

THE KNOWLEDGE AND OPINION OF THE FACULTY OF KINESIOLOGY STUDENTS ON ARTISTIC GYMNASTICS

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Abstract

The purpose of this research was to find out level of theoretical knowledge and motor skills in artistic gymnastics of the Faculty of Kinesiology, University of Zagreb students at the beginning of 2nd year of study. Research was conducted, in total on 175 male and female students. Students have filled a questionnaire about the opinion of their theoretical knowledge and motor skill in artistic gymnastics. Statistica 12 software was used for data analysis. With frequency of questions and claims from 1 to 5, it was determined that the level of theoretical knowledge was very high, more than 85%, and that the level of motor knowledge was low, because the grade for basic gymnastics elements was 2. Students agree that artistic gymnastic has an important role in curriculum in primary and high schools in Croatia.

Key words: *gymnastics elements, motor skills, knowledge, questionnaire, curriculum*

Introduction

From the standpoint of the science of kinesiology, artistic gymnastics can be briefly defined as a sport branch in which aesthetically designed acyclic movement structure are evaluated according to previously prescribed convention of movement defined by rules for evaluation proposed by the International Gymnastics Organization (Živčić, 2000). Gymnastics is divided into professional and recreational sport. Faculty of Kinesiology curriculum contains artistic gymnastics as a compulsory subject on the 2nd year of study. Aim of the subject is to educate students about artistic gymnastics for work in primary and high schools as a physical education teacher. As a basic sport, gymnastics has an important place in the curriculum of primary and high school. Gymnastics content appears in the curriculum in each year of education in primary and high schools (Vican & Milanović, Litre, 2006). The aim of the application of general gymnastic content is versatile development, adoption of motion habits and improving health status; or to overcome basic motor skills and abilities which are useful in everyday life (Živčić Marković & Krističević, 2016). Knowledge of gymnastics can also be included in a variety of recreational programs in extracurricular and free time activities. Although a basic and one of most important supports for healthy growth and maturation, because of problems such as inadequate facilities and lack of reconciliation in schools, it is also one that is most difficult to implement. For this reason it happens that children during attendance of primary and high schools do not acquire curriculum prescribed theoretical and practical knowledge about gymnastics. This situation is not specific only for Croatia, but the same problem also occurs in Slovenian schools. Some authors (Novak et al., 2008.) have found that teachers carried out only about 40 percent of gymnastics curriculum content, with least in high school and more in the third cycle of primary school (Bučar et al., 2010). The aim of this research is to find out the level of theoretical knowledge and motor skills in artistic gymnastics of the Faculty of Kinesiology, University of Zagreb, students at the beginning of the 2nd year of study.

Methods

Research was conducted on a sample of 176 students of second year of the Faculty of Kinesiology, University of Zagreb. 29,30% were female and 70,7% male students, before the start of college (Artistic Gymnastics I). Answers on opinion questions ranged from 0 to 5, considering the importance of the question. Number 0 means that students do not have an opinion. Number 1 means that students do not agree with the claim. Number 2 means that students partially agree with the claim. Number 3 means that students neither agree nor disagree with the claim. Number 4 means that students agree with the claim. Number 5 means that students completely agree with the claim. Variables of opinion questions were: artistic gymnastics in curriculum for primary school has an important role. (2.2.1.), artistic gymnastics in curriculum for high school has an important role. (2.2.2.), theoretical knowledge of artistic gymnastic has an impact on successful performance of elements. (2.2.3.), gymnastics has scared me. (2.2.4.), I am afraid of height (2.2.5.), I am afraid of speed (2.2.6.), I am afraid of handstand (2.2.7.), learning of gymnastic elements develops a sense of mutual assistance (2.2.8.), Artistic gymnastics develops coordination (2.2.9.), artistic gymnastics has a positive influence on psychomotor development of children and youth (2.2.10.), artistic gymnastics develops perseverance (2.2.11.), artistic gymnastics develops diligence (2.2.12.), artistic gymnastics develops determination (2.2.13.), artistic gymnastics develops creativity (2.2.14.), artistic

gymnastics develops independence (2.2.15.), artistic gymnastics develops aggressiveness (2.2.16.), artistic gymnastics develops precision (2.2.17.), artistic gymnastics develops self-confidence (2.2.18.), artistic gymnastics has an influence on correct posture (2.2.19.), how do you grade the importance of artistic gymnastics on motor development (2.2.20.), how do you grade the importance of athletics on motor development (2.2.21.), how do you grade the importance of sports games on motor development (2.2.22.). Variables of motor abilities were basic acrobatic elements: KOLNAP (forward roll), KOLNTR (backward roll), KNTPN (backward roll with extended legs), SVJ (candlestick), ZVD (cartwheel right), ZVL (cartwheel left), STOJ (handstand), TOTAL (total motor knowledge).

Statistica 12 was used for analysis of data. Basic descriptive parameters, and frequencies were calculated for all variables.

Results

Table 1 displays frequencies of opinion questions where students agree with importance of artistic gymnastics in the curriculum of primary and high school.

Table 1: Frequency table of opinion questions

Number of question	0	1	2	3	4	5
2.2.1.	0,64%	5,10%	6,37%	26,11%	19,75%	42,04%
2.2.2.	0,64%	7,01%	5,10%	27,39%	26,75%	33,12%
2.2.3.	1,91%	3,82%	10,19%	28,66%	31,85%	23,57%
2.2.4.	0,64%	27,39%	25,48%	21,02%	14,65%	10,83%
2.2.5.	0,00%	45,22%	15,92%	16,56%	11,46%	10,83%
2.2.6.	0,00%	56,69%	21,66%	11,46%	5,10%	5,10%
2.2.7.	0,64%	60,51%	12,74%	13,38%	6,37%	6,37%
2.2.8.	0,64%	9,55%	10,83%	33,76%	29,30%	15,92%
2.2.9.	0,00%	2,55%	4,46%	12,74%	30,57%	49,68%
2.2.10.	0,00%	1,27%	3,82%	8,28%	31,85%	54,78%
2.2.11.	0,00%	1,27%	1,27%	12,74%	31,21%	53,50%
2.2.12.	0,00%	1,27%	1,91%	12,10%	31,85%	52,87%
2.2.13.	0,00%	2,55%	0,64%	10,19%	28,63%	57,96%
2.2.14.	0,00%	3,82%	3,18%	14,65%	29,94%	48,41%
2.2.15.	0,00%	3,18%	3,18%	21,02%	34,39%	38,22%
2.2.16.	0,00%	40,76%	28,03%	16,56%	7,01%	7,64%
2.2.17.	0,00%	7,01%	9,55%	19,75%	25,48%	38,22%
2.2.18.	1,27%	2,55%	2,55%	10,83%	32,48%	50,32%
2.2.19.	0,64%	1,91%	3,18%	12,10%	22,29%	59,87%
2.2.20.	1,91%	1,27%	1,27%	4,46%	35,03%	56,05%
2.2.21.	0,00%	1,91%	1,27%	12,10%	42,68%	42,04%
2.2.22.	0,00%	3,18%	1,91%	20,38%	37,58%	36,94%

Table 2 displays basic descriptive parameters of acrobatic elements. Total grade of KOLNAP, KOLNTR, KNTPN, SVJ, ZVD, ZVL, STOJ was 2.

Table 2: Descriptive statistics of acrobatic elements

Variable	Descriptive Statistics: Acrobatic elements				
	Valid N	Mean	Minimum	Maximum	Std.Dev.
KOLNAP	157	2,28	1	5	1,04
KOLNTR	157	2,22	1	4,66	1,01
KNTPN	157	1,90	1	5	1,04
SVJ	157	1,83	1	4,66	0,89
ZVD	157	2,04	1	5	1,09
ZVL	157	2,07	1	5	1,07
STOJ	157	2,19	1	4,66	1,02
TOTAL	157	2,07	1	4,66	0,71

Discussion

Before college enrollment, 94,90% of students were active in some sport activities, 56,68% of them were involved in professional sports and 21,64% in recreational. 80,89% of students do not agree with appropriateness of entrance examination of the college. 55,41% of students did not acquire theoretical knowledge about artistic gymnastics in primary schools, and 50,95% in high school. More than 85% of students know how to execute several acrobatic elements on vault, uneven and parallel bars, horizontal bar, still rings and balance beam.

42,04% of students completely agree that gymnastics has an important role in primary schools, and 33,12% completely agree that gymnastics has an important role in the curriculum for high schools.

Descriptive parameters of measured variables about student motor knowledge have shown that the total grade of basic gymnastic elements was 2. 80% of students have declared that they know how to execute several elements on apparatus, but it has been established that their score of execution of basic elements was very low. Based on this information, we can conclude that students do not have knowledge about proper execution of individual elements. Difference between theoretical and practical knowledge of students lies in the fact that a proper execution is based on understanding of theoretical execution of the technique.

In answers to questions related to fear of gymnastics, height, speed and handstand, highest percentages were recorded in the claim "I disagree", which indicates that students do not feel fear in regard to gymnastics. Reason for that is that 56,68% of students were involved in professional sports. Students completely agree that gymnastics develops positive personality characteristics, and they completely disagree that gymnastics develops aggressiveness. 56,05% of students completely agree with the claim that gymnastics is important for motor development. It is known that gymnastics completely develops coordination of motion, strength, flexibility and balance, which are neglected in the daily life (Zajec, 1992).

Conclusion

From acquired data, it can be concluded that students of second year of Faculty of Kinesiology have weak motor knowledge, which is not the case with theoretical understanding of execution of gymnastic elements on apparatus. Based on that information, it can be concluded that students do not have an understanding of proper execution of individual elements. Difference between theoretical and practical knowledge of a student lies in the fact that proper execution of elements is based on understanding of theoretical execution of the technique. Likewise, students have emphasized the importance of implementation of elements of artistic gymnastics in primary and high schools. In regard to cognitive personality characteristics, students claim that gymnastics does not develop aggressiveness, but encourages mutual cooperation.

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