

The Socialization of People with Muscle-Skeleton Disorders in Rehabilitation Centres

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Abstract: *The article considers the people with muscle-skeleton disorders (hereinafter "MSDs") who suffer from the effects cerebral palsy, myopathy and spinal diseases. The article aims to determine, theoretically justify and experimentally verify the pedagogical conditions for the socialization of people with MSDs in rehabilitation centres. All the respondents had MSDs, namely: 76 respondents – pediatric cerebral palsy; 19 respondents – myopathy; 10 respondents – spinal diseases. It must be noted that 11 respondents, apart from MSDs, had intellectual disabilities (F 71). The experiment involved 59 males and 46 females. The age requirement was the following: 56 respondents aged between 14 and 17; 49 respondents aged between 18 and 19. The socialization programme, verified during the formative experiment, involved working with people with MSDs based on all socialization components; methodological work with the teaching staff of rehabilitation centres; parents. The programme included such specialized courses as Human Rights, Gardenotherapy; dance therapy; photography classes; a support group for parents of children with MSDs. Before the beginning of the experiment, only 11.55% of persons with MSDs had a high level of socialization. After the formative experiment, the number increased to 30.45%. Besides, 44.1% of people have a sufficient level of social skills. The implementation of the designed programme as a condition for the socialization of people with MSDs has made it possible to significantly increase the level of social skills in people with MSDs in the experimental group.*

Keywords: *psychophysical problems; diagnostics; socialization programmes; correction; adaptation.*

How to cite: Sarancha, I., Volkova, K., Khmeliar, I., Babiak, V., Sabadyshyn, R., Babiak, O., Imeridze, M., Buzhynia, I., Gusak, L., Martyniuk, T., & Marchak, T. (2020). The Socialization of People with Skeleton-Muscle Disorders in Rehabilitation Centers. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 11(3), 01-14. <https://doi.org/10.18662/brain/11.3/105>

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1. Introduction

According to the UN data, there are about 450 million people with mental or physical problems, which is one-tenth of humanity. The social support of people with psychophysical problems is one of the important objectives worldwide, and its need is reflected in the most important international legal instruments. One of the most important factors in the social integration of people with psychophysical problems is the preparation of society for the genuine perception of people with special needs. Nowadays, academics, public figures and society as a whole pay much attention to inclusive education. The gradual integration of people with special needs occurs at all levels of the educational and rehabilitation process.

I. Kon & V. Olshanskyi (1970), I. Mynovych & (1999) and A. Shevtsov (2009) regard human socialization as a set of four components: 1) spontaneous human socialization in the interaction and under the influence of objective circumstances of social life, whose content, nature and results are determined by social and economic and social and cultural realities; 2) targeted socialization, which the state uses to take certain economic, legislative, organizational measures to solve the problems affecting the change of opportunities and the development of certain age groups; 3) socially controlled socialization (education) as the systematic creation of legal, organizational, material and spiritual conditions for human development by society and the state; 4) a conscious self-change which can be characterized by a prosocial, asocial or antisocial vector (self-building, self-improvement, self-destruction) according to individual capabilities and objective living conditions or contrary to them.

A. Shevtsov (2009) and I. Dobryakova & T. Shchedrina (2004) indicate that the socialization of people with MSDs is considered as a process and the result of the acquisition and further generation of social experience. This interpretation of socialization has become the starting point of this research.

The socialization of people with MSDs is viewed as the process and the result of the acquisition and further generation of social experience; rehabilitation and socialization of people with MSDs depend on social and labour adaptability, evaluation of their life prospects and creation of a non-discriminatory environment in society. The socialization of adults with MSDs is closely linked to such processes as development, education and rehabilitation; the social rehabilitation of people with psychophysical problems should ensure the teaching of basic social skills; the adjustment of

living conditions to the needs of people with MSDs; the provision of social and household equipment and services; the ability of these people to protect their rights, interests, self-analyze, positively perceive oneself and others and acquire communication skills; the independent living in a society with the necessary support (Bakhmat et al. 2019). The integration of people with MSDs into society is a deliberate process of society's sharing social experience, taking into account the characteristics and needs of different categories of people with MSDs along with their active participation and provision relevant conditions. The important components of socialization of people with MSDs include their labour adaptability, which begins with a professional orientation, and the forming of their life prospects.

2. Materials and Methods

The socialization levels of people with MSDs were studied according to the following components: social adaptability, labour adaptability, one's life prospects and creation of a non-discriminatory environment in society. The programme of rehabilitation and the methodology of the experiment have been developed by such institutions as Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Pavlo Tychyna Uman State Pedagogical University, Municipal Establishment "Kharkiv Humanitarian-Pedagogical Academy" of Kharkiv regional council, Rivne Medical Academy, Los Angeles University, K. D. Ushinsky South Ukrainian National Pedagogical University n, Lesya Ukrainka Eastern European National University, Lesya Ukrainka Eastern European National University, Podilsky Special Education and Rehabilitation Socio-Economic College.

To determine the levels of social integration of people with MSDs, a special questionnaire with four blocks of questions was prepared to survey a target group about the social integration of the respondents, labour integration, prospects of one's family life and personal information. Psychopedagogical discussions and observations were conducted. Also, individual family plans of rehabilitation and development of clients of social rehabilitation centres, individual programmes of rehabilitation, as well as the products of educational activities were analyzed.

To determine the levels of social adaptability of people with MSDs, the following aspects were studied: the aspirations and life orientations of people with MSDs after completing a course of social rehabilitation, self-care skills, ability to live in society, family relationships, relationships with active members of society.

In order to determine the level of labour adaptability of people with MSDs, the experimentators studied their attitude towards further education

and employment, evaluation of their professional and computer skills, which, at the present stage of society development, help people with MSDs to compensate for the existing physical limitations to create an opportunity for communication with the surrounding world and employment in order to become an equal member of society. It was necessary to study whether people with MSDs were willing to start their own family, have children and live independently to evaluate their life prospects (Behas et al. 2019). The level of social discrimination of people with MSDs was studied by analyzing their relationships with peers and family members, as well as their public life.

Certain criteria and indicators of socialization levels of people with MSDs were specially developed for this research. The criteria for socialization are the following: psychophysical, psycho-emotional and activity-based ones. An indicator of the psychophysical criterion is the monitoring of psychophysical problems; an indicator of the psycho-emotional criterion – the possibility of establishing feedback from people with MSDs, the understanding of prospects of their family life; an indicator of the activity-based criterion – both need and ability to organize outside help, establish form social connections, use modern information technologies and be socially active.

Accordingly, the four levels of socialization of people with MSDs were determined: a high level – psychophysical problems are constantly monitored and hardly affect a person's life. The feedback is constant and clear. In everyday life, such a person does not need any help from others or can organize one's activities independently. He/she is completely self-sufficient, acts mostly independently or with organized outside help, is aware of and accepts his/her limits, seeks and establishes strong social relationships, knows how to use modern information technologies, is ready for full support of his/her own family and realizes himself/herself in professional and public life. A sufficient level is characterized by the fact that it is possible to establish constant and relevant feedback with such a person. He/she may sometimes need outside help to satisfy his/her psychophysical needs. His/her self-sufficiency is partial since his/her creative potential is underdeveloped and rarely used, even though the ability to act independently gives grounds for successful development of social adaptability. A low level implies that a person has significant and permanent psychophysical problems. However, the initial comprehensive examination of the child in the social rehabilitation centre showed some small preserved areas of the brain that served as the basis for further corrective development. Such a person needs constant skilled help from others and must stay within a proper rehabilitation environment. Even though he/she is not self-sufficient

and viable, the presence of preserved areas of the brain has made it possible to build a rehabilitation programme and obtain small but positive results. These people can independently establish minimal social relationships with social support. They are largely isolated from society but have a minimal need for social relations. An initial level suggests that a person has permanent psychophysical problems that have rarely been corrected in social rehabilitation centres for children with special educational needs. Normally, such people require around-the-clock supervision and skilled help from others, are unable to establish social relationships on their own and almost completely isolated from society.

The research involved 105 graduates from the Vinnytsia centre for social rehabilitation of children with special educational needs under the name “Promin”, affiliated to the Ministry of Labour and Social Policy of Ukraine, the regional center for social rehabilitation in Nyzhniv in Ivano-Frankivsk region, the Vinnytsia centre for social and psychological rehabilitation of children and young people with functional disorders under the name “Obrii”. All the respondents had MSDs, namely: 76 respondents – pediatric cerebral palsy; 19 respondents – myopathy; 10 respondents – spinal diseases; 11 respondents, apart from MSDs, had intellectual disabilities (F 71). The experiment involved 59 males and 46 females. The age requirement was the following: 56 respondents aged between 14 and 17; 49 respondents aged between 18 and 19.

The authors of the article have conducted a comparative study of adolescents attending secondary schools and adolescents with MSDs attend rehabilitation centres to determine the social orientation in the modern world and the levels of adaptability in it and understand the further life orientations of adolescents with developmental norms and adolescents with MSDs, to understand the influence of education on the development of personality in secondary schools and the prospects of developing correctional education in rehabilitation centres for children with special educational needs. The survey included 79 adolescents attending secondary schools No 7, 26 and 33 in Vinnytsia to compare their life targets with a similar survey of 105 adolescents having MSDs.

The analysis of the results obtained from the study of socialization levels of the respondents with MSDs was as follows: a high level – 11.55%, a sufficient level – 38.85%; a low level – 54.6%; an initial level – 5.25%. As for their healthy peers, a low level was characteristic of 1.9% respondents, a sufficient level – 5.7 %, a high level – 92.4% (see Table 1).

Table 1. A comparative table of socialization levels of adolescents with MSDs and adolescents with developmental norms

Socialization levels	Adolescents with MSDs	Adolescents with developmental norms
High	11.55	92.4
Sufficient	38.85	5.7
Low	54.6	1.9
Initial	5.25	0

A summary of research findings reveals the following characteristics of the socialization of people with MSDs: they experience some difficulties in providing self-care and interacting with urban infrastructure; one can observe a significant dependence on parents and closest people. In most cases, people with MSDs express a declarative nature of the desire for independence. The following problems are rather acute: the role of people with MSDs in parents' families; the devaluation of love and friendship as the basis of family and social relationships; the deformation of the system of spiritual values in the relationships between people due to the priority of financial enrichment; major social and financial problems in creating and ensuring a decent standard of living for their own families; adults with MSDs find it difficult to obtain employment and realize themselves professionally; a negative impact of the socio-economic situation on the social well-being of children and adults with MSDs and their families.

The analysis of the results obtained from the ascertaining experiment makes it possible to formulate the following conclusions: the adolescents with developmental norms show a higher level of socialization and they are more interested in the material side of life. People with MSDs express sufficiently strong material and psychological dependence on their parents and their closest people, which impedes socialization. In most cases, they show a declarative rather than adequate nature of the desire for independence. Therefore, the basic problem of socialization of adults with MSDs is the practical inability to exercise their rights to live independently, to find a job and realize themselves professionally. Besides, there is a negative influence of the socio-economic situation in Ukraine on the well-being of children and adults with MSDs and their families. To correct these characteristics, people with MSDs require socialization in rehabilitation centres.

The analysis of scientific concepts of such scholars as V. Bondar & V. Syniov (2011), M. Halaidiuk et al. (2018), B. Maksymchuk et al. (2018), N.

Melnyk et al. (2019), L. Shipitsyna (1997) and A. Shevtsov (2009), current trends in the development of correctional education in Ukraine, the experience and practice of realization of the educational and rehabilitation process in EU countries, cultural and historical traditions of socialization of people with MSDs, established in Ukraine and the results of the ascertaining experiment have made it possible to develop pedagogical conditions for socialization of people with MSDs in rehabilitation centres:

1. The systematic and profound psycho-pedagogical study of each child and adult with MSDs both before the beginning of the course of social rehabilitation and throughout the period of its realization. The systematic and deep diagnostics of each person with MSDs is a basic component of the effectiveness of the socialization programme since it allows using available personal capabilities and predicting individual personal progress. The monitoring of the rehabilitation process has made it possible to adjust the programme of socialization and use the acquired personal potential of people with MSDs.

2. The development of a socialization programme for people with MSDs, taking into account all its components of socialization. The availability of a clear, comprehensive programme ensures the harmonious socialization of adolescents in rehabilitation centres.

3. The involvement and strict adherence to an individual approach in the realization of the socialization programme for people with MSDs. An individual approach has made it possible to personally select the forms and methods of socialization aimed at revealing social potential and involving people with MSDs in society.

4. The mastering of socialization methods for people with MSDs by all teaching staff of social rehabilitation centres for children with special educational needs since team interaction is the key to adequate socialization.

5. The understanding of people with MSDs of the influence of their psychophysical problems on their life activity as a whole, which should help them to use their capabilities for better adaptation and realization of themselves in society, levelling their weaknesses.

6. The unity of actions and realization of socialization for people with MSDs on the part of specialists from social rehabilitation centres for children with special educational needs, family and public: specialists from rehabilitation centres, family members and the community were key actors in the process of socialization for people with MSDs, so they all had a clear understanding of the characteristics of people with MSDs;

7. The provision of the opportunity to obtain the necessary social rehabilitation services throughout life.

The formative experiment was conducted based on the Vinnytsia centre for social rehabilitation of children with special educational needs under the name "Promin", affiliated to the Ministry of Labour and Social Policy of Ukraine. The experiment involved 40 people with MSDs.

The socialization programme, verified during the formative experiment, involved working with people with MSDs based on all socialization components; methodological work with the teaching staff of rehabilitation centres; parents. The programme included such specialized courses as Human Rights (54 classes), Gardenotherapy (238); dance therapy (507 classes); photography classes (68); a support group for parents of children with MSDs (15 meetings).

Each specialized course and block of rehabilitation classes contained a correction component. The correctional and developmental goals of Gardenotherapy was to teach how to work on the land independently, follow a routine pattern, develop housekeeping skills, fine motor skills, navigation skills and facilitate the physical and emotional development of people with special needs. The correctional and developmental goals of photography classes was to develop creative skills in people with MSDs, as well as their fine motor skills, logical and analytical thinking; to teach them to follow a routine pattern; to develop their self-control skills, coherent speech and teamwork skills; to apply psychological correction of the existing problems. The correctional and developmental goals of Human Rights included developing logical and analytical thinking, oral and written language and communication skills. The correctional and developmental goals of dance therapy were as follows: to develop the motor and emotional repertoire of people with MSDs; to develop the ability to take spontaneous decisions and verbally discuss their psycho-emotional state; to cultivate their personality; to ensure their aesthetic education; to contribute to their social activity. During the formative experiment, the main aim of social and pedagogical work with families with people with MSDs was to mobilize the family's internal potential for its socio-psychological adaptation to the problems of adolescents and adults with special needs and to generate the parents' awareness of further social opportunities of their child.

The conducted correctional and rehabilitation work in the framework of the formative experiment has contributed to a number of social changes in the behaviour and self-identification of people with MSDs, namely, the expansion of self-service and economic activities; the development of social skills; the changes in social needs; the changes in relationships between family members; the formation of new social roles in families; the changes in views on one's own family and childbirth; the

changes in interaction with society; the changes in the motivation and localization of public life; the formation of life plans, motivation towards education and further employment and evaluation of one's own professional skills; the enhancement of information technology skills.

3. Results

After the formative experiment, there occurred some significant changes in the social behaviour of people with MSDs. Indeed, they have developed a positive attitude towards their health problems and learned how to use their potential for a full life in the community. Also, they have improved their self-care skills, familiarized themselves with urban infrastructure, enhanced their decision-making skills, asserted their rights and further developed communication skills and, therefore, learned how to build friendships and family relationships. Finally, people with MSDs have developed their gardening skills and mastered modern information technologies, which has positively influenced their professional self-identification and employment. The mentioned changes are presented in Table 2.

Table 2. Socialization levels of people with MSDs before and after the formative experiment

Socialization levels	Experimental group		Control group	
	Before experiment	After experiment	Before experiment	After experiment
High	11.55	30.45	15	17.25
Sufficient	38.85	44.1	32.2	34.75
Low	54.6	35.7	45.55	42.55
Initial	5.25	0	7.25	5.45

Positive changes in the experimental group were statistically significant ($p < 0.05$), which confirms the effectiveness of the formative research (Student's t-test for independent samples).

The formative experiment proves that social rehabilitation centres can promote socialization of people with MSDs under the following conditions: the systematic and profound psycho-pedagogical study of each child and adult with MSDs both before or during social rehabilitation; the preparation of a relevant programme for socialization of people with MSDs, taking into account all the components of socialization; the involvement and clear adherence to an individual approach during the implementation of the

socialization programme for people with MSDs; the mastering of socialization methods for people with MSDs by all teaching staff of social rehabilitation centres for children with special educational needs; the understanding of people with MSDs of the influence of their own psychophysical problems on their life activity as a whole; the unity of actions and realization of socialization for people with MSDs on the part of specialists from social rehabilitation centres for children with special educational needs, family and public; the provision of the opportunity to obtain the necessary social rehabilitation services throughout life.

4. Discussion

A. Shevtsov (2009), L. Shipitsyna & I. Vinogradova (1996) point out that the socialization of adults with MSDs is closely linked to development, education and rehabilitation. This research confirms that the successful implementation of social rehabilitation of children and adults with MSDs is possible only with profound knowledge and taking into account both the main factors and conditions on which the normal development of the psyche and the driving forces of this development depend.

The obtained research findings prove the assumption of A. Shevtsov (2009) that social rehabilitation of people with psychophysical problems should ensure the teaching of basic social skills (personal hygiene, self-care, movement, communication, etc.); the adjustment of living conditions to the needs of people with MSDs; the provision of social and household equipment and services; the ability of these people to protect their rights, interests, self-analyze, positively perceive oneself and others and acquire communication skills; the independent living in a society with the necessary support (social, medical, legal support, household services).

An important component of socialization of people with MSDs is their labour adaptability, whose formation begins with a professional orientation. This research also confirms the views of O. Yaremko, K. Bondarchuk & N. Komarova (2003), O. Romanenko (2002) and A. Shevtsov (2009) on the effectiveness of labour activity for people with psychophysical problems. It can increase even more if the characteristics of this activity are taken into account in developing relevant programmes, choosing forms and methods of professional orientation in social rehabilitation centres.

The authors of the article agree that another component of socialization of people with MSDs is the forming of their life prospects in adulthood, which rely on family education, as well as the creation of

opportunities for realizing family values. People with MSDs and their families often find themselves in psychological and social isolation. In most developed countries, the concept of normalization and the principle of involving people with MSDs into society are rather common, which has resulted in the creation of the concept of supported living service. According to A. Shevtsov (2009), the concept of independent life changes the existing views on the correlation between socialization and social adaptation of people with MSDs.

The prospects for further research include developing and implementing new forms and methods of social rehabilitation of people with MSDs in rehabilitation centres.

5. Conclusions

The results obtained from the ascertaining experiment reveal the following characteristics of socialization of people with MSDs: the lack of independence, determination and series of actions; an expressive tendency towards care and emotional interaction with adults; the dependence of social skills development on the level of impaired functions of the musculoskeletal system; a low level of proficiency in modern information technologies; low motivation towards education and further employment; low legal culture and culture of interpersonal relations; low social activity. The revealed characteristics prove the need to take into account not only the severity of MSDs but also the psychology of children and adults with MSDs, an individual approach to people with MSDs.

The implementation of the designed programme as a condition for the socialization of people with MSDs has made it possible to significantly increase the level of social skills of people with MSDs in the experimental group. Before the beginning of the experiment, only 11.55% of persons with MSDs had a high level of socialization. After the formative experiment, the number increased to 30.45%. Besides, 44.1% of people have a sufficient level of social skills. Thus, a convincing majority of the respondents in the experimental group have increased levels of independence, developed social and personal incentives, enhanced the proficiency in modern information technologies, reinforced the desire to be independent from adults and create their own family, as well as the desire for education and further employment and active participation in public life.

As a result of the conducted research, the set objectives have been realized and the effectiveness of the proposed pedagogical conditions for ensuring the socialization of people with MSDs in rehabilitation centres has been verified.

References

- Bakhmat, N., Maksymchuk, B., Voloshyna, O., Kuzmenko, V., Matviichuk, T., Kovalchuk, A., Martynets, L., Uchytel, I., Solovyov, V., Manzhos, E., Sheian, M., Aliksieiev, O., Slyusarenko, N., Zhorova, I., & Maksymchuk, I. (2019). Designing cloud-oriented university environment in teacher training of future physical education teachers. *Journal of Physical Education and Sport*, 19(4), 1323-1332. <https://doi.org/10.7752/jpes.2019.s4192>
- Behas, L., Maksymchuk, B., Babii, I., Tsymbal-Slatvinska, S., Golub, N., Golub, V., Chepka, O., Lemeshchuk, M., Dychok, T., Nikitenko, A., Sarancha, I., & Maksymchuk, I. (2019). The influence of tempo rhythmic organization of speech during gaming and theatrical activities on correction of stammering in Children. *Journal of Physical Education and Sport*, 19(4), 1333-1340. <https://doi.org/10.7752/jpes.2019.s4193>
- Bondar, V. & Synov, V. (2011). *The dictionary of pathologies*. Lesia.
- Dobryakova, I., & Shchedrina, T. (2004). *The rehabilitation of children with the problems of the central nervous system and musculoskeletal system*. The Publishing House of the St. Petersburg Medical Academy of Postgraduate Education.
- Halaidiuk, M., Maksymchuk, B., Khurtenko, O., Zuma, I., Korytko, Z., Andrieieva, R., Strykalenko, Y., Zhosan, I., Syvokhop, Y., Shkola, O., Fomenko, O., Maksymchuk, I. (2018). Teaching approaches in extracurricular physical activities for 12-14-year-old pupils under environmentally unfavourable conditions. *Journal of Physical Education and Sport*, 18(4), 2284-2291. <https://doi.org/10.7752/jpes.2018.04344>
- Kon, I., & Olshanskiy, V. (1970). *Socialization. The philosophical dictionary*. Knowledge.
- Maksymchuk, I., Maksymchuk, B., Frytsiuk, V., Matviichuk, T., Demchenko, I., Babii, I., Tsymbal-Slatvinska, S., Nikitenko, A., Bilan, V., Sitovskiy, A., & Savchuk, I. (2018). Developing pedagogical mastery of future physical education teachers in higher education institutions. *Journal of Physical Education and Sport*, 18(2), 810-815. <https://doi.org/10.7752/jpes.2018.02119>
- Melnyk, N., Bidiuk, N., Kalenskiy, A., Maksymchuk, B., Bakhmat, N., Matviienko, O., Matviichuk, T., Solovyov, V., Golub, N., & Maksymchuk, I. (2019). Models and organizational characteristics of preschool teachers' professional training in some EU countries and Ukraine. *Зборник Института за педагошка истраживања* [Proceedings of the Institute for Pedagogical Research], 51(1), 46-93. <https://doi.org/10.2298/ZIPI1901046M>
- Mynovych, I. (1999). *Social work*. Uzhhorod State University.
- Romanenko, O. (2002). Forming the cognitive component of self-image in adolescents with cerebral palsy. *Defectology*, 4, 24-32.

- Shevtsov, A. (2009). *Educational fundamentals of rehabilitation*. Lesia.
- Shipitsyna, L. (1997). *Education for children with developmental problems in different countries of the world*. Fallow Deer.
- Shipitsyna, L., & Vinogradova, I. (1996). *The mental development of orphans (based on the results of psychiatric monitoring)*. Piter.
- Yaremenko, O., Bondarchuk, K., & Komarova, N. (2003). *The employment of young people with functional disorders*. Kyiv: The State Institute for Family and Youth Issues.