

**14 - ANALYSIS OF PROFILE DERMATOGRÁFICO, VARIATION OF WEIGHT, INDICE OF CORPORAL MASS (IMC) And INFLUENCES AMBIENT IN TWIN And TRIGEMEOS**

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**INTRODUCTION**

To present of brief fashion, aspects of the genetic methodology applied the interests of twin Mz and Dz in relation to the sports, determining the presence of genetic, ambient effect and its indices in practises porting. With the attempt to contribute for the quarrel and the pretension to extend the knowledge on the dermatoglifia in twin in the esportivo talent on the vision of determined authors, whom they search to the same clarify on the subject interpreting in the context of the motricidade human being. The modern sport offers a varied set of benefits that a wide specter of the biological domain to the psychological one covers. The brought up to date summary of these benefits can be consulted in the skillful volume edited by Bouchard, Shephard & Stewens in 1992, referring one discusses it of Toronto. The dermatoglificos standards can be studied by direct comment, but generally they are analyzed by graphical impression in paper. Three types of drawings Arco(A), Presilha(L) exist basically and verticilo(W) A form of the drawings constitutes a characteristic qualitativa. A amount of lines of each one of fingers (QL) and the somatória of the total amount of lines (SQTL) is the quantitative aspects (DANTAS & FERNANDES SON, 2002). Giving to continuation to the questioning the light in the dermatoglifia, it must be complemented with the emergent knowledge that the majority of the characters or traces of the twin, the fenótipos is influenced by multiple genes and an enormous variety of factors of the envolvimento. The fenotípica variation produces one analyzes and distribution of the meanings gifts in the seio of população.(Lynch & Walsh, 1988). The sample of this inquiry on twin Mz and Dz was constituted by 20 pairs of twin. The age varied between 1 and 39 years, where 5 pairs had been of couples of twin 8 feminine pairs and 7 masculine pairs. The corporal composition mentions amount to it and the ratio of diverse components in the human body, being somatotipo antropométrico one of the classificatórias techniques of the corporal composition human being more used to determine physical characteristics that differentiate the human beings between itself. (CARTER and HEART, 1990). The evaluation through the fingerprints can be used to describe and to compare twin, esportistas of distinct sports as tool of analyzes through the fingerprints. Moreover, constituen in an excellent instrument, the discovery of talentos. With this work the pretension is not had to break paradigms,ao if to add the dermatoglifia question, but yes to supply the lack or vacuidade in the area of determination of the profile of twin and athletes in varied sports, exceeding trends of the motor behavior and the values of the being. To understand the dermatoglifia we must understand

**OBJECTIVE**

The general objective of this study was to verify the ambient influence on the stature, the corporal weight, the index of mass corporal(IMC) in twin Mz and Dz of the feminine and masculine sex.

**METHODOLOGY**

Type of Study the Research that we will go to present is part of a vast tending project to the clarification of interpretativos factors of the dermatoglifia as a light for the discovery of porting talentos in gêmeos.O study was transversal description, of the comparative type, that serves to compare the differences between averages where the difference is the isolated and known cause (THOMAS and NELSON, 2002).

**SAMPLE**

The sample was constituted of 20 pairs of twin, having composed 9 pairs of Mz twin and 11 pairs of Dz twin, in the etária band of 1 the 39 resident years in the cities of Good Jesus and Currais (Been of the Piauí).

**EXPERIMENTAL PROCEDURE**

The collection of data was carried through according to protocol somatotipo of Heart and Carter (1967), using the methodology of Isak (2000) to determine points and measures. The present work takes care of the norms for accomplishment of research in Human beings, 196/96, of the National advice of Health of 10/10/96.(Brasil, 1996). Initially, the twin and its families had taken knowledge of the objectives of the study and, after to submit itself to one anmenese had signed the term of consentimento.Em followed had been made referring recommendations to the regular procedures during the collection of data and in this occasion the twin had been guided how much to the procedures to be taken for the collection of the fingerprints (Dermatoglifia). The collection of data harvested with the participants of the study served to evaluate the applicability of the method in twin. It was demonstrated that factors could be limitations for the application of the method (as differences to intrapar how much to the creation and the practical one of physical activities), probably had not been important.

**GENETIC INFLÊNCIAS And ANBIENTAIS ON the DEVELOPMENT Of the CAPACITIES, ABILITIES And TENDENCIAS.**

To understand the dermatoglifia we must understand the hereditary succession and the environment where they live. The development of a person is the result of the interaction of the hereditary succession with the way ambiente.a influences of the factors and of the environment on the development they bring indications of a genotípica action. The DNA molecules, whose nucleus of the cells is composed for the concentration of chromosomes, serve of effective carriers of hereditary succession in the different levels of organization of the life. The unit of hereditary succession is the gene. The biological hereditary succession, related with the transmission of genetic structures, indicates that the man possesss a social continuity to be transmitted, by means of the education.

**ANALYSIS And DISSCUSSÃO Of the RESULTS**

The drawings of the fingerprints, its types of combination, D10, the QL as well as the SQTL had been analyzed. Table 1

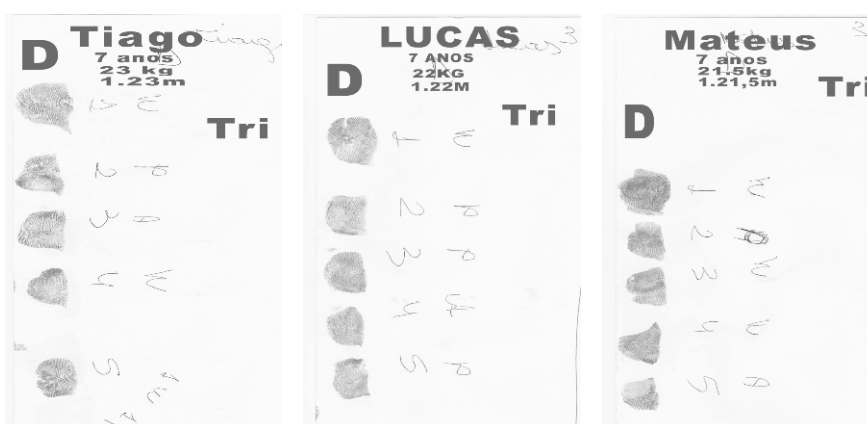
shows to the differences between twin of the masculine and feminine sex for the type of fingerprints and its forms.

| INSPESSES     | Ny MEN | Ny WOMAN | TDH | TDM |
|---------------|--------|----------|-----|-----|
| ARC (A)       | 13     | 15       | 60  | 68  |
| PRESILHA(L)   | 13     | 17       | 48  | 48  |
| VERTICILIO(W) | 10     | 18       | 31  | 64  |

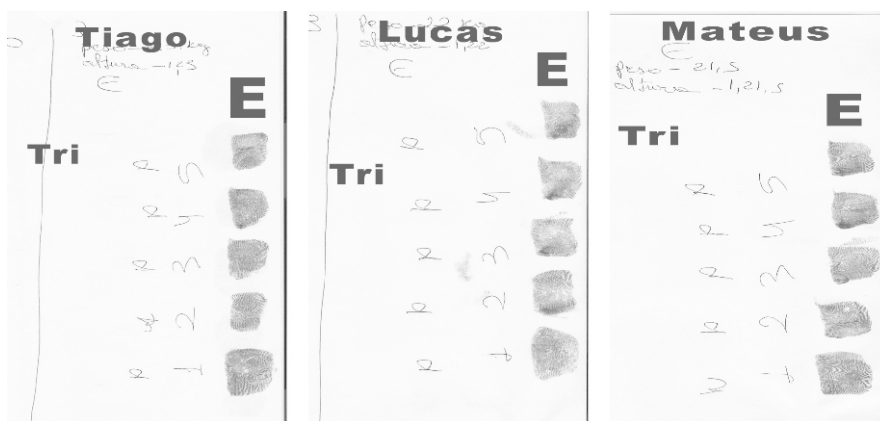
Number of men, number of women, total of the digital ones of the men, total of the digital ones of the women. The dermatoglyphic characteristics of twin, concerning the digital drawings, indicate the predominance of W in men (31=2,77) L (48=2,08) (60=1,66) in the men and in women W(64=1,56) L (48=2,08) (68=1,47), in the men it has a minor I number of verticilos, where the amount of arcs in such a way in men how much in the women and bigger good that trend for the sports means low, but in this case all the types of impressions well are distributed not influencing in these twin. The characteristic 0 variable of the fingerprints of the trigêmeos analyzed about A,W and L sujerem predominance of speed in the three, good motor in two and hipertrofia coordination in two as we can see in the figures

|               | MATEUS | TIAGO | LUCAS |
|---------------|--------|-------|-------|
| ARC (A)       | 2      | 1     | 1     |
| PRESILHA(L)   | 5      | 8     | 5     |
| VERTICILIO(W) | 3      | 1     | 4     |

Total amount of the figures of the hands left and right



Figures of the fingerprints of the trigêmeos, Tiago, Mateus, Lucas (Left Hand)



On the basis of the total profile of the twin can be observed that in the three pairs of twin of the city of corral being 2 masculine pairs and a feminine pair, both had presented much force, speed, low motor coordination and low independent aeróbica capacity of the sexo. Todos lives with the parents, with distinct professions como: 1 pair masculino(músicos) o another feminino(saúde). Nos par(política and educação) e the pair too much pairs of twin of Good Jesus, 2 pairs of masculine twin where 1 pair is nephews and the other is uncles, where the comparisons são: 3 has much force and the 4 have trend the sports of high speed, mainly the natação. Nesta comment was evidenced from the experience of the mother and sister who with its profiles (commentaries of the mother Maria Luiza), in the chance where a wide amount of data exists supporting the trends of the estimates where the results of this study had indicated a great ambient influence of the analyzed group.

**CONCLUSION**

The present study it confirmed the importance of if considering the dermatoglia as informative, objective landmark and of orientation of the election of twin and sportsmen in geral. Com base in such information and using the dermatoglia as an important tool in the discovery of talentos in twin and young athlete it can and it must be effected in way to take care of to the development of the physical qualities proposals in the sport, based on the use of the method of twin for future studies so that let us can understand the factors that influence opening ample possibilities of diagnosis in the form of the corporal composition

**ANALYSIS Of INFLUENCE GENOTIPICA And the ENVIRONMENT ON the LIGHT Of the DERMATOGLIFIA Of the STATURE, PHYSICAL QUALITIES And SEXUAL MATURATION IN TWIN Of The MASCULINE And FEMININE SEX**

**ABSTRACT**

A study on the relative influences of the environment, variation of weight, index of corporal mass (IMC) of twin of masculine and feminine sex with ages of 1 the 39 years, the cities of Good Jesus and Currais-PI. It was carried through by the method of twin through the herdadabilidade index ( $h^2$ ). The studied sample was constituted by 9 pairs of Mz twin and 11 pairs of Dz. twin Only for the corporal weight and the IMC had not been found estatisticamente significant differences between the variances of the monozigoticos and dizigoticos groups. For the excessively changeable ones it was possible to infer that human being exists also ambient significant genetic influence as. These 0 variable present herdadabilidade indices elevados ( $h^2=0,84$  0,93), que confirm the importance of if considering the paper of the genetic influence on the antropométricas characteristics mainly how much to the environment. Through the dermatoglifia with the use of the fingerprints as a light in the discovery of talentos, it is characterized as a genetic marker of ample specter for the use in association with basic the physical qualities in the discovery of talentos for practical the porting one in diverse modalities that in offer a varied set to them of benefits that a long specter in the biological domain to the psychological one covers.

**ANALYSE du PROFIL DERMATOGRÁFICO, VARIATION DE POIDS, INDEX DE MASS CORPOREL (IMC) Et INFLUENCES AMBIANTES DANS JUMENTEAU Et TRIGEMEOS**

ABSTRAIT Une étude sur les influences relatives de l'environnement, variation du poids, index de la masse corporelle (IMC) de jumellent du sexe masculin et féminin avec des âges de 1 les 39 années, les villes de bon Jésus et Currais-Pi. Elle a été exécutée par la méthode de jumellent par l'index de herdadabilidade ( $h^2$ ). L'échantillon étudié a été constitué par 9 paires de jumeau de Mz et 11 paires de Dz. jumellent seulement pour le poids corporel et l'IMC n'avait pas été des différences significatives trouvées d'estatisticamente entre les désaccords des monozigoticos et les groupes de dizigoticos. Que excessivement les variables il était possible impliquent que l'être humain existe également influence génétique significative ambiante As. Ces index actuels variables elevados ( $h^2=0,84$  0,93), que de 0 herdadabilidade réaffirment l'importance de si considérant le papier de l'influence génétique sur les caractéristiques d'antropométricas principalement combien à l'environnement. Par le dermatoglifia avec l'utilisation des empreintes digitales comme lumière dans la découverte des talentos, il est caractérisé comme repère génétique de spectre suffisant pour l'usage en association avec de base les qualités physiques dans la découverte des talentos pour pratique de mise en communication dans les modalités diverses qui leur offrent dedans un ensemble divers des avantages qu'un long spectre dans le domaine biologique à le psychologique couvre.

**ANÁLISIS del PERFIL DERMATOGRÁFICO, VARIACIÓN DEL PESO, ÍNDICE DE MASS CORPORAL (IMC) E INFLUENCIAS AMBIENTE EN GEMELOY TRIGEMEOS**

**EXTRACTO**

Un estudio en las influencias relativas del ambiente, variación del peso, índice de la masa corporal (IMC) de hermana de sexo masculino y femenino con edades de 1 los 39 años, las ciudades de buen Jesús y Currais-Pi. Fue llevado a través por el método de hermana con el índice de herdadabilidade ( $h^2$ ). La muestra estudiada fue constituida por 9 pares del gemelo de Mz y 11 pares de Dz. hermanan solamente para el peso corporal y el IMC no había sido diferencias significativas encontradas del estatisticamente entre las variaciones de los monozigoticos y los grupos de los dizigoticos. Que los excesivamente cambiables era posible deduzcan que existe el humano también influencia genética significativa ambiente como. Estos índices variables elevados ( $h^2=0,84$  0,93), que de 0 actuales herdadabilidade confirman la importancia de si consideran el papel de la influencia genética en las características de los antropométricas principalmente cuánto al ambiente. Con el dermatoglifia con el uso de las huellas digitales como luz en el descubrimiento de talentos, se caracteriza como marcador genético del espectro amplio para el uso en la asociación con básico las calidades físicas en el descubrimiento de los talentos para práctico el virar hacia el lado de babor en las modalidades diversas que adentro les ofrecen un sistema variado de las ventajas que un espectro largo en el dominio biológico el psicologico cubre.

**ANÁLISE DA INFLUÊNCIA GENOTIPICA E DO AMBIENTE SOBRE A LUZ DA DERMATOGLIFIA, ESTATURA E QUALIDADES FÍSICAS DE GÊMEOS DO SEXO MASCULINO E FEMININO**

**RESUMO**

Um estudo sobre as influências relativas do ambiente, variação de peso, índice de massa corporal (IMC) de gêmeos de sexo masculino e feminino com idades de 1 a 39 anos, das cidades de Bom Jesus e Currais-PI. Foi realizado pelo método de gêmeos através do índice de herdadabilidade ( $h^2$ ). A amostra estudada foi constituída por 9 pares de gêmeos Mz e 11 pares de gêmeos Dz. Apenas para o peso corporal e para o IMC não foram encontradas diferenças estatisticamente significativas entre as variâncias dos grupos monozigoticos e dizigoticos. Para as demais variáveis foi possível inferir que existe humana influência genética significante como também ambiental. Essas variáveis apresentam índices de herdadabilidade elevados ( $h^2=0,84$  a 0,93), que confirmam a importância de se considerar o papel da influência genética sobre as características antropométricas principalmente quanto ao ambiente.

Através da dermatoglifia com a utilização das impressões digitais como uma luz na descoberta de talentos, caracteriza-se como um marcador genético de amplo espectro para a utilização em associação com as qualidades físicas básicas na descoberta de talentos para a prática desportiva em diversas modalidades que nos oferecem um conjunto variado de benefícios que percorre um longo espectro no domínio biológico ao psicológico.