAÍBA

ABSTRACT

Objective: to establish the profile of the body composition, the somatotype, and basic physical qualities of surfers of the Open category of the Paraíba. It is a study of the transversal and descriptive type. Sample: 30 athletes, being 6 adolescents and 24 adults of both the sexes. Was adopted for evaluation of the body composition the Body Mass Index (BMI) and the Percentage of Fat (%G) according to Deuremberg (1980) for adolescents and Jackson, Pollock and Ward (1978/1980) for adults. It was used the somatotypical protocol of Heath & Carter (1990) and the referring tests to the evaluation of the physical qualities: Flexibility (FLEX), Agility (AGILE), Power (PO) = vertical Impulse (IV) and horizontal Impulse (IH), Located muscular resistance (RML) = Support of front on the ground (AF) and Abdominal (ABD) and Aerobic resistance. For the analysis of the data it was used SPSS 14.0. Results: it had significant difference in the percentage of fat (%f) and vertical impulse (IV) between the sexes (adolescents) ($p < 0,05$). The adolescents had presented one BMI and one %G inside of the stipulated standards of references. The boys had presented one Somatotype Mesomorfic balanced (2,4 - 6,3 - 2,4) and girls one Somatotype central (3,3 - 3,8 - 3,5). How much to the physical qualities, the boys had presented below of the average: ABD (34,3reps; average = 37reps), IV (39,1cm; average = 43,53cm), IH (196,0cm; average = 211,7cm), AGILE (12,16seg; average = 10,53seg) and RAER (32,97ml/kg/min; very weak), while the girls had presented IV (28,1cm; average = 28,38), AGILE (15,52seg; average = 12,26seg) and RAER (27,82ml/kg/min; weak). Between the adults, it had significant difference in the weight, stature, percentage of fat (%f), Endo e Aerobic resistance (RAER) between the sexes ($p < 0,05$). These had presented one BMI and one %G inside of the stipulated standards of references. The men had presented one Somatotype Mesomorfic balanced (2,1 - 4,9 - 2,2) and women one Somatotype Mesomorfic- Endomorfic (4,2 - 4,7 - 2,3). In the physical qualities, the men had presented only IV below of the average (42,80cm; average = 45,8cm), while the women had presented only IH (215,0cm;

Weak). Although with an adjusted body composition, physical qualities had been observed below of the values standards preset in literature. These facts evidence that it must have a program of trainings where can give to greater attention to these variable.

KEY WORDS: Surf. Body composition. Somatotype. Physical capacity.

PROFIL DE LA COMPOSITION CORPORELLE, DES SOMATOTYPIQUE ET QUALITÉS PHYSIQUES DE BASE DE SURFEURS OUVERT CATÉGORIE DU PARAÍBA

RÉSUMÉ

Objectif: établir le profil de la composition corporelle, le somatotype, et qualités physiques de base de surfeurs de la catégorie Ouverte du Paraíba. C'est une étude du type transversal et descriptif. Échantillon: 30 athlètes, être 6 adolescents et 24 adultes de les deux les sexes. Été adopté pour évaluation de la composition du corps l'Index de la Masse de Corps (IMC) et le Pourcentage de Graisse (% G) d'après Deuremberg (1980) pour adolescents et Jackson, Pollock et Salle (1978/1980) pour les adultes. Il a été utilisé le protocole du somatotypical de Heath & Carter (1990) et les se reportant épreuves à l'évaluation des qualités physiques: Flexibilité (FLEX), Agilité (AGIL), Pouvoir (PO) = Impulsion verticale (IV) et Impulsion horizontale (IH), résistance musclée Localisée (RML) = Support de devant sur la terre (AF) et Abdominal (ABD) et résistance Aérobie (RA). Pour l'analyse des données il a été utilisé SPSS 14.0. Résultats: il avait la différence considérable dans le pourcentage de graisse (% G) et impulsion verticale (IV) entre les sexes (adolescents) ($p < 0,05$). Les adolescents avaient présenté un IMC et un % G dans les niveaux stipulés de références. Les garçons avaient présenté un Somatotype Mesomorfic a équilibré (2,4 - 6,3 - 2,4) et filles un central Somatotype (3,3 - 3,8 - 3,5). Combien aux qualités physiques, les garçons avaient présenté au-dessous de la moyenne: ABD (34,3reps; moyenne = 37reps), IV (39,1cm; moyenne = 43,53cm), IH (196,0cm; moyenne = 211,7cm), AGILE (12,16seg; moyenne = 10,53seg) et RA (32,97ml/kg/min; très faible), pendant que les filles avaient présenté IV (28,1cm; moyenne = 28,38), AGILE (15,52seg; moyenne = 12,26seg) et RA (27,82ml/kg/min; faible). Entre les adultes, il avait la différence considérable dans le poids, taille, % G, Chute en avant e RA entre les sexes ($p < 0,05$). Ceux-ci avaient présenté un IMC et un % G dans les niveaux stipulés de références. Les hommes avaient présenté un Somatotype Mesomorfic a équilibré (2,1 - 4,9 - 2,2) et femmes un Somatotypique Mesomorfic - Endomorfic (4,2 - 4,7 - 2,3). Dans les qualités physiques, les hommes avaient présenté seulement IV dessous de la moyenne (42,80cm; moyenne = 45,8cm), pendant que les femmes avaient présenté seulement IH (215,0cm; Faible). Bien qu'avec une composition corporelle ajustée, les qualités physiques eussent été observées au-dessous des niveaux des valeurs préétablies dans la littérature. Cette évidence des faits qu'il doit avoir programme de formations où peuvent donner à la plus grande attention ce variable.

MOTS-CLÉS: Surf. Composition corporelle. Somatotypique. Qualité physique.

PERFIL DE LA COMPOSICIÓN CORPORAL, DE LOS SOMATOTYPE Y CALIDADES FÍSICAS BASICAS DE SURFERS LA CATEGORÍA ABIERTA DEL PARAÍBA

RESUMEN

Objetivo: para establecer el perfil de la composición corporal, el somatotype, y las calidades físicas básicas de surfers de la categoría Abierta del Paraíba. Es un estudio del tipo transversal y descriptivo. La muestra: 30 atletas, siendo 6 adolescentes y 24 adultos de ambos los sexos. Se adoptó para la evaluación de la composición del cuerpo el Índice de Masa de Corporal (IMC) y el Porcentaje de Grasa (% G) según Deuremberg (1980) para los adolescentes y Jackson, Pollock y Pupilo (1978/1980) para los adultos. Se usó el protocolo del somatotypical del Heath & Carter (1990) y las pruebas refiriéndose a la evaluación de las calidades físicas: La flexibilidad (ENCORVE), Agilidad (ÁGIL), Power (PO) = el Impulso vertical (IV) y el Impulso horizontal (IH), la resistencia muscular Localizada (RML) = el Apoyo de frente en la tierra (AF) y Abdominal (ABD) y la resistencia Aerobic. Para el análisis de los datos se usó SPSS 14.0. los Resultados: tenía la diferencia significante en el porcentaje de grasa (% G) y el impulso vertical (IV) entre los sexos (los adolescentes) ($p < 0,05$). Los adolescentes habían presentado un IMC y un % G dentro de las normas estipuladas de referencias. Los muchachos habían presentado un Somatotype Mesomorfic equilibró (2,4 - 6,3 - 2,4) y muchachas un Somatotype central (3,3 - 3,8 - 3,5). Cuanto a las calidades físicas, los muchachos habían presentado debajo del promedio: ABD (34,3reps; el promedio = 37reps), IV (39,1cm; el promedio = 43,53cm), IH (196,0cm; el promedio = 211,7cm), ÁGIL (12,16seg; el promedio = 10,53seg) y RAER (32,97ml/kg/min; muy débil), mientras las muchachas habían presentado IV (28,1cm; el promedio = 28,38), ÁGIL (15,52seg; el promedio = 12,26seg) y RAER (27,82ml/kg/min; débil). Entre los adultos, tenía la diferencia significante en el peso, la estatura, el porcentaje de grasa (% G), Endo e la resistencia Aerobic (RAER) entre los sexos ($p < 0,05$). Éstos habían presentado un IMC y un % G dentro de las normas estipuladas de referencias. Los hombres habían presentado un Somatotype Mesomorfic equilibró (2,1 - 4,9 - 2,2) y mujeres un Somatotype Mesomorfic - Endomorfic (4,2 - 4,7 - 2,3). En las calidades físicas, los hombres habían presentado sólo IV debajo del promedio (42,80cm; el promedio = 45,8cm), mientras las mujeres habían presentado sólo IH (215,0cm; Débil). Aunque con una composición corporal ajustada, las calidades físicas se habían observado debajo de las normas de valores prefijadas en la literatura. Estos evidencia de hechos que debe tener un programa de entrenamientos a dónde pueden dar a la atención mayor estos inconstante.

PALABRAS CLAVES: Surf. Composición corporal. Somatotipo. Calidades físicas.

PERFIL DA COMPOSIÇÃO CORPORAL, DA SOMATOTIPIA E DAS QUALIDADES FÍSICAS BÁSICAS DE SURFISTAS DA CATEGORIA OPEN DA PARAÍBA

RESUMO

Objetivo: estabelecer o perfil da composição corporal, da somatotipia e das qualidades físicas básicas de surfistas da categoria Open da Paraíba. É um estudo do tipo transversal e descriptivo. Amostra: 30 atletas, sendo 6 adolescentes e 24 adultos de ambos os sexos. Para avaliação da composição corporal foram adotados o Índice de Massa Corporal (IMC) e o Percentual de Gordura (%G) segundo Deuremberg (1980) para adolescentes e Jackson, Pollock e Ward (1978/1980) para adultos. Foi utilizado o protocolo somatotípico de Heath & Carter (1990) e os testes referentes à avaliação das qualidades físicas Flexibilidade (FLEX), Agilidade (AGIL), Potência (PO) = Impulsão vertical (IV) e Impulsão horizontal (IH), Resistência muscular localizada (RML) = Apoio de frente sobre o solo (AF) e Abdominal (ABD) e Resistência Aeróbica. Para a análise dos dados foi utilizado o SPSS 14.0. Resultados: houve diferença significativa no percentual de gordura (%G) e impulsão vertical (IV) entre os sexos (adolescentes) ($p < 0,05$). Os adolescentes apresentaram um IMC e um %G dentro dos padrões de referências estipulados. Os meninos apresentaram um somatotipo mesomorfo equilibrado (2,4 - 6,3 - 2,4) e as meninas um somatotipo central (3,3 - 3,8 - 3,5). Quanto às qualidades físicas, os meninos apresentaram abaixo da média: ABD (34,3reps; média = 37reps), IV (39,1cm; média = 43,53cm), IH (196,0cm; média = 211,7cm), AGIL (12,16seg; média = 10,53seg) e RAER (32,97ml/kg/min; muito fraco), enquanto as meninas apresentaram IV (28,1cm; média = 28,38), AGIL (15,52seg; média = 12,26seg) e RAER (27,82ml/kg/min; fraco). Entre os adultos, houve diferença significativa no peso, estatura, percentual de gordura (%G), Endo e resistência aeróbica (RAER) entre os sexos ($p < 0,05$). Estes apresentaram um IMC e um %G dentro dos padrões de referências estipulados. Os homens apresentaram um somatotipo mesomorfo equilibrado (2,1 - 4,9 - 2,2) e as mulheres um somatotipo mesomorfo-endomorfo (4,2 - 4,7 - 2,3). Nas qualidades físicas, os homens apresentaram apenas IV abaixo da média (42,80cm; média = 45,8cm), enquanto as mulheres apresentaram apenas IH (215,0cm; Fraco). Embora com uma composição corporal adequada, foram observadas qualidades físicas abaixo dos valores padrões preestabelecidos na literatura. Estes fatos evidenciam que deve haver um programa de treino em que possa dar maior atenção a essas variáveis.

PALAVRAS-CHAVE: Surf. Composição corporal. Somatotipo. Qualidades físicas.