

186 - PROFILE OF THE VERTICAL IMPULSION OF DANCERS PARTICIPANTS OF THE FESTIVAL OF DANCE OF JOINVILLE / SC

PEDRO JORGE C. MORALES¹²; VALESKA ILIENKO V. SOUTO¹²;
 JERSON DUTRA¹²; FABRÍCIO FAITARONE BRASILINO¹³.
 Research Group in Motion¹
 Physical Education Teachers²
 Physical Activity Supervisor of CAF³
 UNIVILLE - Santa Catarina/BR
pedro.jorge@univille.br

Introduction

Along the course of humanity's socio-cultural development, dance has always been present, being the reason why people are still reluctant to show not want to relate it to the term physical activity, which certainly is related to Physical Education.

Dance is a physical activity, even though many specialists in the field refused to reference it as such, but rather as an artistic activity. However it is clear that without the existence of body movement and consequently of physical activity, it is not possible to have artistic expression. The term physical activity is used, then, not only because its traditional connotation, but rather it supports the common procedures for the dance (LEAL, 1998; MARQUES, 2001). The existence of various types of dance lines contributes considerably to make more difficult this process of understanding. Analyzing the dance exclusively for its artistic and cultural aspects, it would be possible to glimpse it only as an artistic act to seek disclosure of the mysteries of creation and scenic representation, coupled with the story of an artistic region, developed through movements that nurture the known history of a people (regional folk dances BERTONI, 1992; CAMINADA, 1999).

In addition to these aspects, also the conditions of preparation, the conditioning, the development and levels of the dancer's physical fitness in a constant search for reducing the levels of the so common injuries in this activity. So many are the movements used by dancers in a choreographic representation, that also are numerous the opportunities for intervention in the assessment procedures and prescription of exercises with the aim of improving motor skills and, consequently, the artistic development (KAPAMDJI, 1980; LEAL, 1998; SAMPAIO, 1999).

Within a specific classic dance shows, as the main feature in the movement carried out "*en dehors/outside*" (FARO; SAMPAIO, 1989; PAVLOVA, 2000). For this condition is extremely detailed and requires a repositioning anatomical changes with deep muscle, biomechanical and postural; for this is that the body must adapt itself as it should, gradually without injury or damage until that position to become its second dancer nature, enabling the synchronized implementation of various movements that often do not seem to be natural to the body, and at the same graceful, light and smooth; run without apparent effort minor (SCHIEBELBEIN; MORALES, 2003).

In his book Sampaio (1999), presents a full chapter about the redevelopment muscle articulate promoted by anti-needed adequacy of anatomically in a position to outside (*en dehors*), reporting specific points and influential in the acquisition and development of the degree of external rotation at the joint, such as bone structures, key to determine the degree of external rotation angle and the lame-femoral joint, ligament aided by the characteristics of the joints that varies from one individual to another. "The characteristics femoral by a greater or lesser range of motion are: the size of the femoral neck, the neck-between body size and the size of the ante version angle of ..." (SAMPALIO, 1999: 48).

With all these features the classical dance presents numerous opportunities for information and it is from that through this approach in mind was felt the need to conduct a process of diagnostic evaluation on the vertical profile of the push of dancers from different regions and countries, which were participants of the Joinville's Dance Festival, annually held in the city of Joinville, in Santa Catarina/BR.

Methods

The investigated population was formed by dancers from different regions of the country and abroad. The sample comprised 540 subjects of both sexes. The examined movement was the *Sauté* in first position, "*en dehors/outside*" and "*en dedans/inside*". It was also, according to data from body weight and stature examined the body mass index (BMI) by Pompeu (2004, pg 17).

For data collection instruments were used as follows: Jump Test platform, which consists of a plate of contact measuring between 66 to 100cm in length by 55 and 66 cm wide (hardware); Jump Test 1.1 program (software), sensitive to touch, and cable connection (interface); wall stadiometer CWS for the collection of information in stature; digital balance/mobile brand Plenna for the collection of total body weight.

The data were tabulated in a spreadsheet data from Excel for Windows and then transferred to a spreadsheet of the statistical program SPSS 11.2. The processing of data was descriptive, with values of central tendency and its derivatives. For comparison, we performed the non-parametric test the Kruskal Wallis and test "t-student" and to observe the existence of cause and effect between variables, we performed the test of correlation of Sperman (BARBETTA, 2002).

The index of significance adopted for the statistical treatment in order to consider it acceptable to the purposes of research and maintain a level of scientific research, was $p < 0.05$. Is 95% probability for the affirmative and/or negative denoted during the research process.

Analysis of the Results

The group examined showed the following characteristics (Table 01): the 362 dancers who participated in the sample, 82 (22.65%) were male and 280 (77.35%) were females. The overall average age was 16.2 ± 4.07 and the age males were 17.96 ± 4.25 and 15.68 ± 3.87 female. The average age of male group was higher, first because of the low amount of boys who practice the sport, the second that for males the age does not present a problem of great significance as for females, that is, so generally the dancer can have a tutorial later that the dancer (BUSSELL, 1994; DECITRE, s.d.).

The descriptive data for the group assessed, characterizing them as gender, age and BMI are presented in Table 01. Overall the group had BMI of 20.01 ± 2.55 while the male group had a higher average (21.11 ± 2.55) than the average presented by the female group (19.68 ± 2.46). However it is necessary claim that the data suggest the group named in the classification of normal (POMPEU, 2004, pg. 18).

Table 01

SEX			n/%	Age	BMI	
Male	N	Valid	82(22.65)	82	82	
		Missing	0	0	82	
	Mean			17.96	21.1139	
	Median			17.00	20.8400	
	Stand derivation			4.240	2.55121	
	Variance			17.974	6.50869	
	Least			11	16.14	
	High			34	27.18	
	Female	N	Valid	280(77.35)	280	280
			Missing	0	0	280
Mean				15.68	19.6898	
Median				15.00	19.5600	
Stand derivation				3.868	2.46178	
Variance				14.958	6.06036	
Least				11	13.85	
High				32	30.11	
General		N	Valid	362(100%)	362	362
			Missing	0	0	0
	Mean			16.20	20.01	
	Median			15.00	19.91	
	Stand derivation			4.06	2.54	
	Variance			16.53	6.5	
	Least			11	13.85	
	High			34	30.11	

Table 02 shows the average values corresponding to data obtained in leaps "en dehors/outside" and "en dedans/inside". To be able to answer how a jump is more efficient in relation to the other was used to test "t-student" to show paired. The averages suggest that there is the difference between jumping in the male group ("en dehors/outside" and "en dedans/inside") and the male group compared with the female group. But given the difference in the overall context between jumps ("en dehors/outside" and "en dedans/inside"), showed no significance in its entirety.

Table 02

Descriptivs	General		Male		Female	
	inside	outside	inside	outside	inside	outside
N	362	362	82	82	280	280
Least	10.50	10.1	12.90	14.10	10.50	10.10
High	48	47.3	48.00	47.30	38.40	39.60
Media	25.12	25.19	31.03 \ddot{y}	31.63 \ddot{y}	23.39 \ddot{y}	23.31 \ddot{y}
Median	24.45	24.4	31.00	32.25	23.40	23.20
Stand derivation	6.08	6.18	7.03	6.94	4.50	4.43

¹Significance of jumping "en dehors/outside" and "en dedans/inside" in the genus;

²Significance of jumping "en dehors/outside" and "en dedans/inside" between genders

In general observation is unthinkable that the group had no relevance in terms of majority be formed by the female. But the result made by the male group, in relation to the group itself and the female group, showed significance ($p < 0.05$) which suggests that the information they present the male as the bearer of greater strength and power are also found in a jump "en dehors/outside". Where the muscle is not used to that normally correspond to the literature (KAPANDIJ, 1980; HALL, 1997).

It is believed that the performance found in the male group is larger not only because the generation of power characteristic of sex, but the burden imposed during the work for the improvement of the gesture engine exclusive to the movements made during the choreographic sequence (THOMPSON; FLOYD, 1997). The dancer, during class or test, is used as implements of his own body and the dancer (sets of jumps and ports) for the development of muscle strength. This gain in generation of power can influence the performance of jumps related.

Table 03

			Jump inside	Jump outside	Genus
Jump Inside	Spearman's	Correlation coefficient	1,000	,887(**)	-,457(**)
		Sig. (2-tailed)	.	,000	,000
		n	362	362	362
Jump outside	Spearman's	Correlation coefficient	,887(**)	1,000	-,487(**)
		Sig. (2-tailed)	,000	.	,000
		n	362	362	362
Genus	Spearman's	Correlation coefficient	-,457(**)	-,487(**)	1,000
		Sig. (2-tailed)	,000	,000	.
		n	362	362	362

** The correlation is significant to the 0.01 level (2-tailed)

Table 03 shows the correlation between the jump "en dehors/outside" and "en dedans/inside" as to gender (male and female). You can observe that there is a correlation to a significance level of 0.01 between the performance of jumps, with $0.887 = r$ and $r^2 = 78.68\%$, which is 78.68% probability that there is a relationship of cause and effect between variables.

Conclusions

The dance and especially the classic, invite a lot of attention because of their needs and particularities. The profile bio typological is one of the key elements to this practice which offers countless issues. The dance mainly requiring a number of endless hours of practice and refinement, although many do not want to understand how such an activity is "sports-income".

The ill-conditioned practitioner can not perform certain movements and sometimes you can buy an injuries' of single negligence. The use of movement as anti-anatomical comes to reinforce this condition. There is then a need to undertake specific activities, and make use of new technologies so that the practitioner will enjoy the activity with greater safety and quality, giving admirers of true performance art and artistic technique (SPARGER, 1970; THOMPSON; FLOYD, 1997).

The data provide information on which the realization of a leap "en dehors/outside" is more efficient in a position

"*en dedans/inside*". However, it is necessary that further research be undertaken so that we can say categorically that placement.

References

- BARBETTA, p. a. *Estatística aplicada as ciências sociais*. 5ed. Florianópolis: Ed. Da UFSC, 2002.
 BERTONI, I. G. *A dança e a evolução : o ballet e seu contexto teorico : programacao didatica*. Sao Paulo: Tanz do Brasil, 1992.
 BUSSELL, D. *Os Jovens Bailarinos*. London: Civilização, 1994.
 CAMINADA, E. *História da dança: evolução cultural*. Rio de Janeiro: Sprint, 1999.
 DECITRE, M. *Dansez la France* tome 1. Paris: Dumas, s.d.
 FARO, A. J.; SAMPAIO, L. P. *Dicionário de balé e dança*. Rio de Janeiro: Jorge Zahar, 1989.
 HALL, S. J. *Biomecânica básica*. 3. ed. Rio de Janeiro, Guanabara Koogan, 1997.
 KAPAMDJI, I. A. *Fisiologia Articular: Esquemas comentados de mecânica humana*. 5ª ed. São Paulo: Manole, 1980.
 LEAL, M. *A preparacao física na dança*. Rio de Janeiro: Sprint, 1998.
 MARQUES, I. A. *Ensino de dança hoje: textos e contextos*. 2.ed. São Paulo: Cortez, 2001.
 PAVLOVA, A. *Dicionário de Ballet*. Rio de Janeiro: Nórdica Ltda, 2000.
 POMPEU, F. A. M. S. *Manual de cineantropometria*. Rio de Janeiro: Sprint, 2004.
 SAMPAIO, F. *Ballet Essencial*. 2ªed. Rio de Janeiro : Sprint, 1999.
 SCHIEBELBEIN, F.; MORALES, P. J. *Flexibilidade em abdução para bailarinos iniciantes*. Monografia de conclusão de curso. Joinville: UNIVILLE, 2003.
 SPARGER, C. *Anatomy and Ballet*. 15º ed. London: A & C Black, 1970.
 THOMPSON, C. W.; FLOYD, R. T. *Manual de Cinésilogia Estrutural*. São Paulo: Manole, 1997.

R. Padre Antonio Vieira, 300 ap. 04 bl Julia
 América
 Joinville Santa Catarina/BR
 89204-150
 +554734619026
pedro.jorge@univille.br

PROFILE OF THE VERTICAL IMPULSION OF DANCERS PARTICIPANTS OF THE FESTIVAL OF DANCE OF JOINVILLE / SC

Introduction: Along the course of humanity's socio-cultural development, dance has always been present, being the reason why people are still reluctant to show not want to relate it to the term physical activity, which certainly is related to Physical Education. **Objective:** Conduct a process of diagnostic evaluation on the vertical profile of the push of dancers from different regions and countries, which were participants of the Joinville's Dance Festival, annually held in the city of Joinville, in Santa Catarina/BR. **Methods:** The sample consisted of 362 dancers from different regions. For data collection, in addition to body weight and height, was used to test Jump platform with the realization of the movement called Sauté (jump) "*en dehors/outside*" and "*en dedans/inside*" in the 1st position. The data were analyzed by descriptive statistics through SPSS 11.2. **Results:** Of the 362 dancers, 82 (22.65%) were males with average age 17.96 ± 4.24 and 280 (77.35%) females with a mean age of 15.62 ± 3.86 . The average overall thrust between jumps was 25.12 to 25.19 cm while for men the average was 31.03 to 31.63 * for women and 23.39 to 23.31 cm. * Significant value for the group between male and between genders. **Conclusions:** From the analysis of data could be determined that although perform the same gesture, the male group showed statistically significant differences in relation to female group. In the male group was still possible to see that there are differences between the *sauté* (jump) "*en dehors/outside*" and "*en dedans/inside*".

Key Words: Vertical Thrust, Dancers, Legs

PROFIL VERTICAL DE L'IMPULSION DES DANSEURS PARTICIPANTS DU FESTIVAL DE DANSE DE JOINVILLE/SC

Introduction: Dans le cadre de l'humanité développement socio-culturel, de la danse a toujours été présente, est la raison pour laquelle les gens hésitent encore à ne pas vouloir montrer à l'associer à terme l'activité physique, qui est certainement liée à l'éducation physique. **Objectif:** Mener un processus d'évaluation diagnostique sur le profil vertical de la poussée de danseurs provenant de différentes régions et pays, qui ont été les participants de la Joinville's Dance Festival, tenu chaque année dans la ville de Joinville, à Santa Catarina / BR. **Méthodes:** L'échantillon était constitué de 362 danseurs venus de différentes régions. Pour la collecte de données, en plus de poids et la hauteur, a été utilisé pour tester la plate-forme Aller à la réalisation du mouvement appelé sauter "*en dehors*" et "*en dedans*" dans la 1ère. Les données ont été analysées par des statistiques descriptives par SPSS 11.2. **Résultats:** Sur les 362 danseurs, 82 (22,65%) étaient des hommes avec une moyenne d'âge $17,96 \pm 4,24$ et 280 (77,35%) femmes avec un âge moyen de $15,62 \pm 3,86$. La moyenne globale entre les sauts de poussée a été de 25.12 à 25.19 cm pour les hommes alors que la moyenne était de 31.03 à 31.63cm* pour les femmes et de 23,39 à 23,31 cm. *Une valeur significative pour le groupe entre les hommes et entre les sexes. **Conclusions:** À partir de données pourrait être déterminé que, même si effectuer la même geste, le groupe des hommes a montré des différences statistiquement significatives en ce qui concerne les femmes du groupe. Dans le groupe des hommes est encore possible de voir qu'il existe des différences entre les faire sauter "*en dehors*" et "*en dedans*".

Mots clés: La Poussée Verticale, Des Danseurs, Des Jambes

PERFIL DE LA IMPULSIÓN VERTICAL DE LOS BAILARINES PARTICIPANTES DEL FESTIVAL DE DANZA DE JOINVILLE/SC

Introducción: La danza ha sido siempre, de una manera u otra, presente la historia de la humanidad. Es posible entender que el movimiento cultural que surgió siempre se vincula a una forma de ritmo y movimientos que se exploran artísticamente. Sin embargo, usted puede encontrar la danza como una forma de actividad física es para la relajación, *fitness*, la salud o la estética. **Objetivo:** Determinar el perfil de la orientación vertical de los bailarines que participan en el festival de danza de Joinville/SC. **Métodos:** La muestra consistió de 362 bailarines de diferentes regiones. Para la recopilación de datos, además de peso corporal y la altura, se ha utilizado la plataforma para poner a prueba Saltar a la realización del movimiento de *Sauté* (salto) "*en dedans* (dentro) y "*en dehors* (fuera) en la 1ª posición. Los datos fueron analizados por estadística descriptiva a través de SPSS 11.2. **Resultados:** De los 362 bailarines, 82 (22,65%) eran hombres con edad media $17,96 \pm 4,24$ y 280 (77,35%)

mujeres con una edad media de $15,62 \pm 3,86$. El promedio de orientación general se salta entre 25,12 a 25,19 cm, mientras que para los hombres la media fue de 31,03 a 31,63 cm* para las mujeres y 23,39 a 23,31 cm. *Un valor significativo para el grupo entre los hombres y entre los géneros. **Conclusiones:** Desde el análisis de los datos se pudo determinar que a pesar de realizar el mismo gesto, el grupo masculino mostró diferencias estadísticamente significativas en relación con el grupo femenino. En el grupo masculino sigue siendo posible ver que hay diferencias entre los *Sauté* en *en dehors* en relación al *en dedans*.

Palabras Clave: Empuje Vertical, Bailarines, Piernas

PERFIL DA IMPULSÃO VERTICAL DE BAILARINOS PARTICIPANTES DO FESTIVAL DE DANÇA DE JOINVILLE/SC

Introdução: A dança sempre esteve, de uma maneira ou de outra, presente nos períodos históricos da humanidade. É possível, então, entender que os movimentos culturais surgidos sempre estão ligados a uma forma de ritmo e movimentos que são explorados artisticamente. Entretanto, é possível encontrar a dança como uma forma de atividade física seja para relaxamento, condicionamento físico, saúde ou estética. **Objetivo:** Determinar o perfil da impulsão vertical dos bailarinos participantes do festival de dança de Joinville/SC. **Métodos:** A amostra foi composta de 362 bailarinos de diferentes regiões. Para a coleta de dados, além de peso corporal e estatura, foi utilizado a plataforma de *Jump test* com a realização do movimento denominado *sauté* (salto) em *en dehors* e *en dedans* na 1ª posição. Os dados obtidos foram analisados pela estatística descritiva através do programa SPSS 11.2. **Resultados:** Dos 362 bailarinos, 82 (22,65%) eram do sexo masculino com idade média $17,96 \pm 4,24$ e 280 (77,35%) do sexo feminino com idade média de $15,62 \pm 3,86$. A média geral de impulsão entre os saltos foi 25,12 para 25,19 cm sendo que para os homens a média foi 31,03 para 31,63* e para as mulheres 23,39 para 23,31 cm. *Valor significativo para entre o grupo masculino e entre os gêneros. **Conclusões:** A partir da análise dos dados obtidos foi possível determinar que, embora realize o mesmo gesto, o grupo masculino apresentou diferenças estatisticamente significativas em relação ao grupo feminino. No grupo masculino ainda foi possível perceber que existem diferenças entre o *sauté en dehors* em relação ao *en dedans*.

Palavras Chave: Impulsão Vertical, Bailarinos, Membros Inferiores