PSYCHOPEDAGOGICAL DETERMINANTS OF SPECIAL EDUCATION AND REHABILITATION OF INDIVIDUALS WITH COUPLED MULTIPLE DISABILITIES¹

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Summary. This paper discusses current interpretative differences between such terms as: coupled, complex, multidimensional, and multiple disabilities. The analyses of these terms and what they connotate are also presented in the light of the concepts of human disability proposed by the World Health Organization from 1980 and 2001. Moreover, based on the presented analyses, the possible interpretations of the selected terms are discussed in relation to the required educational and rehabilitative needs of individuals with particular types of disabilities.

Key words: disability, complex disability, multidimensional disability, coupled multiple disability, intellectual disability

The nature of coupled multiple disabilities

For many decades the term “coupled multiple disabilities” has aroused frequent and heated debates both among theoreticians and practitioners of special education. This term is interpretatively ambiguous, and this ambiguity directly affects strategies encompassing the organization and implementation of specialized activities dedicated to people who experience wide-ranging, generally serious and severe, multidimensional consequences of a particular disability.

Kirejczyk (1981) analyzes the term “coupled multiple disabilities” and relates it to children with intellectual disabilities. He indicates that the population of children with intellectual disabilities encompasses also such children who exhibit “additional disabilities,” that is “coupled” (double or even triple) impairments. The analyzed category, according to this scholar, includes: mentally retarded children who are si-

¹The term “coupled multiple disabilities” is used in this paper to emphasize the terminological specificity of the Polish language with respect to the analyzed concept. In Polish, the term niepełnosprawność sprzężona directly denotes disabilities that have interactional effects due to their coupling. The English equivalent “multiple disabilities” does not explicitly denote the coupling of the disabilities involved.
multaneously socially maladjusted; those mentally retarded and deaf or with hearing impairments; those mentally retarded and blind or with visual impairments; those mentally retarded with physical disabilities, especially with orthopaedic impairments; chronically ill children with mental retardation; those mentally retarded with partial impairments, e.g., speech defects, serious emotional disorders, etc. He further adds that because of the specificity of the disability, such children can be categorized both as mentally retarded children and, due to the concomitant visual impairment, for instance, as blind children. Coupled multiple disabilities can also occur, in Kirejczyk’s (1981) approach, in children characterized with “normal mental development”.

As Kirejczyk (1981, p. 600) claims: “Each additional disability results in, apart from mental retardation (in the case when intellectual disability occurs), specific, distinct and negative consequences for the development of children who exhibit them, and for their adaptation to life. Therefore, mentally retarded children who additionally have, for instance, a hearing impairment, display more learning difficulties and have more problems in their adaptation to life and work than deaf children with normal intellectual development, or children with a comparable level of mental retardation but without a hearing impairment. Developmental possibilities of children from the first group are more limited as compared to the other two groups. This means, on the one hand the need to lower educational requirements, and so to simplify the curriculum for children with coupled multiple disabilities, and on the other hand, the need to implement the organization of learning, educational methods and aids appropriate to the occurring disabilities”. To conclude, it can be observed that the quoted author refers the meaning of the term “coupled multiple disabilities” not only to the situation when intellectual disability is concomitant and coupled with sensory impairments or orthopaedic impairments, but also when damage to the organism is concomitant with somatic problems (e.g., chronic illnesses) or social problems (e.g., social maladjustment). Briefly, in Kirejczyk’s opinion, coupled multiple disabilities occur when, apart from a minimum one organic defect, there are concomitant somatic, psycho-emotional or social consequences.

Deutsch Smith (2008) from the USA prefers to use the term “multiple disabilities”, and when there are very serious consequences of the existing impairment or impairments, she employs the term “multiple-severe disabilities”. She quotes the definition of multiple disabilities following the federal law – the Individuals with Disabilities Education Act (IDEA): “Multiple disabilities are those with concomitant impairments (e.g., mental retardation-blindness, mental retardation-orthopaedic impairment, etc.), the combination of which causes such severe educational needs that they cannot be accommodated in special education programs solely for one of the impairments. The term does not include deafblindness. (U.S. Department of Education, 1999, p. 12422)” (Deutsch Smith, 2008, p. 311-312). She also provides a description of a severe disability, quoting from the brochure of the Association for Persons with Severe Handicaps (TASH): “Individuals of all ages, all races, religion, nationality, sex and sexual orientation who require extensive ongoing support in
more than one major life activity in order to participate in integrated community settings and to enjoy a quality of life that is available to citizens with fewer or no disabilities. Support may be required for life activities such as mobility, communication, self-care, and learning as necessary for independent living, employment and self-sufficiency (TASH, 2000)” (Deutsch Smith, 2008, p. 309). Simultaneously, she adds that in the context of IDEA, deafblindness and traumatic brain injury are separate categories which do not fit within the meaning of the term “multiple disabilities” (Deutsch Smith, 2008, p. 309). According to Deborah Deutsch Smith, "Individuals with multiple-severe disabilities require intensive, sustained support throughout their school years and often throughout their entire lives. For some individuals such support may relate to only one sphere of life; for the majority it is necessary to get access to and participate in the mainstream society. Support is necessary because the majority of individuals with multiple-severe disabilities require assistance in many life spheres” (Deutsch Smith, 2008, p. 311).

Dutch and Belgian scholars are of the opinion that the term “coupled multiple disabilities” includes the presence of sensory impairments concomitant with intellectual dysfunctions and/or orthopaedic impairments. However, they further suggest to introduce the term “severe intellectual disability” in relation to individuals with intellectual disability and concomitant other impairment(s), whereas to apply the term “coupled multiple disabilities” only to cases concerning sensory impairments and orthopaedic impairments, alternatively concomitant with serious somatic diseases (du Ville, Vandelanotte, 1990).

Consequently, according to de Wit (1975) and de Jong (1986) coupled multiple disabilities should be regarded as a qualitatively separate type of disability, because the combined consequences of the involved impairments are far more complicated and serious than the consequences of each separate defect contributing to a given disability. Thus, individuals with coupled multiple disabilities (children, youth, adults) form a qualitatively separate group of the disabled, not so much due to the presence of concomitant impairments, but because of the specificity and uniqueness of specialized activities that such people require.

The International Classification of Impairments, Disabilities and Handicaps (ICIDH) published by the World Health Organization (WHO) in 1980 invites some possibilities for analyzing the term “coupled multiple disabilities” and for suggesting its exceptional nature. This classification postulates that for the purpose of interpretations related to the inception and development of an organism’s disablement, its three dimensions should be considered. These dimensions are/can be interrelated and interactive and involve: impairment at the level of organ function (impairment); biological or functional disability of the organism (disability); and social impairment or disability (handicap). Special attention should be placed on impairment, defined as any loss or abnormality of psychological, physiological or anatomical structure or function due to a specific congenital defect, disease or injury; specifically the “loss or abnormality of an anatomical structure in an organism” merits attention. This means that the occurrence of at least two impairments, that is anatomical defects in the organism’s structure, can or actually should be decisive in
determining the presence of coupled multiple disabilities, and consequently their
diagnosis; whereas loss and/or abnormality of psychological and/or physiological
structure or function – should be seen as functional problems. They can affect the
functioning of the human organism. However, they do not have to, because they
occur independently of the organic impairment (yet, they generally are its direct
consequence) (Majewski, 1998). In this approach to coupled multiple disabilities,
the other dimensions of disability, that is biological disability (any restriction or
lack, resulting from an impairment, of ability to perform an activity in the manner
or within the range considered normal for a human being) and handicap (social
disability) (a disadvantage for a given individual resulting from an impairment or
a disability, that limits or prevents the fulfilment of a role that is normal, depending
on age, sex and social and cultural factors, for that individual), are only functional
consequences of the presence of an impairment (Majewski, 1998).

The International Classification of Functioning, Disability and Health (ICF)
adopted by the WHO in 2001 creates significantly more limited possibilities for the
interpretation of the concept of “coupled multiple disabilities” (Międzynarodowa
Klasyfikacja Funkcjono-wania..., 2007). The ICF was created as a result of the criti-
cism directed at the ICIDH of 1980, its fault being too large an emphasis placed on
the medical aspects of disability. The current classification assumes the so-called
biopsychosocial model of disability. This approach encompasses interrelations
among the health, functioning and disability of an organism, as well as the partici-
pation of an individual in social life. In fact, this classification is strictly functional,
although in its name it postulates accounting for the biological element, and thus
medical aspects. Neither in the interpretation of health, functioning nor disability,
can one find hints to explain “coupled multiple disabilities”. The concept of health
refers to well-being – well-being is a general term, encompassing the total universe
of human life, including physical, mental and social aspects, that make up what can
be called a “good life”; human functioning is an umbrella term encompassing such
elements as organism functioning, human activity and participation in society; it
denotes the positive aspects of the interaction between an individual (with a health
condition) and that individual’s contextual factors (situational factors, i.e., environ-
mental and personal factors that influence that individual’s good functioning); the
concept of disability is an umbrella term for impairments, activity limitations and
participation restrictions (it denotes the negative aspects of the interaction between
an individual and that individual’s contextual factors) (Międzynarodowa Klasyfikac-
ja Funkcjonowania..., 2007). This classification does not designate any element that
could be assumed as a starting point for defining the nature of coupled multiple
disabilities. It refers to the functional and developmental consequences of a health
condition and stresses that a human being is a biological being (this refers to the
human organism of a specific structure and fulfilling specific functions – organism
functioning) and that a human being is a specific individual, acting and performing
specific life activities – an active being, and that a human being is also a member
of a specific social group, to which he or she belongs and in whose life he or she
participates (Międzynarodowa Klasyfikacja Funkcjonowania..., 2007). As a result, this
classification blurs the possibilities of exact diagnosis and the selection of adequate strategies to support the disabled in general, including individuals with coupled multiple disabilities. It does not provide explicit arguments for the analysis of coupled multiple disabilities. Even the description of the biological level of human functioning (loss, limitation or disturbance in the organism’s functions depending on the severity and range of impairments of an organ or system) does not allow for the explicit formulation of the definition regarding this concept.

On the basis of the aforementioned opinions and concepts and their critical analysis, it is possible to suggest an approach to the issue of coupled multiple disabilities that differentiates the biological aspect (organism’s impairment) from the functional aspect (the consequences of an impairment and/or strictly functional possible abnormalities, that is loss or abnormality in physiological and/or psychological structure or function of an organism). Within this approach, the term “coupled multiple disabilities” refers to a health condition, excluding an intellectual disability, characterized by the presence of at least two serious defects in the body structure, the consequences of which are qualitatively different from hypothetically possible consequences of each separate impairment leading to this particular health condition. In the context of this interpretation, deafblindness will be included in the group of coupled multiple disabilities, because it involves the presence of serious impairments to the sense of hearing and vision and qualitatively different consequences as compared to the situation when only hearing or only vision is impaired. The situation is similar when an orthopaedic impairment is concomitant and coupled with, for instance, deafness or blindness. However, the term “coupled intellectual disability” will be more appropriate to define an intellectual disability concomitant and coupled with, for instance, a visual impairment or hearing impairment, on condition that an intellectual disability is the dominant, underlying condition, that is decisive for the course of disability, its consequences or an individual’s level of functioning.

A coupled intellectual disability occurs when an intellectual disability is the dominant disability caused by organic factors, that is decisive for current problems, difficulties or quality of life of a given individual, and is additionally concomitant and coupled with, for instance, a hearing or visual impairment. In other words, an individual with an intellectual disability due to organic factors, who additionally exhibits a visual impairment, will be qualified into a group of people with a coupled intellectual disability. However, a blind person, who acquired an intellectual disability due to the existing visual impairment and a lack of stimulation of the environment, and is in fact intellectually delayed, will be primarily qualified into a group of blind people with delayed intellectual development, that is to the blind, or, alternatively, given current stereotypes concerning an intellectual disability, to a group of intellectually disabled people (however, the latter approach is highly ungrounded and wrong); but will not be qualified to a group of people with coupled multiple disabilities.

In the analysis of serious disabilities various other terms are also applied: multiple, complex, multidimensional, and, recently, also co-occurring or coexisting.
These terms are constructed taking into account functional parameters (physiological, psychological and/or sociological). Disability is considered here from the point of view of the existing consequences which can be associated not only with organic impairments, but also with functional abnormalities, both quantitative and qualitative. This terminological variety indicates that in the analysis of serious disabilities the following factors should be considered: the number and types of the existing impairment(s), the severity of such impairment(s), the dominance of any of such impairments, in other words the leading character of one impairment, as well as the number and complexity of the existing consequences of impairment(s).

The term “coupled multiple disabilities” suggests the existence of concomitant and coupled impairments. As for the consequences and their number, they are generally very serious, varied and numerous, though they do not need to be so. Additionally, in coupled multiple disabilities, usually one impairment is more serious and severe than others and becomes the dominant one. For instance, when both hearing and vision are impaired, there can occur complete blindness and moderate hearing impairment, thus, visual impairment will be probably the dominant disability.

When analyzing the aforementioned terms, it should be stressed that the multidimensionality of disability indicates numerous functional domains in which the consequences of a disability occur quantitatively. Because at least two domains are involved, for instance, physical and social functioning, this category is quantitative and functional. This means, that the multidimensionality of disability can relate to the situation in which only one impairment occurs, e.g., deafness or blindness. However, the complexity of disability suggests its complex character, implicitly a complex character of consequences resulting from an impairment, not necessarily an organic impairment, because it can also be an impairment of a psychological or physiological structure or function of an organism – thus, it is a qualitative category. Additionally, a disability that involves only one impairment, e.g., loss of vision or hearing, can also be characterised by a complex course. The multiplicity of disability connotes, however, the presence of serious consequences, both in the qualitative and quantitative context; thus the consequences a disability are complex and simultaneously they occur in at least two functional domains. This means that

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Wygotski emphasized that in the analysis of serious, complex disabilities, one should consider the question of primary and secondary consequences, and when two organic defects occur, additionally the dominant nature of one of them. He observed that the current impairment (e.g. of vision, hearing) determines the primary disability, the secondary disability refers to possible qualitative and quantitative consequences occurring as the outcome of the primary impairment, it means that these are functional consequences (Basilowa, 2009; Sokolariski, 1962; Wygotski, 2003; Zaorska, 2008, 2010). A dominant impairment, when there are at least two organic defects, is this impairment which limits the child’s development to a largest extent and is significantly decisive as regards the severity and consequences of a disability, current difficulties and restrictions (generally, a dominant impairment is the one which causes a complete loss of activity of a particular organ) (Sokolariski, 1962; Wygotski, 2003).
it can refer to, e.g., deafness or blindness. The complexity, multidimensionality and multiplicity of disability can also relate to coupled multiple disabilities, although they do not need to.

The terms co-occurring disabilities or coexisting disabilities appear to be the least appropriate. They do not suggest anything, apart from the fact that in the condition of serious, complex and perhaps even coupled disabilities, one disability co-occurs or coexists with another one or other ones. Hence there is no connotation of a qualitatively different character as to such disabilities, and specifically there is no indication of the qualitative and quantitative specificity of the consequences of such disabilities. In other words, co-occurrence and coexistence can be interpreted as being next to each other rather than together, jointly, mutually. In the best scenario they can be seen as different organic and functional conditions “glued” to each other.

Concluding – not every disability resulting from an organic impairment or impairments can be considered to be complex, multidimensional or multiple, and even more so – coupled multiple disabilities. And not every type of coupled multiple disabilities is or can be complex, multidimensional, multiple, and even more so – co-occurring or coexisting.

**Developmental and early disability**

Psychopedagogical analyses and interpretations of the concept of human disability utilize also terms such as developmental disability and early disability.

Dykck (2009, p. 266) observes that, “Due to practical reasons, the definition of a developmental disability refers mostly to individuals who acquired a disability before the age of 18 years. If a disability appears early, and it is so advanced that it limits basic life functions, then such developmental disturbances are manifested with a significant lowering of intellectual abilities, qualitative abnormalities in social contacts and communication, and a limited, stereotypical and repetitive repertoire of interests and activities”. This author relates the concept of a developmental disability essentially to an intellectual disability and autism. However, the above considerations invite a suggestion to extend this term to encompass also other types of disability, including coupled multiple disabilities. It is true that the specificity of the correlation between the appearance of coupled multiple disabilities with rehabilitative and educational needs and the perspective for future life and available activity is different for an individual with coupled multiple disabilities since birth or acquired early and for an individual who acquires a disability around the age of 18. However, in the context of development, there are sensible arguments for the validity of the analyzed term. Still, in the case of sensory impairments – hearing, vision – traditionally the critical age is assumed to be the age of 5 years. Consequently, an individual who has lost sight before the age of 5 is classified as a blind person, and after the age of 5 as among a group of individuals with sight loss\(^3\). A solution

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\(^3\) This differentiation is typical of the Polish language in which two separate terms exist: *niewidomy* (sight lost before the age of 5) and *ociemniały* (sight lost after the age of 5).
to such doubts may involve complementing the term developmental disability with a reference to the developmental period in which an impairment or impairments appear, based on the periodization proposed by Harwas-Napierala and Trempala. These authors differentiate the following developmental periods before the age of 18: early childhood – from birth to 3 years old, middle childhood – between the ages of 4 and 6, late childhood – between the ages of 7 to 10-12, adolescence – between the ages of 10-12 to 20-23. Nevertheless, there is some doubt as to whether in the context of development one can directly transpose developmental periods with appropriate developmental norms to a condition of disability, especially for instance an intellectual disability or couple multiple disabilities. With reference to specific disabilities it is frequently postulated to move the borderlines of developmental periods to other age categories, for instance the period of early childhood is extended up to 10 years of age.

Summing up, it should be emphasized that when the condition of a disability is analyzed, the accounting for the developmental aspect and a specific developmental period in correlation with the appearance of a disability can significantly contribute not only to the identification of the possible consequences of such a disability, but also to the choice of adequate rehabilitative and educational activities and to the determination of hypothetical perspectives in adulthood.

**Selected general factors differentiating the rehabilitation and education of a disabled person depending on the specificity of a disability**

Based on the aforementioned analyses, one can ask a question as regards the criteria concerning the differentiation of the desired range of rehabilitative and educational support in relation to the type and specificity of an individual’s disability. Such criteria will qualitatively and quantitatively determine both the targeted diagnostic process and the selection of consistent rehabilitative methods, as well as the range, methods and expected educational outcomes.

Undoubtedly, different aims are in place for the diagnostic process, and then a possible course and range of rehabilitation and education in the case of a single disability (one impairment involved), and different ones for coupled multiple disabilities, coupled intellectual disability, a single disability that limits/delays intellectual development, and an intellectual delay caused by the influence of environmental factors.

Thus, the diagnostic process of a child/individual with a visual impairment should be targeted not only upon the determination of the existing visual perception, but also on the possibility of using compensatory mechanisms and personal features that predispose such a person to acquire knowledge, skills and competences as are adequate to that individual’s possibilities. The situation is similar in the case when a hearing, orthopaedic and intellectual impairment caused by factors that do not damage brain structures is diagnosed. As for the rehabilitation and education of a person with a visual impairment (an impairment involving the sense that
plays the most important role in learning about the surrounding reality), the acquiring of knowledge and functioning in various social situations will require support with respect to the development and utilization of the other senses. Furthermore, adaptation concerning the range and content of educational activities to the existing visual limitations will be necessary as well as orientation in space and learning to move safely in space, learning everyday life activities, and in the context of adult life – the selection of a profession that will allow such a person to be successful and self-fulfilled.

In the case of a single hearing impairment, rehabilitative and educational activities should be generally focused on the domains of communication, intellectual and social development, and the adaptation of the core curriculum and occupational education to the acquired level of communication; in the case of an orthopaedic impairment – on the removal of architectural and urban restrictions, and the adaptation of the surrounding environment, including the educational environment and work place, to the existing mobility.

Individuals with an intellectual disability due to an organic brain damage, depending on the severity of an intellectual disability, require the selection of educational content, organization and methods adequate to their cognitive possibilities, and the prognosis of a future life and an available activity, including work, in relation to intellectual possibilities, acquired mobility, the level of social functioning, and even determination of desired support from various communities and specialized institutions providing care for intellectually disabled adults.

The situation is different in the case of coupled multiple disabilities. Such cases require the identification of the dominant disability, but also the consequences of this disability in relation to the consequences of another, concomitant impairment, and the consequences of the concomitant and coupled impairments that decide on the qualitative character and qualitative specificity of this particular condition.

Thus, in the case of simultaneous visual and hearing impairments, when the visual impairment is more serious, specialized support should be based on the less impaired hearing, and in the opposite case, when the hearing impairment is more serious as compared to the visual impairment – on the existing visual possibilities.

When an orthopaedic impairment is concomitant and coupled with a visual or hearing impairment, not only the grade of the sensory impairment is significant, but also the severity and seriousness of the orthopaedic impairment. It should be stressed, however, that vision and hearing are vital for the acquisition of knowledge, consequently it is highly probable that sensory impairments will to a greater extent limit that individual’s development exhibiting specific coupled multiple disabilities. Moreover, modern mobility rehabilitation offers various rehabilitative possibilities to improve mobility. The situation is different as regards visual and hearing impairments. When vision is impaired, there are only aids that support residual vision (e.g., corrective glasses, magnifying glasses and other types) or replace impaired vision by means of hearing (e.g., voice computer software). When hearing is impaired, cochlear implants, high quality hearing aids, hearing support systems, e.g., FM wireless assistive listening systems, can be used. These assistive
tools cannot, however, fully compensate for the limitations resulting from visual or hearing impairments.

Deafblind individuals in whom both vision and hearing are completely lost (although such situations occur relatively rarely) have still different rehabilitative and educational needs. Their other senses, unfortunately less significant cognitively, need to be stimulated and activated. They also require educational contents to be limited to be adequate to their possibilities and developmental needs in the domains of physical, psychological and social functioning. In many cases it is necessary to plan the types and ranges of social and occupational support and care needed in adulthood.

Individuals with a coupled intellectual disability are in an exceptionally difficult developmental and functional situation, although a concrete and unambiguous one from a diagnostic point of view. For them, an intellectual disability is a dominant disability. A concomitant impairment, e.g., visual, hearing or orthopaedic impairment, is an additional, negative determinant that limits the life activities and developmental possibilities in a way specific to this particular additional impairment. Such limitations influence the range of knowledge, skills and competences that can be acquired, which are obviously restricted. They also affect life needs in adulthood, especially with regards to social and institutional care and support.

Individuals with a single disability limiting/delaying intellectual development require comprehensive, careful and meticulous diagnostic procedures. Above all, it is necessary to differentiate an intellectual disability from a delay in intellectual development. For instance, a child who is blind (or deaf) since birth can demonstrate very serious and severe problems concerning intellectual development. However, these problems can be caused by an existing intellectual disability, that is mental retardation caused by organic brain damage – then such a child will be qualified as having a coupled intellectual disability. Such problems can be, however, due to the limiting influence of the up-bringing environment, and an inadequate strategy of stimulating the development (not adjusted to the child’s possibilities or simply wrongly selected), lack of interest in the child’s development within the educational environment, or insufficient intensity of support provided for the child in relation to this child’s individual needs – such a child will be qualified as a blind child with delayed intellectual development. In the latter case, the child will require activities targeted at the facilitation of development, taking into account the existing visual limitations, so that the undertaken activities could influence positively the intellectual development. In other words, a child who is blind since birth and is intellectually delayed will require different rehabilitative and educational activities than a child with a coupled intellectual disability, who is also blind since birth. Expectations as to the outcomes of such activities will also differ in these two different cases.

The situation of a child whose intellectual development is delayed due to the influence of the educational environment is also different. In this case, there occur not only intellectual problems caused by external factors, but also specific problems encompassing developmental possibilities, corrective possibilities and possibilities
to make up for the deficiencies, as well as knowledge, skills and competences that such child can acquire. Such are larger in comparison to an intellectually disabled child due to brain damage. Also those possibilities concerning self-sufficiency and thus an active and satisfactory life in adulthood are greater.

As regards the differences in the interpretation of disability signalled here, it should be observed that there will exist different, dependent on the type and complexity of a disability, requirements concerning the activity and involvement of educational environments, including the family, in providing support, as well as the competences of specialists working with those individuals with a particular type or types of disabilities.

Conclusions

Summing up the previous considerations, it appears valid to conclude that the introduction of interpretative clarity as regards the analyzed terms can contribute not only to facilitating diagnostic activities, but also to the designing of rehabilitative and educational strategies that can be correlated with the nature and specificity of a disability and individual possibilities of a given disabled person. Additionally, terminological clarity can minimize, colloquially speaking, the placing of different disabilities into one bag. This will serve directly to assist a disabled person in his or her present life and possibly active adulthood. Indirectly, society will also benefit, as it will be possible to offer a maximal support system that will be consistent with types of disability and individual developmental and functional needs of a particular disabled person.

References


