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**ABSTRACT.** Introduction: Institutionalized children are at risk in terms of their integration into society, as the lack of educational and financial resources hinders the development of their cognitive and non-cognitive skills. Sports activities contribute to the development of interests and influence the general education of the children, which can be stimulated through music and dance the most representative artistic field that allows the psychomotor development of children. **Objective:** The aim of this study is to ascertain the differences between the institutionalized children and the dancers who come from families in terms of their interests and values. Materials and Methods: Fifty-five children aged 11-12 participated in the study, including 30 children in foster care who do not participate in organized extracurricular physical activities and 25 performance dancers who come from organized families. Results: The interest in the various activities in which children are asked to participate is more obvious in dancers, particularly from an artistic and social point of view, and children in foster care are preoccupied with free time and social relations, with authority being the least valued. Conclusions: The influence of dance on children's development can be noticed in the results of the psychological tests assessing their interests and values, which suggest that dancers are more interested in *extracurricular activities* compared to children in foster care centers and they are more concerned about their future employment situation.

Keywords. Dance, interests, values, institutionalized children.

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REZUMAT. Studiu comparativ privind interesele si valorile copiilor institutionalizati si ale copiilor dansatori care provin din familii. Introducere: Copiii institutionalizati reprezintă o categorie cu factor de risc din punct de vedere al integrării în societate, lipsa resurselor educationale si financiare împiedicând dezvoltarea abilităților cognitive și noncognitive ale acestora. Activitătile sportive contribuie la formarea intereselor si influentează educatia generală a copiilor, care poate fi stimulată prin intermediul muzicii si dansului acesta fiind cel mai reprezentativ domeniu artistic ce permite dezvoltarea psihomotrică a copiilor. **Obiectiv:** Scopul acestui studiu este de a stabili diferentele dintre copiii instituționalizați și dansatorii proveniți din familii, din punct de vedere al intereselor și valorilor acestora. Materiale și Metode: La studiu au participat 55 de copii cu vârsta cuprinsă între 11-12 ani, incluzând 30 de copii din centre de plasament care nu participă la activități fizice extrașcolare organizate și 25 de dansatori de performanță, proveniți din familii organizate. Rezultate: Interesul pentru diversele activități la care sunt solicitați copiii este mai bine evidențiat la dansatori, în special din punct de vedere artistic și social, iar copiii din centrele de plasament sunt preocupați de timp liber și de relațiile sociale, cel mai putin apreciind autoritatea. **Concluzii:** Influenta dansului asupra dezvoltării copiilor poate fi observată în urma rezultatelor testelor psihologice de evaluare a intereselor si valorilor, care sugerează faptul că dansatorii sunt mai interesati de alte activități desfășurate în afara orelor de școală comparativ cu copiii din centre, și sunt mai preocupați de viitoarea situație profesională.

Cuvinte cheie: Dans, interese, valori, copii instituționalizați.

#### Introduction

Through their specific content, sports activities influence the path of the general education from a motor, intellectual, aesthetic, and emotional perspective (Gevat et al., 2012), contributing to the development of interests and motivation in order to achieve good results in other disciplines and areas, as well as to the biopsychic development of the child (Popa et al., 2013). Extracurricular physical activities improve the quality of life and positively influence the physical development and integration into society of children (Tomescu, Stănescu & Aivaz, 2022). The values each person is guided by in life are correlated with his/ her state of well-being, a very important role pertaining to the psychological processes (mental health), needs (relationships, autonomy, and skills) and ways of acting in order to achieve results according to his/her personal values and interests (Raymond I. J. & Raymond C. M., 2019). According to a study involving 85 physical education teachers, aesthetic movements are appreciated

by students, among their favorite subjects being gymnastics, an artistic sport included in the school curriculum (Stănescu, 2013). The activities related to music and art are important milestones for children's education, as they stimulate cognitive, emotional, psychomotor, and social development. Only the children who feel free and secure develop their creativity and the necessary skills to satisfy their needs and interests effectively (Benic et al., 2017). There is a connection between the personality type and the personal, social, and economic interests (Funder, 2001), and the relationships between these are reflected in children's school situation and their motivation to study.

A study carried out by Jodl et al. (2001) with the participation of 444 7th grade children from parent families shows that parents' values in the academic or sports field are directly or indirectly transmitted to their children, who end up having the same interests and professional vision as their parents. Young people's behavior towards curricular or leisure activities often reflects the adults' aspirations. According to this study, the inclination for sports appears to come from the father, whereas the academic motivation is maintained by the mother. Children may also inherit their parents' occupational desires, as well as their parents' non-cognitive skills and dominant types of intelligence.

Institutionalized children are at risk in terms of their integration into society. Educational and social exclusion is of interest to specialists, as it is a phenomenon that occurs in adolescence, a period of change that affects the behavior, psychological orientation, values and interests, as well as social interaction (Tudor et al., 2020). Frequently, institutionalized children want to be involved in various activities, but they give up after a very short time. Selfdetermination depends on every individual's level of motivation, and it can be intrinsic (it is interest-based), or autonomous extrinsic (it presumes the importance of a thing or of an activity for the individual), both of which contributing to achieving school performance or performance in the workplace, as well as to the well-being and the satisfaction that a person feels as a result of performing tasks or achieving good results (Gagne & Deci, 2005). Limited educational and financial resources hinder the development of disadvantaged children's cognitive and non-cognitive skills. Thus, programs for the educational and social integration of children who are at risk have started to be implemented at national level in Romania. Extracurricular activities, such as sports games, music, dance, painting, etc. have a positive influence on the educational, social, and emotional development of young people (Martin & Dowson, 2009). The subjects' interest in undergoing training can be maintained through activities, carried out on a musical background, which are an outlet for their energy and a provider of energy, and which offer satisfaction and a good mood (Teodorescu & Bota, 2008).

Specialists in the field consider necessary the instruction on the expressive aspects of motricity, dance being one of the sports and artistic activities through which body expression and musicality are stimulated (Manos, 2016). It is the most representative artistic field that allows the development of creativity, originality, sociability, and aesthetic posture through movement, therefore the inclusion of dance in the school curriculum could bring benefits in terms of children's personality development (Macovei et al., 2013).

Professional dancers have highly developed emotional intelligence, especially those who have been dancing from an early age, and the stimulation of this type of intelligence through dance implies the development of multiple interests in other activities and the achievement of professional goals (De Las Heras-Fernandez et al., 2020). The dance stimulates the noncognitive skills, and those who are practicing this sport have better developed artistic and social skills than those who do not carry out physical activities during their free time (Tomescu et al., 2021).

This comparative study aims to establish the differences between the institutionalized children and the dancers who come from families, in terms of their interests and values, the test results showing the efficiency of dance in terms of children's motivation and interest in school and extracurricular activities.

### Materials and Methods

Fifty-five children aged 11-12 participated in the study, including 30 children in foster care who do not participate in organized extracurricular physical activities and 25 performance dancers who come from organized families. The inclusion of the institutionalized children in the target group was done after consultations with the specialized staff of the foster care centers from which they came, who helped by administering the assessment tests.

For this study we have accessed the *PEDb Platform*, a software app for assessing developmental and mental health and career counselling, through which children's interests and values can be assessed.

The Interest Assessment Questionnaire consisted of six scales which set out the preferences for specific areas of activity or knowledge. Children were able to respond to the statements in the questionnaire by circling an option from 0 to 2 (0 - if they disliked the activity, 1 – they were indifferent, 2 - they liked the activity). The maximum score for each dimension was 20, meaning a 100% level of influence (4=20% - 20=100%).

SCALE	DESCRIPTION				
Social interests (S)	Activities which involve interpersonal relations, focus				
	on teamwork and less on independent activities				
Entrepreneurial interests (E)	Initiative, prefers to influence other persons, to make				
	decisions, manage, and take risks				
Artistic interests (A)	Creativity, expressiveness; prefers to change things				
	and apply new ideas, and less to follow rules				
Investigative interests (I)	Attraction to research, investigation, exploration,				
	understanding things and situations in depth,				
	thoroughness				
Realistic interests (R)	Tendency to manipulate objects and tools, physical				
	activities; attraction to working with plants, animals,				
	or objects, and less with people				
Conventional interests (C)	Inclination towards well-organized activities with				
	precise rules, carried out according to procedures,				
	requiring systematic knowledge of data or objects				

Table 1. Description of the Interest Assessment Questionnaire's scales

The Value Assessment Questionnaire consisted of nine scales and it highlighted the child's core beliefs with regard to the activities and relationships within the society. The statements in the questionnaire were descriptions of certain people, and the subjects were asked to rate how much this model resembles themselves by choosing from the following options: 5 - very much like me, 4 - much like me, 3 - somewhat like me, 2 - less like me, 1 - very little like me. The maximum score obtained for each dimension was 20, meaning a 100% level of influence (4=20% - 20=100%).

SCALE	DESCRIPTION
Skills Development (SD)	The importance of developing and harnessing
	interests, skills, and competences
Authority (A)	Ability to lead, make decisions, take responsibility;
	desire to have influence and to dominate other people
Challenge (CH)	Involves risky and complex activities
Safety (S)	Important to know the risks, the factors involved, the
	steps to follow in an activity
Autonomy (AUT)	Freedom and diversity
Rule Following (RF)	Organizing and carrying out activities according to
	the rules set by others

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SCALE	DESCRIPTION
Free Time (FT)	Systematic pursuit of recreational activities and
	passions
Professional Recognition (PR)	Entails competence in the workplace or in one's field
	of activity, through which one earns respect and
	admiration from those around them
Social Relations (SR)	Desire to build and develop harmonious relationships
	with those around them, without competitiveness

The comparative study of the two groups (children in foster care and dancers) aimed at interpreting the average score of the tests' variables so as to assess children's interests and values in terms of the differences and correlations between them, as well as analyzing the statistical connections between the variables using the principal component analysis (PCA) method. This descriptive method highlights the connections and associations between the numerical variables.

### **Results and discussions**

*Interests.* The statistical analysis for this test was performed in relation to all the stipulated variables: social, entrepreneurial, artistic, investigative, realistic, and conventional interests. The following table describes the average/ mean score of the two assessed categories and the standard deviation for each type of interest.

Cat	egory	S	E	Α	I	R	С
	Mean	13.60	11.03	11.40	10.20	13.07	10.20
сс	Ν	30	30	30	30	30	30
	Std. Dev.	3.909	5.014	5.399	4.582	4.705	5.027
	Mean	18.32	16.16	19.12	15.12	16.64	14.76
d	N	25	25	25	25	25	25
	Std. Dev.	1.773	2.779	1.130	3.046	2.737	3.479
	Mean	15.75	13.36	14.91	12.44	14.69	12.27
Total	Ν	55	55	55	55	55	55
	Std. Dev.	3.903	4.855	5.592	4.638	4.294	4.920

Table 3. Average/mean score of the interest assessment test's variables

Note: *S* - Social; *E* - Entrepreneurial; *A* – Artistic; *I* – Investigative; *R* – Realistic; *C* – Conventional; *cc* – children in foster care; *d* – dancers; *N* – Number; *Std. Dev.* – Standard Deviation

Dancers (d) scored higher on all variables, meaning that they were more preoccupied with the activities carried out for the benefit of their professional development. From an artistic point of view, they scored an average of 19.12, and the children in the foster care (cc) only 11.40. The closest values were for realistic interests, where the mean value for dancers and institutionalized children was 16.64 and 13.07 respectively.



Graph 1. Graphical representation of the results - Interests

The interest in the various activities in which children are asked to participate is more obvious in dancers, particularly from an artistic and social point of view, and the investigative and conventional interests are the areas for which the children in both categories are least inclined.

Variables	Chi-Square	р	Phi
Social	30.521	.004	.745
Entrepreneurial	28.870	.011	.725
Artistic	32.108	.001	.764
Investigative	29.360	.031	.731
Realistic	21.062	.100	.619
Conventional	23.271	.226	.650

 Table 4. Pearson's Coefficients - Interests

According to Table 4, the differences are significant for most variables, as p < 0.05. The largest differences were recorded with regard to artistic interests, where  $\chi^2$  (3) = 32.108, p < 0.001 and social,  $\chi^2$  (3) = 30.521, p < 0.004. Dancers also performed significantly better with regard to entrepreneurial and investigative interests, with a value of p < 0.011, respectively 0.031. The average scores for realistic and conventional interests were also higher for the dancers, however, the differences were not as significant as the ones mentioned.

Variables	S	Е	Α	I	R	С
Social	1.000	.556	.716	.464	.486	.340
Entrepreneurial	.556	1.000	.569	.530	.493	.556
Artistic	.716	.569	1.000	.493	.446	.363
Investigative	.464	.530	.493	1.000	.647	.577
Realistic	.486	.493	.446	.647	1.000	.718
Conventional	.340	.556	.363	.577	.718	1.000

Table 5. Correlation matrix - Interests

The *Correlation Matrix* describes the correlations between the variables. There were no very strong correlations, as no values above the 0.8 limit were recorded. There were, however, correlations between 0.6 - 0.8, representing strong correlations. Some experts also consider correlations that exceed the value of 0.5 to be strong correlations. Table 5 illustrates the fact that social interests were strongly correlated with entrepreneurial (0.556) and, especially, artistic (0.716) interests, and that realistic interests had the most significant correlations with conventional (0.718) and investigative (0.647) interests. The weakest correlations were between conventional and social (0.340) and artistic (0.363) interests. The variable with the most correlations was the entrepreneurial interests. A person who has initiative, is decisive and risk-taking also has social, artistic, investigative and conventional skills, which means that he/she enjoys working with people, has vision and imagination, likes to investigate and find out as much information as possible, and can organize his/her work so as to get what he/she wants.

Note: S - Social; E - Entrepreneurial; A – Artistic; I – Investigative; R – Realistic; C – Conventional

According to Diagram 1, the dancers scored better mean values, their results showing very strong connections. This aspect is indicated by their presence on the right side of the vertical axis. The children in foster care (cc) were predominantly positioned to the left of the axis, with remarkable differences between their results taking into account their disordered arrangement around the axes.



Diagram 1. Distribution of the children from the two groups, by interests

*Values.* The statistical analysis of the value assessment test was carried out based on several variables: skills development, authority, challenge, safety, autonomy, rule-following, free time, professional recognition, social relations. Table 6 suggests higher mean scores on all variables for the dancers, with the closest values being recorded for safety (15.23 for the institutionalized children and 15.64 for the dancers) and rule-following (15.27, respectively 15.44). In terms of social relations, the mean value for the dancers (d) is much higher than the one for children in foster care (cc), with values of 18.16, respectively 15.73, and the preoccupation for skills development is higher for those who were raised in families.

Ca	itegory	SD	Α	СН	S	AUT	RF	FT	PR	SR
сс	Mean	15.57	13.80	15.57	15.23	15.53	15.27	15.87	14.43	15.73
	Ν	30	30	30	30	30	30	30	30	30
	Std. Dev.	3.298	3.336	2.473	2.897	2.991	2.363	2.763	3.626	3.732
d	Mean	18.24	16.04	17.16	15.64	18.16	15.44	18.24	18.36	18.16
	Ν	25	25	25	25	25	25	25	25	25
	Std. Dev.	1.964	2.475	2.154	3.569	1.434	3.216	1.451	1.680	2.173
Total	Mean	16.78	14.82	16.29	15.42	16.73	15.35	16.95	16.22	16.84
	Ν	55	55	55	55	55	55	55	55	55
	Std. Dev.	3.059	3.157	2.447	3.195	2.732	2.757	2.542	3.494	3.326

**Table 6.** The mean score of the value assessment test's variables

Note: *SD* – Skills Development; *A* – Authority; *CH* – Challenge; *S* – Safety; *AUT* – Autonomy; *RF* – Rule Following; *FT* – Free Time; *PR* – Professional Recognition; *SR* – Social Relations; *cc* – children in foster care; *d* – dancers; *N* – Number; *Std. Dev.* – Standard Deviation

According to Table 6, compared to the dancers (d), the children in foster care (cc) do not have such well-established values. The differences are visible in graph 2, which highlights the better results obtained by the dancers on all variables.



Graph 2. Graphical representation of the results - Values

The differences between the two categories of children were not as obvious as in the case of interests. However, the dancers scored higher, the most important issues for them being professional recognition, free time, skills development, autonomy, and social relations. Children in foster care were also preoccupied with free time and social relations, with authority being the least valued.

Variables	Chi-Square	р	Phi
Skills development	16.264	.092	.544
Authority	13.994	.301	.504
Challenge	7.387	.597	.366
Safety	18.375	.144	.578
Autonomy	16.827	.113	.553
Rule-following	11.373	.413	.455
Free time	13.969	.174	.504
Professional recognition	26.239	.010	.691
Social relations	19.033	.040	.588

Table 7. Pearson's Coefficients - Values

The most significant differences were noticed for professional recognition ( $\chi^2$  (3) = 26.239, p < 0.010) and social relations ( $\chi^2$  (3) = 19.033, p < 0.040). This aspect highlighted the low interest of children in foster care in education and professional development, whereas dancers were preoccupied with school results and were aware of the need for a stable job in the future. The social nature of dance was also emphasized in this test, with interpersonal relations and communication with those around them being of greater importance to the dancers.

Variables	SD	А	СН	S	AUT	RF	FT	PR	SR
Skills development	1.000	.295	.523	.057	.618	.255	.377	.543	.595
Authority	.295	1.000	.381	.206	.379	010	.220	.356	.322
Challenge	.523	.381	1.000	042	.527	.001	.574	.350	.545
Safety	.057	.206	042	1.000	.109	.425	.308	.285	.106
Autonomy	.618	.379	.527	.109	1.000	.136	.491	.619	.684
Rule-following	.255	010	.001	.425	.136	1.000	.198	.107	.241

Table 8. Correlation matrix - Values

Variables	SD	Α	СН	S	AUT	RF	FT	PR	SR
Free time	.377	.220	.574	.308	.491	.198	1.000	.404	.481
Professional recognition	.543	.356	.350	.285	.619	.107	.404	1.000	.456
Social relations	.595	.322	.545	.106	.684	.241	.481	.456	1.00

Note: *SD* – Skills Development; *A* – Authority; *CH* – Challenge; *S* – Safety; *AUT* – Autonomy; *RF* – Rule Following; *FT* – Free Time; *PR* – Professional Recognition; *SR* – Social Relations

Table 8 describes the correlations between the variables, with the values between 0.5 - 0.8 representing strong connections. The connection between autonomy and skills development (0.618), professional recognition (0.619) and social relations (0.684) is highlighted. These aspects are influencing each other. Professional recognition implies the desire to progress, to develop and to be independent, as the relations with those around them depend on this. Safety and rule-following do not correlate with any other variable, which means that the lack of self-confidence limits other values or activities, and rule-breaking slows down the development of other characteristics stipulated in the test.



Diagram 2. Distribution of children in the two groups by set of values

Diagram 2 suggests the creation of the two clusters - the dancers (d) are grouped on the right of the vertical axis, and children in foster care (cc) are predominantly positioned on the left. There are, however, fluctuations in terms of the correlation of the dancer children's responses to the value assessment test, therefore their distribution is not homogeneous.

### Conclusions

The influence of dance on children's development can be seen in the results of the interest assessment test, where dancers obtained the highest scores for artistic and social interests. They are also more interested in other extracurricular activities compared to the children in foster care and have better established values and principles. This may be due to the environment they come from, as well as to the extracurricular activities carried out during their free time. Whereas dancers are preoccupied with their future career prospects and social relations, institutionalized children place the most emphasis on their free time, and the least on authority.

We believe that these differences are due to both their living environment and the emotional state. Extracurricular activities are important for improving children's psychological and emotional state, and art is a method recommended by specialists for reducing stress and integrating into society. Dance is a varied and complex artistic sport, which enables children's psychomotor development. We believe that the implementation of a dance program for the development of cognitive and non-cognitive skills can improve children's school situation by improving their moral values and increasing their interest in curricular and social, free time activities.

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