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# Chosen problems of psychosocial adjustment and rehabilitation of people with physical disabilities in adulthood

Key words: motor disability, adulthood, adjustment, psychosocial functioning, rehabilitation

### Abstract

Musculoskeletal dysfunctions are a serious problem also in Poland: not only a medical one, but also a social one, because, along with cardiovascular diseases, they cause a total of approx. 45% of the cases of disability. It should be added that there is a year-on-year increase in the number of people with disabilities. The presented review of research shows that elevated anxiety and depressive tendencies tend to be permanent characteristics of people with mental physical disabilities. Adults with physical disabilities tend to show passive and apathetic attitude towards life. However, their sense of the meaning of life is within the norm. It is worth noting that the psychosocial adaptation of adults with physical disabilities changes in subsequent phases of adulthood. First of all, every adult period of life is characterized by the dominance of another sphere of problems with physical disabilities. It is currently most commonly accepted that optimal rehabilitation of people with disabilities requires an interdisciplinary approach that enables the consideration of the physical, psychological, social, educational, professional, financial and recreational spheres in this process in relation to a person with a disabilities can bring satisfactory results.

## Introduction

The percentage of people with disabilities in various countries ranges from 14.2% in the UK to about 19% in the US (Callahan, Martin, Pledger, source: Kowalik 2007). At the same time, disability often refers to the physical sphere – 10% of the population. Musculoskeletal dysfunctions are also a serious problem in Poland, and not only a medical one, but also a social one, because, along with cardiovascular diseases, they cause a total of approx. 45% of the cases of disability. It should be added that there is a year-on-year increase in the number of people with disabilities, e.g. in the period between 1988 and 2002 the number increased by 1–721–200 (i.e. by 46.1%) and, therefore, the

dynamics of this phenomenon is significant and shows a continuous upward trend. Most of those people have a medical certificate of mild or moderate degree of disability. Moreover, the population reviewed includes slightly more women than men. The most common causes of disability are considered to be: cardiovascular diseases, mental illnesses, and musculoskeletal dysfunctions. (GUS 2005, Ogonowska-Musiatowicz, Chmielewski 2003). The latter include a great diversity of the types, of the origins, of the symptoms, and of treatments. They have various courses: from a stabilized, to advancing, to a certain degree or complete loss of mobility, up to death. They can occur at any stage of life, starting from innate ones, beginning in early childhood, in youth to adulthood, and at the senior age. They are differentiated by the frequency of experiencing pain and the degree of it. They cause varying degrees of reduced mobility, from the possibility of independent movement, to the need to use orthopaedic equipment and help of other people, to almost complete immobility. All of these features of locomotor dysfunctions and diseases are not negligible, both for the course of psychosocial development and for adaptation in the course of life, and so they will involve long-term consequences, present throughout adulthood.

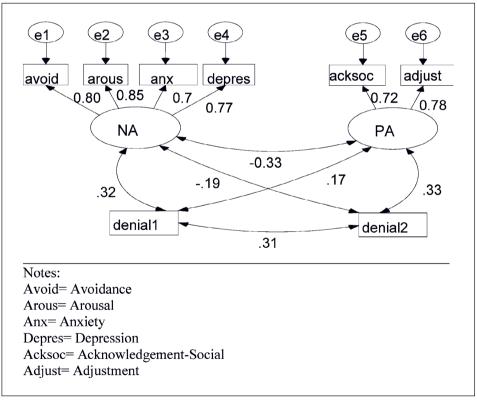
Most often it is assumed that adulthood begins around 20 years of age and continues until death. The total period includes approximately 60–80 years of human life. The qualitative transformations of the whole structure of life of an individual taking place at this time enable the isolation of three sub-stages: early, middle, and late adulthood (Brzezińska 2007). However, there are relatively few empirical reports which enable the characterization of the dynamics of the psycho-social functioning of people with physical disabilities in subsequent periods of adulthood. Most researchers focused on the said period as a hole or on one selected stage. The rest of this article will analyse the results of studies covering the entire period of the adulthood of people with physical disabilities.

# Psychosocial adaptation problems

Psychosocial adaptation belongs to a category of concepts of a broad range (like "functioning" and "behaviour"). It is most commonly characterized by the level of quality of life, perception of its meaning, the number and severity of emotional problems experienced (anxiety, depression), the ways of dealing with them, and the skilful use of learned behaviours and focus on the creative transformation of reality. At the source of so understood adaptation,

examined over a long period of time, there lie the determining factors of personality, mainly in the form of self-esteem and attitudes towards one's own disability, as well as social-demographic factors related to physical disabilities (Majewicz 2012).

Results of the research conducted by E. Livneh, H. Martz, T. Bodnar (2006) in adults with spinal trauma (SCI) have shown that, among the three studied adaptation models, one explains a particularly large percentage of the variance. And so, the first model takes into account the global dimension with opposite polarity, i.e. adaptation – maladjustment, and the second assumes the existence of two different dimensions – adaptation and maladjustment; they proved to be less important than the third model which also includes an additional dimension in the form of denial. The structure of psychosocial adaptation to CID (chronic illness and disability) is shown below.



**Figure 1.** Confirmatory factor analysis of the hybrid psychosocial adaptation model (Livneh, Martz, Bodnar 2006, p.257)

As a result of complex statistical analysis we extracted two overarching factors of adaptation, or positive attitude (PA) and negative attitude (NA), between which there is a series of interactions mediated by two different types of denial (denial 1 and denial 2). These two distinct types of denial are: a) bargaining with the higher forces and unrealistic request to take away disability and b) belief in the upcoming "miraculous" cure. Their relationship with the main factors, the positive attitude (PA) and the negative attitude (NA), is distinct. Generally, persons with severe permanent acquired disabilities tend to hold beliefs about the impermanence of their own state. Especially the second type of denial plays a significant role. This factor is moderately associated with PA and less, but in a negative manner, with NA. According to the authors, this indicates propensity for denial of depression and anxiety, and for adhering to pseudo-optimistic views of the future, despite contrary medical evidence.

As shown by the results of the earlier research conducted by E. Martz, H. Livneh (2003) among individuals with spinal cord injury, including mostly veterans (54%), anxiety and depression may be important factors modifying their goals and life plans. That is particularly important because, according to Shontz (source: Kowalik 2007), elevated levels of anxiety and depression can be considered lasting psychological traits of people with different disabilities, among others with amputated limbs, spinal cord injuries or rheumatic diseases. However, as shown by the results of the studies conducted by Huang C.Y., et al. (2015) a more negative perception of oneself implies depressive tendencies, and social support is limited by experiencing negative emotions.

In addition, adults with various physical disabilities are characterized by their level of meaning of life which can be determined as falling within the lower limits of the norm. However, in-depth analysis revealed that almost half of the respondents felt its low level. These people are in danger of the feeling of meaninglessness or loss. Besides, as a result of the study of individual cases, it can be assumed that disabled people in difficult situations pay more attention to death, which should be interpreted as a cry for help and should result in the need for providing it. Generally, it can be said that adults with physical disabilities often cannot cope with their problems, which in turn is associated with the formation of a passive and apathetic attitude towards life. These difficulties are more clearly manifested in women, and the elderly, mainly at the age of 80 and more. The level of acceptance of one's disability and life optimism and self-efficacy play an important role in this respect. The level of the perceived meaning of life increases along with their severity. On the other

hand, such values as "good health, mental and physical fitness" and "happy family life" and "love, friendship" (Konieczna 2010) are particularly appreciated by adults with physical disabilities.

D. Wyrzykowska and J. Kirenko (1999) draw attention to the importance of other personality variables in the psychosocial functioning of physically disabled persons aged 18-68 years, dealing with creativity. The results obtained indicate that the participant persons with disabilities are more focused on themselves, they try to be presented in a better light, but at the same time can talk about their ways of functioning more openly than the non-disabled and evaluate them more realistically. They ascribe greater value to the body, health, physical appearance, sexuality and efficiency than the non-disabled persons do. However, persons with locomotor disabilities have less adequate self-esteem than those with visual impairments. They tend to perceive the different spheres of their self-image, and so the "physical self", the "self and family" and the "social self" in isolation from other areas. Moreover, they tend to be defensive and introverted. Their sense of meaning in life oscillates around the average level. These individuals present themselves as believers in God, for whom faith and religion occupy an important place in life, and being with people and conversations are a source of joy and satisfaction, which inevitably affects their quality of life.

Review of the studies on the quality of life of people with traumatic spinal cord injury conducted by K. Jaracz and B. Grabowska-Fudała (2007) shows that the vast majority of respondents talk about good quality and enjoyment of life. However, their quality of life measured by point scales is lower than that of healthy individuals and the general population. The difference concerns mainly the objective, and to a much lesser extent, subjective quality of life. Reducing the level of quality of life relates primarily to physical functioning, and to a lesser extent psychosocial functioning. In general, quality of life is improved along with the time of the occurrence of damage. However, some research results suggest deterioration in the quality of life with age, which is particularly evident after 50 years of age. Contacts and social support, the general health status and access to environmental resources are significant factors affecting quality of life. Furthermore, during the process of adaptation to the acquired disability, the concept of self is modified along with the hierarchy of values and fundamental priorities of life of people with traumatic spine injury. In addition, quality of life is clearly related to the level of independence and physical activity (Kawanishi, Greguol 2013).

Job is an extremely important part of everyday life of any adult. Unfortunately, economic activity in the population of people with disabilities is very low, and it is the same against the average activity of this group in the US, European Union countries, and against the employment of the disabled in Poland. For example, in the United States, as much as 75% of adults with paraplegia work or learn (Wilder 2006). However, in our country, the situation of the disabled is different. In 2007, up to 80.2% women and 75.4% of men among people with disabilities of working age were economically inactive (Szczupał 2010). In turn, lower activity of women with physical disabilities is associated with greater levels of poverty, which is one of the main determinants of higher levels of experienced stress, in addition to such factors as social isolation, experiencing violence, or chronic health problems. What is more, the population notes particularly severe depression, which is almost twice stronger than in the case of men with disabilities (Nosek, Hughes 2003). However, there are opportunities for modifying the existing conditions. As indicated by the research conducted by S. R. Wilbanks, N. V. Ivankova (2015) promoting motivation and mobilization of resources at the disposal of state agencies effectively increase employment opportunities for people with physical disabilities.

In general, it can be said that psychosocial adaptation of adults with physical disabilities is changing in temporal terms. A particularly marked change occurs in late adulthood. First of all, the number of problems perceived in the sphere of family and occupation is reduced. Therefore, the dominant problems in the period are related to personality. However, in the mid-adulthood, occupational problems become the most important, and in the early adulthood, problems with social functioning. So each period of adulthood is characterized by the dominance of a different sphere of problems with physical disabilities.

Psychosocial adaptation of people with physical disabilities is mainly determined by such factors as the moment of diagnosis/acquiring disability and its degree, and to a lesser extent, the type of disability, as resulting from its course (stable-unstable disability). The age when a person was diagnosed/disability was acquired is of the vital importance to the process of psychosocial adaptation. Generally, we can say that the sooner the disability appears, the more negative impact it has on the level of psychosocial adaptation. There are clearly more problems related to disability perceived by people with reduced mobility lasting from birth or school age than those with reduced mobility which appeared in adulthood. This is particularly marked in the sphere of family and social problems.

The degree of mobility limitations is also important to adaptation. Although it does not exhibit many relations with adaptation dimensions, as recognized in the test model, those which occur are relatively strong. First of all, the sum of the perceived problems is clearly lower in people moving on their own than in the case of those using orthopaedic equipment and wheelchairs, especially during the middle and late adulthood. Moreover, problems in the family sphere get worsened with increasing mobility limitations. Thus, a person with a higher reduction in mobility perceives more problems, which, due to various obstacles, seems to be quite natural.

Such socio-demographic variables as the level of education and income are important factors that determine the psychosocial adaptation of adults with physical disabilities. The sex and the use of support organizations have a slightly smaller but also significant role. The actual place of residence is by far the least important to psychosocial adaptation (Majewicz 2012).

## Rehabilitation problems

Rehabilitation of people with physical disabilities is characterized by differences in terms of the accepted and used models, such as the medical model and the educational model (Wilder 2006). The first one focuses on the physical realm and physiology and draws attention mainly to the role of personality problems, connected with e.g. depression and anger, in generating organic complications. Therefore it stresses the importance of counselling and therapy. In turn, the second model emphasizes the need for teaching people with disabilities the way in which they can adapt. It focuses on the problems of the active participation of people with physical disabilities in the rehabilitation process. S. Kowalik (2007) believes that this emphasis on the importance of the subjectivity of the disabled in organizing their own lives is a reaction to the shortcomings of the integration rehabilitation of the twentieth century, which developed very spontaneously and, therefore, did not avoid some errors. This new stage in the process of rehabilitation was defined by the author as the rehabilitation of joint responsibility.

It should be noted, however, that the medical model may also, under certain conditions, play a positive role. According to R.B. Trieschmann (1989), this model works best in the period immediately after suffering a disability and so, during greater intensity of negative experiences, while the educational model is much more appropriate at a later date, in the course of rehabilitation. Active inclusion of people with disabilities in the rehabilitation process is then

essential and, therefore, also their own active work to improve their situation. Thus, they become jointly responsible for the effects of this process, and are not merely "passive objects" in the hands of a rehabilitation team (Fordyce 1976, Safilios-Rothschild 1976, Trieschmann 1989). Specific rehabilitation proceedings involve taking into account the personal meanings ascribed to their disability and the consequences of it for the people, and the focus of activities on selected targets (Trieschmann 1989; Craig, Hancock, Dickson 1994; Frost, 1993; King and Kennedy 1999; Galvin, Godfrey 2001, Wilder 2006). This is essential for the rehabilitation process, since every man/woman who is able to receive and process information from the environment, creates a subjective picture of the reality in which he/she lives. This image of the surroundings produced by individuals is even more unique than the life environment of every human. To refer to this subjective perception of the world and oneself, as created by a person with a disability, S. Kowalik (2006) introduces a new term which is "protodiagnosis". Generally speaking, it is a set of views generated on the basis of information about reality, interpreted according to one's own situation. All the same, protodiagnosis of people residing in the same objective environment can be clearly distinguished from each other. In addition, people with disabilities perceive the environment in a specific way and therefore often exaggerate the difficulties in the use of the environment, and thus limit or forgo social activities and rehabilitation. For this reason, the responsibility of professionals is to help people with disabilities understand their environmental protodiagnosis. Without this, effective rehabilitation is impossible, as the diagnosis is inadequate and serious problems are often ignored, underestimated or, vice versa, exaggerated.

In contrast, the same rehabilitation should focus on stimulating people with disabilities to overcome obstacles in the pursuit of personal growth. The basic condition for the adoption of such an attitude in life is to accept the disability, which is associated with the adoption of new life challenges arising from the dysfunction of the body. Thus, in the course of formulating objectives and life tasks, a person should adequately take into account their own capabilities, so as to cope with the implementation of the plans. In addition, getting rid of feelings of shame is an indispensable element of self-acceptance of people with disabilities. In this perspective, self-acceptance does not mean reconciliation with disabilities, as this might hamper the process of rehabilitation and adaptation, but the perception of oneself as a person having another characteristic feature that must be taken into consideration in formulating consecutive goals, decision-making, and execution of tasks (Majewicz 2012).

## **Summary**

The presented review of research shows that elevated anxiety and depressive tendencies tend to be permanent characteristics of people with mental-physical disabilities. Adults with physical disabilities tend to show passive and apathetic attitude towards life. However, their sense of the meaning of life is within the norm. In addition, the reaction of denial plays an important role in adapting. It may also be found that the vast majority of people with physical disabilities declares good quality of life and satisfaction with it. Decreased quality of life concerns mainly physical, and to a lesser extent psychosocial, functioning. Employment has an extremely beneficial effect on the level of the perceived meaning of life and quality of life. However, economic activity of people with physical disabilities in Poland is very low, especially in the case of disabled women.

It is worth noting that the psychosocial adaptation of adults with physical disabilities changes in subsequent phases of adulthood. First of all, every period of adult life is characterized by the dominance of a different sphere of problems for persons with physical disabilities. A particularly marked change occurs in late adulthood, when the number of the problems perceived in the sphere of family and occupation decreases. Therefore, personality problems are dominant in this period of adult life. However, in the mid-adulthood, occupational problems become the most important, and social functioning problems- in early adulthood.

It should be emphasized that the psychosocial adaptation of people with physical disabilities is mainly determined by such factors as the time of acquiring the dysfunction and its degree, and, to a lesser extent, the type of disability resulting from its course. Other significant factors include education and income.

It is currently most commonly accepted that optimal rehabilitation of people with disabilities requires an interdisciplinary approach that enables the consideration of the physical, psychological, social, educational, professional, financial and recreational spheres in this process in relation to a person with a disability. Only such a multi-faceted approach to problems of the rehabilitation of persons with disabilities can bring satisfactory results (Ragnarsson, Gordon 1992; Wilder 2006).

At the end, it is worth quoting the tasks of modern rehabilitation, as formulated by S. Kowalik (2007, p.121). Above all, rehabilitation done in a proper way can make the disposition to experience life problems, which is the essence

of disability, become only a disposition. But it is a theoretical idealization. In practice, rehabilitation is designed to minimize the number of life problems experienced by a disabled person and minimize their intensity. The author highlights that rehabilitation is a process of professional:

- 1. Protecting the patient from experiencing the problems, which might be termed as preventive rehabilitation.
- 2. Reducing the intensity of the problems experienced.
- 3. Eliminating the psychological consequences of being in a problematic situation.
- 4. Inclusion of a disabled person as an active co-creator of rehabilitation.

#### References

- Brzezińska A. (2007), Społeczna psychologia rozwoju. Warszawa: Wydawnictwo Naukowe Scholar.
- Craig A.R., Hancock K., Chang E. (1994), The Influence of Spinal Cord Injury on Coping Styles and Self-Perceptions Two Years after the Injury. *Australian and New Zealand Journal of Psychiatry* 28 (2), p. 307–12.
- Fordyce W.E. (1976), A Behavioral Perspective on Rehabilitation. In: G.L. Albrecht (ed.), *The sociology of Physical Disability and Rehabilitation*. Pittsburgh: The University of Pittsburgh Press.
- Galvin L.R, Godfrey P.D. (2001), The Impact of Coping on Emotional Adjustment to Spinal Cord Injury (SCI): Review of the Literature and Application of a Stress Appraisal and Coping Formulation. *Spinal Cord* 39 (12), p. 615–27.
- Główny Urząd Statystyczny (2005), Mały Rocznik Statystyczny. Warszawa: Zakład Wydawnictw Statystycznych.
- Huang C.Y., Chen W.K., Lu C.Y., Tsai C.C., Lai H.L., Lin H.Y., Guo S.E., Wu L.M., Chen C.I. (2015), Mediating effects of social support and self-concept on depressive symptoms in adults with spinal cord injury. *Spinal Cord*. Vol. 53 Issue 5, p. 413–416.
- Jaracz K., Grabowska-Fudala B. (2007), Jakość życia chorych z urazowym uszkodzeniem rdzenia kręgowego. Postępy Rehabilitacji nr 1, p. 41–47.
- Kawanishi C. Y.; Greguol M. (2013), Physical Activity, Quality Of Life, and Functional Autonomy of Adults With Spinal Cord Injuries. *Adapted Physical Activity Quarterly*. Vol. 30 Issue 4, p. 317–337.
- King Ch., Kennedy p. (1999), Doping Effectiveness Training for People with Spinal Cord Injury: Preliminary Results of a Controlled Trial. *British Journal of Clinical Psychology* 38 (1), p. 5–14.
- Kowalik S. (2007), *Psychologia rehabilitacji*. Warszawa: Wydawnictwa Akademickie i Profesjonalne Spółka z o.o.
- Livneh H., Martz E., Bodnar T. (2006), Psychosocial Adaptation to Chronic Illness and Disability: A Preliminary Study of its Factorial Structure. *Journal of Clinical Psychology in Medical Settings*, Vol. 13, No. 3, p. 251–261.

- Majewicz P. (2012), Psychospołeczna adaptacja osób z niepełnosprawnością ruchową w okresie dorosłości. Kraków: Wydawnictwo Naukowe UP.
- Martz E., Livneh H. (2003), Death anxiety as a predictor of future time orientation among individuals with spinal cord injuries. *Disability and Rehabilitation*, 2003; vol. 25, no. 18, p. 1024–1032.
- Nosek M.E., Hughes R.B. (2003), Psychosocial Issues of Women with Physical Disabilities. Rehabilitation Counseling Bulletin. Volume 46, No. 4, p. 224–233.
- Ogonowska-Musiatowicz Z., Chmielewski M. (2003), Osoby niepełnosprawne oraz ich gospodarstwa domowe 2002. Warszawa: Zakład Wydawnictw Statystycznych.
- Ragnarsson K., Gordon W.A. (1992), Rehabilitation after Spinal Cord Injury: The Team Approach. *Physical Medicine and Rehabilitation Clinics of North America* 3(4), p. 853–878.
- Safilios-Rothschild C. (1976), "Disabled Persons" Self-Definitions and their Implications for Rehabilitation. In: G.L.Albrecht (ed.), *The sociology of Physical Disability and Rehabilitation*. Pittsburgh: The University of Pittsburgh Press.
- Szczupał B. (2010), Wykształcenie a sytuacja zawodowa i zatrudnienie kobiet niepełnosprawnych współczesne dylematy. In: Z.Palak, A.Bujnowska, A.Pawlak (ed.), *Aktualne problemy edukacji i rehabilitacji osób niepełnosprawnych w biegu życia*. Lublin: UMCS, p. 194–204.
- Trieschmann R.B.(1989), Psychosocial Adjustment to Spinal Cord Injury. In: W.Heller, L.S.Zegans, L.M.Flohr (eds.), Psychosocial Interventions with Physically Disabled Persons. New Brunswick: Rutgers University Press, p. 117–136.
- Wilbanks S. R.; Ivankova N. V. (2015), Exploring factors facilitating adults with spinal cord injury rejoining the workforce: a pilot study. *Disability & Rehabilitation.*, Vol. 37 Issue 9, p. 739–749.
- Wilder E.I. (2006), Wheeling and Dealing. Living with Spinal Cord Injury. Nashville: Vanderbilt University Press.
- Wyrzykowska D., Kirenko J. (1999), Samoocena a poczucie sensu życia osób niepełnosprawnych zajmujących się twórczością. Szkoła Specjalna, no. 4, p. 204–213.