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Parent's motivations on sports participation of their children with Down's syndrome in Russia



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ABSTRACT

Background: Regular physical exercises can improve physical and mental health and especially important for individuals with extensive disorders, such as Down's syndrome. For the success of rehabilitation, it is necessary to involve the parents of children with Down's syndrome in the process. By understanding the parents' motivation, a successful training program will be possible.

Aim: This study is aimed to determine the importance degree of various parents' motivations in sports participation of their children with Down's syndrome.

Method: A survey was conducted in 137 families from 22 regions of Russia in November 2016. The survey included 23 motivational statements and parents were asked to rate the importance of each statement on a scale of 1 to 10. The results were divided into 5 groups based on the importance of the motivational statements: "absolutely

important", "important", "difficult to say", "not important", and "absolutely not important". Statistical analysis was done using average values method.

Result: Parents considered the following reasons to let their children participate in sports as "absolutely important": to implement healthy and active lifestyle; to develop interaction skills in a group, independence, and dexterity; to improve the skills of large-scale body movements and coordination of movements; and to encourage socialization. None of the motivational statements were considered as "absolutely not important".

Conclusion: This study found that parents considered the majority of the motivational statements as important. Considering the parents' motives will encourage the sports participation of children with Down's syndrome.

Keywords: children, Down's syndrome, parents, sports participation, motivation

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INTRODUCTION

Regular physical exercises can improve health and help in body training.^{1,2} The effects are especially valuable in pathological conditions.³ Regular adequate muscle activity intensifies anabolic processes, increases enzymes synthesis, and boosts the immune system. These effects will increase the possibility to normalize initial pathological processes⁴ and to increase the therapeutic effect of drugs.⁵ Also, active exercises may restore mental balance and self-confidence in various conditions of the patients.⁶ Sports, especially sports games, are strong means of not only rehabilitation but also socialization.⁷ It is especially important to increase physical and mental health in children with various pathological conditions.⁸ Therefore, sports games become more often the means for social-cultural rehabilitation and to increase mental and physical capabilities in children with various functional limitations.⁹ Considering the benefits, sports games have started to be actively applied in the rehabilitation system of children with complicated pathology and extensive disorders, including Down's syndrome.¹⁰

For the success of rehabilitation, it is necessary to involve the parents of children with Down's syndrome in the process.^{11,12} Parents can be the

primary stimulus to activity, and children can learn by imitating them. In this respect, parents' motivation for their children's participation in training creates maximum effect for their development and future sports successes.¹³ The involvement of parents in the process is the main factors of conducting successful training in children with Down's syndrome, as it determines the regularity of their children's attendance in training.¹⁴ Thus, it is very important to understand the parents' motivation in choosing sports as activities that directed towards facilitating their children's development.¹⁵ The trainers for children with Down's syndrome should orientate in the parents' motivation. It can help in encouraging the parents towards regular attendance of their children's training and sports program, and in the children rehabilitation itself.

This study is aimed to determine the importance degree of various parents' motivations on sports participation of their children with Down's syndrome.

METHODS

This research has been approved by the local Ethics Committee of the Russian State Social University in May, 25th, 2016 (Record No. 5). All the subjects

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enrolled in the research have given written informed consent on their participation.

We conducted a survey of 137 families having children with Down's syndrome from 22 regions of Russia: Moscow, Rostov, Bryansk, Leningrad, Novosibirsk, Kaliningrad, Belgorod, Ryazan, Irkutsk, Kaluga, Volgograd, Samara, Chelyabinsk, and Penza regions; Chuvashia and Udmurtia republics; Altai, Perm, and Stavropol territories.

A questionnaire was designed to determine the importance degree of various motivations on sports participation of children with Down's syndrome in Russia. The respondents were asked to rate the importance of each statement based on the scale of 1 to 10 (1–lowest score, 10– highest score). The responses were divided into 5 groups based on the importance of the motivational statements: “absolutely important” (scale 9-10), “important” (scale 7-8), “difficult to say” (scale 5-6), “not important” (scale 3-4), and “absolutely not important” (scale 1-2). The survey was conducted in November 2016.

In this research the parents estimated the importance of the following motivational statement towards sport participations of their children with Down's syndrome: to develop child's interaction skills in a group; to develop and perfect the skills of large-scale body movements, coordination of movements, and dexterity in a child; to encourage socialization in a child; to provide healthy and active lifestyle for child; to develop independence in a child; to improve the child's fitness; to provide a sense of being part of a group in a child; to accustomize discipline in a child; to provide sense of pleasure from participation in trainings in a child; to boost the child's immune system; to provide opportunities for a child to do his/her favorite kind of sports; to provide opportunities for a child to communicate with his/her peers; to give outdoor activities for a child; to provide a sense of pleasure from participating in competitions in a child; to rise the child's self-esteem; to feel (as a parent) that I'm doing something important and necessary for my child; to provide opportunities for a child to travel to other places and countries; to provide opportunities for a child to demonstrate her/his skills; to make a child useful to his/her country; to provide opportunities for a child to participate in competitions; to help a child achieving high results; to help a child showing high results at competitions; and to provide opportunities for a child to do some prestigious kind of sports.

Statistical analysis of the received data was conducted with the help of average values method

using a standard packet of programs Microsoft Excel for Windows.

RESULTS OF RESEARCH AND DISCUSSION

The results of statistical analyses of data about the importance degree of the parents' motivation towards the participation of children with Down's syndrome in sports are presented in [Table 1](#).

The results show that only two statements (No.22 and No.23) were referred to as “not important” (scale 3-4) by parents, and none of the statements was referred to as “absolutely not important” (scale 1-2).

The statements No.1-16 were referred to as “absolutely important” (scale 9-10) and “important” (scale 7-8), which showed how high their importance was. The average scale of importance estimation of the given motivational statements was in the value range of 7.63 (to feel as a parent that I am doing something important and necessary for my child) to 9.44 (to give my child a chance to develop interaction skills in a group). Positive values of the excess (Ex) and negative values of asymmetry (As) of most items showed uniformity in the respondents' opinions. The unanimity of response at grading was also confirmed by closeness of median (Me = 10) and mode (Mo = 10) to mean.

It becomes clear that the statements No.1-5 were the primary motives for sports participation of children with Down's syndrome from their parents' point of view. The importance of physical health improvement are as follows: implementing healthy and active lifestyle; development of interaction skills in a group, independence, and dexterity; improvement of the skills of large-scale body movements and coordination of movements in a child; and socialization of a child. According to the parents' point of view, these were the primary motives in choosing kinds of sports as routine activities for their children. In this respect, the trainers and the doctors should pay attention to these aspects in orienting parents towards physical exercises or sports activities for their children with Down's syndrome.

The motivational statements No.6-16 were referred to as “important” by the respondents and should also be considered very significant in the work of the trainers and doctors. Growth of self-esteem, communication with peers, improvement of fitness, sense of pleasure from participating in competitions and training, growth of discipline, engagement in outdoor activities, improve the immune system, chance to do favorite kind of

Table 1 Russian parents' motivation on sports participation of their children with Down's syndrome (n=137)

No.	The primary motivation on sports for children with Down's syndrome in Russia	X	m	Me	Mo	s	Ex	As
1	To develop child's interaction skills in a group	9.44	0.151	10	10	0.90	-0.98	-1.03
2	To develop and perfect the skills of large-scale body movements, coordination of movements, and dexterity in child	9.30	0.194	10	10	1.16	3.65	-1.78
3	To encourage socialization in a child	9.19	0.198	10	10	1.19	2.51	-1.47
4	To provide healthy and active lifestyle for a child	9.16	0.227	10	10	1.36	4.44	-1.89
5	To develop independence in a child	9.11	0.228	10	10	1.36	2.54	-1.62
6	To improve the child's fitness	8.94	0.168	8	8	1.01	-2.10	0.11
7	To provide a sense of being part of a group in a child	8.75	0.256	8.5	10	1.53	4.84	-1.80
8	To accustomize discipline in a child	8.75	0.196	8	8	1.18	0.93	-0.58
9	To provide sense of pleasure from participation in trainings in a child	8.55	0.216	8	8	1.29	1.25	-0.75
10	To boost the child's immune system	8.33	0.303	8	8	1.82	6.73	-2.06
11	To provide opportunities for a child to do his/her favorite kind of sports	8.16	0.29	8	8	1.76	1.10	-1.06
12	To provide opportunities for a child to communicate with his/her peers	8.08	0.312	8	8	1.87	2.42	-1.39
13	To give outdoor activities for a child	7.86	0.349	8	8	2.09	2.35	-1.45
14	To provide a sense of pleasure from participating in competitions in a child	7.83	0.280	8	8	1.68	0.45	-0.75
15	To rise the child's self-esteem	7.83	0.277	8	8	1.66	0.88	-0.74
16	To feel (as a parent) that I am doing something important and necessary for my child	7.63	0.340	8	8	2.04	-0.99	-0.49
17	To provide opportunities for a child to travel to other places and countries	6.88	0.337	8	8	2.02	0.58	-0.75
18	To provide opportunities for a child to demonstrate his/her skills	6.72	0.441	8	8	2.64	-0.62	-0.61
19	To make a child useful to his/her country	6.02	0.361	5	5	2.17	-0.13	-0.23
20	To provide opportunities for a child to participate in competitions	5.77	0.358	5	5	2.15	-0.86	-0.09
21	To help a child achieving high results	5.5	0.304	6	4	1.82	0.17	0.23
22	To help a child showing high results at competitions	4.66	0.415	4	4	2.49	-0.63	0.60
23	To provide opportunities for a child to do some prestigious kind of sport	3.52	0.216	4	4	1.29	-0.34	0.22

sports, and work in a group – these are usually the motives of individuals engaging in sports. It is very important for the doctors and trainers to encourage these motives in parents of children with Down's syndrome to help the training started as early as possible and to build consistency in sports.

The respondents referred the statements No.17-21 as "difficult to say". The motivational statements included children's demonstration of their skills, achievement of high results, visiting other countries, participation in competitions, and benefit for their own country. These were considered less important by the parents and may affect the future of Russian athletes with Down's syndrome. Increasing parents' motivations in the given aspects should be possible when regular training for children with Down's syndrome become the norm and training system for athletes with Down's syndrome is formed in Russia. This system will allow such athletes to participate in international competitions.

The results showed that most of the observed motivations of the parents were considered

important. Considering parents' motivation is necessary for trainers and doctors to build interest towards doing sports in their children with Down's syndrome.

CONCLUSION

Participation of children with Down's syndrome in sports is determined by the level of their parents' motivation. For this study, it was found that parents considered the majority of the motivational statements as important. Considering the parents' motives will encourage the sports participation of children with Down's syndrome. More in-depth study is needed to further explain the parent's reasons for sports participation of children with Down's syndrome.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest in this research.

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