



# 'Time Comprehension and Management Training' in Everyday Activities for Persons with Moderate Intellectual Disabilities

**ABSTRACT:** Magdalena Hinc-Wirkus, *'Time Comprehension and Management Training' in Everyday Activities for Persons with Moderate Intellectual Disabilities*. Interdisciplinary Contexts of Special Pedagogy, No. 17, Poznań 2017. Pp. 195-221. Adam Mickiewicz University Press. ISSN 2300-391X

A human is a social being, instinctively aspiring to become fully involved with the society. According to the statistics, however, one in ten Polish people is forced to overcome various problems in order to be active in the society. What are the main problems for a person with intellectual disability and their career? One of the main barriers for persons with intellectual disability, are the difficulties with the perception of the time; comprehending the very idea of the time flow and learning to use the watch or the calendar. A simple and cost-effective way to develop these skills is the training in time comprehension ('The Time Workshop'), which is the subject of this article.

**KEY WORDS:** moderate intellectual disability, the time workshop, comprehension of time

## Introduction

A mild to moderate level of intellectual disability is a concern of<sup>1</sup> a minimum of 1% of the society. One of the major everyday

---

<sup>1</sup> According to the Polish Judicature a mild intellectual disability does not qualify as a disability (judicial decision of Ministry of Family, Labour and Social Policy or

difficulties for persons with intellectual disabilities is the perception of time, which works on the one hand in the psychic dimension of perceiving the reality (and one's reality cognition) and on the other, in the pragmatic applications of temporal notion, such as the usage of the calendar or watch and the rationale behind the very existence of such devices. There are, however, simple and cost-effective ways to develop the defective skills by a 'training in time comprehension and management' (usually shortened to 'time workshop').

It should be noted as part of the introduction that basic daily living skill training for people with disabilities are not only a separate form of operation in the context of social work (e.g. as social support provided by a social worker or a caregiver), but also a recognised component of special needs education. To follow an observation by D. Podgórska-Jachnik, the term 'training' is increasingly common in contexts where 'therapy' was used previously (as in e.g. occupational therapy)<sup>2</sup>. Training does seem to offer more precision and better structural distinction for the required activities, and finally does appear more adequate to the actual tasks performed by the caregivers. The therapeutic effect of training is indisputable; however, the distinction mirrors the current tendencies in special needs education to apply the term therapy very sparingly and only when certain advanced forms of intervention are involved.<sup>3</sup> The trainings tend to include a very narrow range of skills, tight pre-planned structure and methodology of competence acquisition, definite time

---

MPiPS). However, students with a mild intellectual disability are allowed to apply for special needs education (judicial decision of the Ministry of Education or MEN). Their education is based on the standard curricula with didactic modifications. Moderate and severe Intellectual disabilities translate to a different set of curricula and are qualified as disabilities in the judicial sense, which is tantamount to a number of limitations both in learning and social functioning.

<sup>2</sup> D. Podgórska-Jachnik, *Social Work with Persons with Disabilities and Their Families (Praca socjalna z osobami z niepełnosprawnością i ich rodzinami)*, Centrum Rozwoju Zasobów Ludzkich, Warszawa 2014, p. 140.

<sup>3</sup> *Ibid.*

frame as well as highly operationalised and easily verifiable expected results.<sup>4</sup> All of the above is very much an advantage in the context of special needs education.

## Functioning difficulties resulting from moderate intellectual disabilities

To quote the World Health Organisation's definition, an intellectual disability *significantly impairs the overall level of intellectual and adaptive functioning before the age of 18 is reached*.<sup>5</sup> According to ICD-10 moderate intellectual disability (F71) is diagnosed in adults with an IQ score of between 39 and 45 (Wechsler AIS)<sup>6</sup>, when the conditions of impaired social functioning and symptoms appearance during the development stage are met. Despite the various and elaborate characteristics of people with intellectual disabilities in circulation<sup>7</sup>, the most important difficulties can be structured as follows:

- Perception: *generally impaired, partial recognition of certain features but without discrimination;*
- Attention: *difficulties with focused top-down attention, prevalence of bottom-up attention;*
- Memory: *limited scope of memory, poor learning curve;*

---

<sup>4</sup> J. Meder, *Rehabilitation (Rehabilitacja)*, [in]: A. Bilikiewicz, J. Rybakowski, S. Puzyński, J. Wciórka (Eds.). *Psychiatria (Psychiatria)*. Vol. II. *Basic Psychiatria (Podstawy psychiatrii)*, Wydawnictwo Medyczne Urban & Partner, Wrocław 2002, pp. 301-317.

<sup>5</sup> *The International Classification of Diseases – ICD*, [online] <http://www.who.int/classifications/icd/> [Accessed on 20 December 2016].

<sup>6</sup> *Ibid.*

<sup>7</sup> K. Bobińska, T. Pietras, P. Gałecki, *Intellectual Disabilities. Etiopathogenesis, Epidemiology, Diagnosis, Therapy (Niepełnosprawność intelektualna – etiopatogeneza, epidemiologia, diagnoza, terapia)*. Wyd. Continuo, Wrocław 2012; R.J. Kijak, *Intellectual disabilities. Between Diagnosis and Action (Niepełnosprawność intelektualna: Między diagnozą a działaniem)*, Centrum Rozwoju Zasobów Ludzkich, Warszawa 2013; R. Piotrowicz, E. Wapiennik, *The Characteristics of Persons with Intellectual Disabilities (Charakterystyka osób z niepełnosprawnością intelektualną)*, [in:] D. M. Piekut-Brodzka, J. Kuczyńska-Kwapisz (Eds.), *Special Needs Education for Social Workers (Pedagogika specjalna dla pracowników socjalnych)*, Wyd. APS, Warszawa 2004.

- **Speech:** *Slowness in learning to talk, very simple sentences, incorrect or indistinct pronunciation, limited vocabulary, inaccessibility of abstract terms;*
- **Thinking:** *limited cause and effect thinking, low processing rate and lack of flexibility, impaired autonomy and self-control;*
- **Emotions:** *advanced emotional sensitivity, limited emotional control, emotional dysregulation and ambivalence;*
- **Motor activity:** *acceptable level of self-care skills, low motor precision and dexterity, slowness;*
- **Social skills:** *frequent limitations in adaptive behaviour and autonomy, usual top level of social skills comparable to a non-dysfunctional 10-year old;*
- **Learning:** *available in primary special needs education, occasionally in the so-called daily living education, basic training for unskilled labour, occupational therapy workshops;*
- **Occupation:** *adaptability to straightforward occupational tasks, ability to operate simple machinery under supervision, sheltered workshops<sup>8</sup>.*

As can be seen, persons with moderate intellectual disabilities are faced with considerable limitations in every aspect of life, resulting in a high level of dependency. The aforementioned perception of time is an important component of all of the above aspects of social functioning. Limited self-care skills and dependency on external support is on the one hand a defining factor of many people with intellectual disabilities, and a discriminative factor on the other, sub-dividing their population according to the level of required support, ranging from occasional and temporary, through limited and ongoing, up to permanent support and supervision throughout the entire life<sup>9</sup>. Persons with moderate intellectual disabilities require a limited level of support. The precise definition of which is a subtle, yet significant issue in itself, as this is exactly where their potential for personal inde-

---

<sup>8</sup> Ż. Stelter, *The Characteristics of Intellectual Disability. Specific Questions (Charakterystyka niepełnosprawności intelektualnej. Zagadnienia szczegółowe)*, [in:] *A Good Start. Workshops for Providers for People with Disabilities ('Dobry Start' - szkolenia dla usługodawców osób niepełnosprawnych)*, Poznań 2006, pp. 91-94.

<sup>9</sup> R.J. Kijak, *Intellectual Disabilities... (Niepełnosprawność intelektualna) ...*, op. cit.

pendence is contrasted with the risk of over-protectiveness which can hinder their development potential.<sup>10</sup> According to S. Kowalik (2007), the most important discriminant of the situation a person with a disability, including intellectual disabilities, might be in, is the inadequateness of social expectations and the capabilities to fulfil them. T. Majewski and C. Miżejewski deem individuals with moderate intellectual disabilities as relatively independent in self-care and basic daily living skills<sup>11</sup>, and, as shown by the results of B. Cytowska's research, their potential is sufficient to master a number of occupational tasks.<sup>12</sup> Regrettably though, people with disabilities are still faced with difficulties in finding employment in Poland, which seems to be a symptom of the certain randomness of the process whereby persons with disabilities can become emancipated from the sense of being dependent.<sup>13</sup>

---

<sup>10</sup> B. Tylewska-Nowak, *Fulfilment of Developmental Tasks by Adults with Moderate or Severe Intellectual Disabilities (Wypełnianie zadań rozwojowych przez osoby dorosłe z umiarkowaną i znaczną niepełnosprawnością intelektualną)*, [in:] B. Cytowska (Ed.), *Adults with Intellectual Disabilities in the Labyrinth of Daily Life. Research Analysis, Critical Approach and Suggested Solutions. Analiza badań – krytyka podejść – propozycje rozwiązań*. Wyd. Adama Marszałek, Toruń 2011; M. Kościelska, *Experiencing Own and Others' Adulthood by Persons with Disabilities (Przeżywanie własnej i cudzej dorosłości przez osoby z niepełnosprawnością)*, [in:] R. Kijak (Ed.), *Disabilities in the Mirror of Adulthood (Niepełnosprawność w zwierciadle dorosłości)*, Oficyna Wydawnicza Impuls, Kraków 2012.

<sup>11</sup> T. Majewski, C. Miżejewski, *The Occupational Possibilities of Persons with Various Types of Disabilities (Możliwości zawodowe różnych kategorii osób niepełnosprawnych)*, [in:] T. Majewski, C. Miżejewski, W. Sobczak (Eds.), *The Borough and the Disabilities. The Borough Official's Handbook for Occupational Activation and Social Rehabilitation of Persons with Disabilities (Gmina a niepełnosprawność. Podręcznik dla samorządów gminnych z zakresu aktywizacji zawodowej i rehabilitacji społecznej osób niepełnosprawnych)*, KIGR, Warszawa 2007, p. 72.

<sup>12</sup> B. Cytowska, *The Programme of Sheltered Workshop for People with Intellectual Disabilities – A Trainer's Book (Realizacja programu 'Wspomagane zatrudnienie osób z niepełnosprawnością intelektualną – Trener')*, [in:] T. Zółkowska, M. Wlazło (Eds.), *Special Needs Pedagogy – Theory vs. Reality. Social and Pedagogical Aspects in Rehabilitation for People with Disabilities (Pedagogika specjalna – koncepcje i rzeczywistość. Socjopedagogiczne aspekty rehabilitacji osób niepełnosprawnych. Vol. III. Uniwersytet Szczeciński, Szczecin 2008.*

<sup>13</sup> B. Tylewska-Nowak, *Fulfilment of... (Wypełnianie zadań) ...*, *op. cit.*; M. Kościelska *Experiencing Own... (Przeżywanie własnej) ...*, *op. cit.*; R.J. Kijak, *Intellectual Disabilities... (Niepełnosprawność intelektualna) ...*, *op. cit.*, p. 12.

Working with people with profound disabilities requires a set of variables to be kept in mind, as the main determinants of what such a cooperation should be composed of. Firstly, even though working with adults, it is irresponsible to expect behaviour fully adequate to the biological age. The usual level of mental development reached by people with moderate intellectual disabilities is roughly equivalent to a non-impaired nine-year old, this being the approximate reference point for structuring the education and development tasks. On the other hand, the essential mindfulness to a person's dignity and their sense of subjectivity, as well as the risk of excessive infantilisation in the relationship<sup>14</sup>, should encourage a respectful and regardful manner of address, empowering the person's subjectivity and their right to make their own decisions. Even in the case of severe intellectual disability, respectful partnership with an affected person is mainly dependent on two factors: a profound respect for one's subjectivity on the part of the caregivers and the development of real-life social skills on the part of the beneficiary according to their actual capabilities, and including competences such as self-advocacy<sup>15</sup>, decision-making and assertiveness. The latter is an issue addressed directly in the new curriculum for persons with moderate to severe intellectual disabilities.<sup>16</sup>

---

<sup>14</sup> E. Pisula, *The Adult Life of Persons with Intellectual Disabilities. Chances and Challenges (Dorosłość osób z niepełnosprawnością intelektualną – szanse i zagrożenia)*, Polish Association for People with Mental Handicap (PSOUU), Management Board, Warszawa 2008; B. Tylewska-Nowak *Fulfilment of... (Wypełnianie zadań) ...*, op. cit.

<sup>15</sup> D. Podgórska-Jachnik, D. Tloczkowska, *The Self-advocate Movement as the Development of Competences in Autonomous Advocacy of People with Intellectual Disabilities (Ruch self-adwokatów jako rozwijanie kompetencji w zakresie rzecznictwa własnego osób z niepełnosprawnością intelektualną)*, [in:] D. Podgórska-Jachnik, *The Questions of Advocacy and Representation of People with Disabilities (Problemy rzecznictwa i reprezentacji osób niepełnosprawnych)*, Wyd. WSP, Łódź 2009.

<sup>16</sup> See: *The Ministry of Education Decree of 27 August 2012 on the curricula in pre-school, primary and secondary education in the various types of schools (Rozporządzenie Ministra Edukacji Narodowej z dnia 27 sierpnia 2012 r. w sprawie podstawy programowej wychowania przedszkolnego oraz kształcenia ogólnego w poszczególnych typach szkół)* (Dz. U. of 2012 pos. 977), Appendix no 3: *Curriculum for students with moderate to severe intellectual disabilities for primary and intermediate schools (Podstawa programowa kształcenia*

## Preparation for the 'time workshop'

Prior to working with persons with intellectual disabilities, a trainer should conduct a detailed diagnosis of their limitations and assets as well as assess the situations in which they function. Establishing the strengths and weaknesses of every beneficiary should be the first step of creating a strategy for the cooperation. In the everyday practice of oligophrenic pedagogues one of the most practical diagnostic tools proved to be the *H.C. Gunzburg (P.A.C.) scale of measurement of social development*. P.A.C. as a whole<sup>17</sup> is comprised of three charts of an increasing task difficulty level, allowing for a good comprehension of the beneficiary's current development level as well as their zone of proximal development, and thus for well-planned education activities. Moreover, it can demonstrate which tasks the beneficiary won't be able to perform at the moment of the assessment, and which tasks may forever remain beyond their capabilities due to the existing limitations and handicaps. The planning stage should balance the pedagogical optimism with realistic outcomes<sup>18</sup> as the two reference points upon which to build the framework of rehabilitation goals and milestones to be accomplished by the beneficiary. The skills measured under the P.A.C. charts can be divided into four groups: *Self-help*, *Communication*, *Socialisation* and *Occupation*. Every group is provided with adequate tasks of increasing difficulty level. The assessment should be updated every six months to better understand in which areas progress, or regress, was made.<sup>19</sup>

---

ogólnego dla uczniów z upośledzeniem umysłowym w stopniu umiarkowanym lub znacznym w szkołach podstawowych i gimnazjach).

<sup>17</sup> PPAC, P-A-C 1 and P-A-C 2 [in:] T. Witkowski, *The Handbook for P-A-C 1 by H.C. Gunzburg for Evaluating the Social Skills of People with Mental Impairment (Podręcznik do inwentarza PAC-1 H.C. Gunzburga do oceny postępu w rozwoju społecznym osób z upośledzeniem umysłowym)*, Katolicki Uniwersytet Lubelski, Lublin 1996.

<sup>18</sup> Cf. B. Tylewska-Nowak, *Fulfillment of... (Wypełnianie zadań) ...*, op. cit.

<sup>19</sup> [http://www.poradnikautystyczny.pl/post/kwestionariusze/skala\\_umiejetnosci\\_spolecznych\\_gunzburga\\_pac](http://www.poradnikautystyczny.pl/post/kwestionariusze/skala_umiejetnosci_spolecznych_gunzburga_pac) [Accessed on 31 December 2016].

Time comprehension, the main focus of the present paper, can be measured on the second or third grade, translating to charts P-A-C 1 and P-A-C 2. *Progress Assessment Chart P-A-C 1 by H.C. Gunzburg, for evaluating the social skills of people with mental impairment* contains the following tasks in this category:

- *correct usage of daytime expressions, such as: in the morning, in the afternoon,*
- *correct understanding of the days of the week and their names,*
- *correct understanding of the differences between time expressions, such as: day – week, minute – hour, etc.,*
- *ability to discern between a quarter of an hour and an hour,*
- *ability to tell the current time and associate the particular hours during the day with various activities and events*<sup>20</sup>.

P-A-C 2 is designed to diagnose persons with mild intellectual disabilities, and as such it is comprised of tasks on a higher difficulty level. However, according to the Zone of Proximal Development framework they can be applied even in cases of more severe disabilities, in order to discover the potential assets a beneficiary could possess. The following tasks are expected to be understood, at least partially and/or with assistance:

- *understanding of time-related adjectives, such as: daily, brief, prompt, frequent, repeated,*
- *ability to read the clock and to associate the particular hours of the day with various activities and events,*
- *understanding of various ways to express the same moment in time, as in: 9.15 – Quarter past nine,*
- *ability to write down the time when dictated,*
- *understanding of time elapsed between given hours, such as between 3.30 and 4.30,*
- *correct indication of the time one or two hours previous to or following a given moment in time,*

---

<sup>20</sup> T. Witkowski, *The Handbook for P-A-C 1...* (Podręcznik do inwentarza PAC-1), *op. cit.*, pp. 7-8.



- *proper usage of measuring devices, such as a ruler or tape measure, understanding of quantifiers, such as: 'a half of', 'a quarter of'*<sup>21</sup>.

The assessment is conducted by means of observation and interview, with the answers marked on the appropriate diagram. Analysing the obtained data facilitates the design of an education activities schedule and its following evaluation, which should be done by comparing the previous, initial diagnosis with the current assessment results.

Another useful tool given the goals of the 'time workshop' could be the R. McConkey & J. Walsh's Index of Social Competence translated into Polish and modified by W. Pilecka i D. Wolska<sup>22</sup>. This index allows profiling in the following ranges of social functioning: Communication, Self-Care and Community Skills. Telling the time is included among the Community Skills, along with simple literacy skills and the ability to handle money. Comprehension of time flow is one of the components of being self-reliant, and can be assessed according to the following observations:

- monitoring the elapsed time by a frequent glance on the watch or clock, e.g. when expecting a phone call;
- ability to read the dial of a watch or wall clock;
- ability to tell the time using a wall clock;
- the ability to discern between specific events in a day (e.g. the start of a TV show<sup>23</sup>), obvious from the person's behaviour.

---

<sup>21</sup> T. Witkowski, *The Handbook for P-A-C 2 by H.C. Gunzburg for Evaluating the Development in Social Skills of People with Mental Impairment (Podręcznik do inwentarza PAC-2 H. C. Gunzburga do oceny postępu w rozwoju społecznym osób z upośledzeniem umysłowym)*, Katolicki Uniwersytet Lubelski, Lublin 1996, pp. 7-9.

<sup>22</sup> D. Wolska, *the Influence of Social Adaptation on the Quality of Life of Adults with Intellectual Disabilities (Wpływ prawidłowego przystosowania społecznego na jakość życia osób dorosłych z niepełnosprawnością intelektualną)*, [in:] B. Cytowska (Ed.), *Adults with Intellectual Disabilities in the Labirynth of Daily Life. Research Analysis, Critical Approach and Suggested Solutions (Dorośli z niepełnosprawnością intelektualną w labiryntach codzienności. Analiza badań – krytyka podejść – propozycje rozwiązań)*. Wyd. Adama Marszałek, Toruń 2011, pp. 63-69.

<sup>23</sup> *Ibid.*, p. 66.

Lack of comprehension can in turn be diagnosed, when it can be suspected that the person is not aware of the time flow.

The time subscale of McConkey and Walsh's index can also be applied to design exercises for the 'time workshop', even though it tends to be less specific than the diagnostic tools of Gunzburg's chart.

### **Personal experience of the 'time workshop' – methodological case-study framework and initial diagnosis**

To illustrate my personal experience with the training in time comprehension and management i have chosen a case study of Krzysztof<sup>24</sup>, a young adult with moderate intellectual disability, living with his parents at his place of birth in a small town. The parents, motivated by the deep emotional bond with their child, were constantly seeking professional support to allow for the development of their son's potential. Regrettably, the time and place of Krzysztof's birth (nearly three decades past in a small provincial town) proved to be major obstacles to the fulfilment of their expectations. As a consequence, they had been hardly aware of the actual cause of their child's developmental handicap and the attempts at rehabilitation and therapy had been undertaken in a rather random fashion. Krzysztof started his education career in a public pre-school, and continued onto a public primary school. However, after three years he was moved to a special needs education facility wherein he concluded his primary education. For the past 10 years Krzysztof has frequented the workshops in a Centre for Community Self-Help (8 hours per working day). The education activities undertaken in his adulthood were somewhat compensatory, as, given proper support, he could have been mastered multiple skills earlier

---

<sup>24</sup> The name as well as pieces of sensitive information had been changed in order to protect the beneficiary's privacy.

in his life. It should be noted, that both parents were highly willing to cooperate, requiring only a degree of guidance and support as well as time and patience.

Due to the fact that the project has been realised according to Krzysztof's individual needs and in the premises of his own house (with concurrent support from the Centre for Community Self-Help), his case can be studied as a type of *action research*, whereby the work of committed, reflective pedagogues is a scientifically recognised method of studying the social circumstances of the researcher's endeavours, with the goal of improving the quality of services provided in such (and similar) contexts<sup>25</sup>.

The research which i had undertaken can be regarded as a micro-scale project, aimed as it were not only at improvements in Krzysztof's personal functioning, but also in the way his whole family addressed various daily living situations (in which i have frequently participated, due to being engaged in the project for a considerable period of time). The workshops have been deeply embedded into the daily living routine and were of personal importance to myself, which also predefined my possible role in the research process. According to its fundamental methodology, action research should:<sup>26</sup>

- be conducted by the same individual, who acts as the provider and makes decisions on the course of action, thus combining the role of researcher and practitioner; and should be with regards to matters of importance to the researcher themselves; this i mentioned above,
- result in practical outcomes; this being a realistic improvement of the beneficiary and their family's functioning,
- allow to draw broader theoretical conclusions from everyday practice; this was the methodological concept of 'time workshop';

---

<sup>25</sup> H. Červinková, D. Gołębnik (Eds.), *Action Research. Committed Pedagogy and Anthropology (Badania w działaniu: Pedagogika i antropologia zaangażowane)*, Wydawnictwo Naukowe DSW, Wrocław 2010.

<sup>26</sup> [www.metologia-badan.wyklady.org/wyklad/7\\_badania-w-dzialaniu-action-research-.html](http://www.metologia-badan.wyklady.org/wyklad/7_badania-w-dzialaniu-action-research-.html) [Accessed on 14 August 2017].

- be conducted with at least a degree of participation from the individuals involved in the researched situation; this was fulfilled by the subjective manner of participation on the side of Krzysztof, by working to further empower this subjectivity and by the parents' active cooperation

The goal i have undertaken was the assessment and improvement of the beneficiary's functioning with regards to timeflow-related issues, mainly to further the comprehension and cognition of time flow and time management. The workshops were aimed at practical facilitation in daily life, both of the beneficiary and his family. Due to the moderate level of intellectual disability in question the prospective results were placed in the range of minor, however noticeable, improvements in development. The main question of the accompanying research on the other hand (accompanying in the understanding of the *action research* methodology, wherein the research question is secondary to support practice, not a scientific goal in its own right) was: *In what manner is it possible to further and broaden the competences of time management among persons with moderate intellectual disabilities?* The realisation stage included a continuous participant observation with the application of H.C. Guznburg's diagnostic chart to assess the progress and evaluate the project as a whole.

Workshops with Krzysztof begun in July 2014 at his age of 26. Even though I knew him before, i decided to conduct a diagnosis, to better asses his capabilities and the later effects, using *the P-A-C 1 Chart by H.C. Gunzburg for evaluating the social skills of people with mental impairment*. The assessment took roughly 30 minutes, with Krzysztof's mother providing great help with the answers. Having analysed the acquired data, I concluded that

- Krzysztof is well able to manage basic daily self-help, although he requires support in more complicated tasks,
- He would never leave the house, even to the nearest vicinity without a supervising caregiver,
- He had mastered the principles of hygiene, though it has to be said he was seldom willing to complete the daily toilette,
- He was unable to tie shoelaces, ribbons or ties himself,

- He experienced difficulties in concentrating for extended periods of time, and consequently in memorising and completing given sets of tasks,
- He could not use a watch, nor understand temporal expressions correctly,
- He found it confusing to discern the nominal value of money, however he understood and appreciated the role of money in life,
- He could not read, even by the G. Doman method,
- He would refuse to participate in group sports,
- He required reminders, encouragement and ongoing support to be involved in any household tasks,
- He experienced minor difficulties with gross motor skills.

Working with Krzysztof took up to two hours once per week (depending on the current needs and his level of participation) over the course of three months. This time was devoted to individual development, but also to hearing Krzysztof with regards to his needs, concerns and expectations, as well as to consulting his parents. We would often adjust our cooperation *au courant* and according to the current needs, e.g. by updating the 'agenda' on our cork board. Simultaneously Krzysztof would practice every day with his parents. Their deep involvement was one of the key conditions of the programme's realisation. After the initial three-month period we would meet once every month to discuss the developments and further strategies. I would be false to deem this process completed, as the established methods had become deeply embedded into the family's routine, which does in fact mirror the methodology of reflective action research.

### **'Time Comprehension and Management Training', suggested exercises**

According to the theoretical and didactic guidelines<sup>27</sup> as well as my own experience in researching the leisure time of people with

---

<sup>27</sup> J. Lausch-Żuk, *Pedagogy vs. People with Mild to Severe Intellectual Disabilities (Pedagogika osób z umiarkowanym, znacznym i głębokim upośledzeniem umysłowym)*, [in:]

intellectual disabilities<sup>28</sup>, I intend to propose my own methodological proposal for the 'Time Comprehension and Management Training' for the above target group, as demonstrated with the programme realised with Krzysztof in mind. Firstly, I should complement the aforementioned basic methodological assumptions for training with people with intellectual disabilities with a series of additional pieces of information, below:

- The term 'Time Comprehension and Management Training', or 'Time Workshop' for the sake of brevity, should be understood in a brachylogic fashion, regarding on the one hand the process of formation of the notion of time as such, and on the other learning skills in the practical understanding of time flow and the time management in life as a person with intellectual disability;
- The subjective perception of time is predominantly dependent on everyday personal experience. Consequently, 'Time Workshop', or in a broader sense the training on the comprehension of the notion of time, simultaneously has to be an exercise in the formation, accumulation and recognition of the personal meanings of the beneficiaries' individual experiences;
- Due to the above, 'time notion training' should be included among the trainings of social skills, aimed at improving the adaptive potential of the people whose experience in this mat-

---

W. Dykcik (Ed.), *Special Needs Pedagogy. Composite Work (Pedagogika specjalna: praca zbiorowa)*, Wydaw. Nauk. UAM, Poznań 2006, pp. 149-165; M. Piszczek (Ed.), *The Manual for Teachers to Students with Moderate to Severe Mental Impairment (Przewodnik dla nauczycieli uczniów upośledzonych umysłowo w stopniu znacznym i umiarkowanym)*, CMPP-P, Warszawa 2001; J. Wyczęsany, *Oligophrenic Pedagogy. A Selection (Pedagogika upośledzonych umysłowo. Wybrane zagadnienia)*, Oficyna Wyd. 'Impuls', Kraków 2002; J. Wyczęsany (Ed.), *Special Needs Didactics. A Selection (Dydaktyka specjalna, wybrane zagadnienia)*, HARMONIA UNIVERSALIS, Gdańsk 2014.

<sup>28</sup> Research within the framework of PhD studies at the Casimir the Great University (UKW) in Bydgoszcz under the supervision of Hab. Dr D. Podgórska-Jachnik, Professor at UKW. Previously under the supervision of Hab. Dr Mariusz Cichosz, Professor at UKW.

ter can be somewhat deficient (e.g. in the range of own experience, role models, certain skills, or the deficit of intellectual capabilities, hampering the comprehension of various regulations of social life, etc.).

Social trainings, also known as *soft skills workshops*, serve to convey the specific daily living and self-help skills, which are diagnosed as deficient in each and every particular case.<sup>29</sup> Among them we can find trainings in areas such as cooking, home budget planning, outward appearances and hygiene, communication and conversation, occupation (both pre-service and on the job) or problem solving in various interpersonal situations. However, the above list is in no way complete<sup>30</sup>. From the perspective of comprehension barriers and time management, time notion training occurred to me as extremely important in the lives of people with intellectual disabilities.

My set of proposals combines theory with practice; on the one hand it refers to the theoretical discourse on the revalidation possibilities in oligophrenic pedagogy and on the other, aims to demonstrate certain practical solutions in this field. For the latter to be valid, it must foremost take into account the specific situation and individual needs of a person with intellectual disability and their immediate surroundings. The cooperation with Krzysztof has also been preceded by a consultation with his parents, where we discussed the existing documentation (such as previous diagnosis or medical opinions) and the support received up to that date, as well as their difficulties, expectations and capabilities. The functioning diagnosis based on *P-A-C* allowed me to determine what ranges of skills Krzysztof had already learnt and what his potential for prospective development was. Following the diagnosis, we discussed which activities could be realistically undertaken by the parents in a regular and consistent manner. This was especially important due

---

<sup>29</sup> D. Podgórska-Jachnik, *Social Work with the Homeless (Praca socjalna z osobami bezdomnymi)*, CRZL, Warszawa 2014, pp. 113-115.

<sup>30</sup> *Ibid.*, p. 114.

to the need to create a common influence front, and the vast scope of the required influence, as well as the value in rehabilitation presented by functioning in family roles on the part of persons with intellectual disabilities.<sup>31</sup> The above would not be possible without having settled on the shared responsibilities of the parents on one hand and the therapist on the other. In our introductory agreements we have set as our common initial goal to better mobilise Krzysztof into various activities and broaden his range of independent functioning. Aside from augmenting his overall motivation we decided on three main targets with regards to the above: 1. improving the level of personal hygiene; 2. encouragement to take his medication in a regular fashion; 3. training in systematic completion of minor household tasks. The targets had been clearly defined, realistic and settled upon as certain milestones to reach. It is worth to note, that the limited number of targets and the degree to which they were inscribed into Krzysztof's everyday activity were intentional and should be underlined. Time comprehension and management surfaced in our work as an essential, pragmatic tool, and as was obvious after the project's completion, was the common denominator of the training and a goal in its own right. This is what led to the training in time comprehension and management becoming separated as both a topic as such, and a set of practical exercises.

The work begun with the attempts to augment Krzysztof's motivation to act in general. In order to encourage Krzysztof, who seemed quite passive at first, to certain activities we used the so-called token economy system.<sup>32</sup> Physically it was comprised of a cork board, on which we placed pictographs representing the tasks which he was meant to learn as a priority.

---

<sup>31</sup> J. Wyczesany (2002), *Oligophrenic Pedagogy... (Pedagogika upośledzonych...)*, *op. cit.*, pp. 147, 156-157.

<sup>32</sup> A. Kołakowski, A. Pisula, *Handling a Difficult Child. A Friendly Behavioural Therapy (Sposób na trudne dziecko. Przyjazna terapia behawioralna)*, GWP, Gdańsk 2016; T. Ayllon, *The Token Economy (Jak stosować gospodarkę żetonową i system punktowy)*, SPOA, Gdańsk 2000.



1. 'Go out to *community*' represented going out to attend the classes at the Centre for Community Self-Help;

2. 'Pills' represented systematic intake of the prescribed medication;

3. 'Clear table after dinner' represented a self-help task we deemed as essential. This particular one had been chosen due to its relative simplicity, its frequent occurrences during the day and the ease with which it could be isolated and assessed;

4. 'Clean teeth' represented the basic, daily hygiene practice, which needed no additional rationale, even though it was previously not included in Krzysztof's habits.

Training conducted with people with intellectual disabilities requires, especially at the initial stage, a set of simple, crucial tasks, which are both repetitive and verifiable.

Aside from pictographs the board was divided into weekdays, with their full names, so that the whole created a chart, crossing the days of the week with the planned tasks. Krzysztof had been tasked with the daily completion of all of the above tasks without complaining. As a reinforcer, a pin would be pushed into the relevant section of the chart. As the pins were varied in shape and colour they provided an additional side-training in discerning colours and geometric shapes. However, the pins could also be removed, when the results were negative (tasks not completed). Our board serve to develop Krzysztof's familiarity with the names of the days of the week, his systematic approach to daily tasks, the elements of cause and effect thinking. At the same time, we practised counting, which will be addressed in more detail below. Inspired by the use of attendance charts and wall calendars to initially shape the understanding of time, this method combined the didactic guidelines of the workshop centres' method\with the<sup>33</sup> reinforcement of target

---

<sup>33</sup> K. Sadowska, *The Basic Assumptions and Values of the Methodology in Special Needs Education Facilities (Podstawowe założenia i wartości metody ośrodków pracy w szkolnictwie specjalnym)*, Teacher and School (Nauczyciel i Szkoła), Issues 1-2(18-19)/2003, pp. 180-196.

behaviour<sup>34</sup> and the broader behavioural approach to competence management<sup>35</sup>.

The contract we settled upon with Krzysztof was another important component. The beneficiary's informed consent and wilful participation were crucial to the strategy of empowering his own subjectivity within the project's framework. We agreed with Krzysztof and his parents that constructive behaviour would be rewarded, while disruptive behaviour should be fined with the loss of tokens. The above mentioned coloured pins would be used as the learnt reinforcers, and the following values were in place:

- 10 pins were worth a sheet of stickers (Krzysztof is passionate about sticker collages);
- 15 pins could be exchanged for a copybook to put stickers in;
- 20 pins were worth going out with Krzysztof's father 'to get ice cream';
- 30 pins were worth a family 'pizza' outing.

As is obvious, despite the material nature of the reinforcers, such as stickers or treats, they also contained a social component<sup>36</sup> to reinforce the relationships within the family<sup>37</sup>.

Collecting pins can be used to familiarise the beneficiary with shapes and colours as well as to practice counting (up to 30 in our case). This is a matter of agreement however, and should depend on the current capabilities of the beneficiary. Further to the above, collecting pins is also an exercise in patience, as the reward is some-

---

<sup>34</sup> A. Zawiaślak, *The Questions of Autonomy of Adults with Intellectual Disabilities. Research in Education (Problemy autonomii osób dorosłych z niepełnosprawnością intelektualną: Nauki o edukacji)*, KPSW in Bydgoszcz Scientific Yearly (Rocznik Naukowy Kujawsko-Pomorskiej Szkoły Wyższej w Bydgoszczy), Issue 3/2008, pp. 41-59.

<sup>35</sup> P. Jurek, P. Pawlicka, *Functioning Diagnosis Questionnaire. The Handbook (Kwestionariusz Diagnostyki Funkcjonalnej: Podręcznik)*, Wydawnictwo Harmonia Universalis, Gdańsk 2015, p. 32.

<sup>36</sup> M. Zielińska, A. Bagińska, *Behavioural Interventions in Case of Severe Nutrients Selection (Interwencja behawioralna w przypadku wystąpienia skrajnej selekcji jedzenia)*, *Developmental Psychology (Psychologia Rozwojowa)*, Vol. 16, Issue 3/2011, p. 73.

<sup>37</sup> A. Kołakowski, A. Pisula (2016), *Handling a Difficult Child... (Sposób na trudne dziecko) ...*, *op. cit.*

what distant in time, and in decision making; whether to save the pins until a greater bonus can be obtained, or maybe collect a minor reward immediately? The simple use of pins allowed us to introduce a more sophisticated incentive system based on the token economy.<sup>38</sup>

Since our main goal was to practice systematicity and time management, the watch soon became an important element.<sup>39</sup> Krzysztof could discern the particular numbers and count, he was not able however, to name them and co-relate the numerical values with written digits. As a result, we settled on a digital watch, fitted with an alarm, which could be set to mark every passing quarter of an hour with a brief sound. The very fact of owning a watch was a sort of nobilitation to Krzysztof, as a token of maturity and independence. The workshops included practising the ability to discern the particular hours, understood as recognising the visual indications on the watch (not necessarily reading them, as the fact that Krzysztof could not read digits made even the visual recognition a challenging task).

As a consequence, we created what was called 'the wall clock'. Krzysztof lined a doorframe with pieces of paper, illustrating some chosen events, situations or activities in colourful pictures.<sup>40</sup> These were painted together in mixed techniques, using not only a brush, but also hands, cotton wool, newspaper, etc. This was aimed at consolidation upon the images, and attributing them with emotional

---

<sup>38</sup> T. Ayllon, *The Token Economy (Jak stosować gospodarkę żetonową i system punktowy)*, SPOA, Gdańsk 2000.

<sup>39</sup> The ideas for using the watch were of my own design, however it should be worthwhile to consult the brochure newly published in Belgium: *Praktijk in beeld. Tijd en planning. Hoe kan ik je tonen wat straks komt? (Practice in Pictures. Time and Planning. How Can I Show What Will Happen Later?)*, Sclera vzw & Iris Visualisaties, <http://sclera.be/resources/pib/tijd/> [accessed on 02 June 2017].

<sup>40</sup> Due to the lack of certain pictographs we needed to prepare some of the pictures ourselves. It is however possible to use the ready-made sets. I can heartily recommend the elaborate Belgian system *Sclera Symbols*, free to download for personal use only at: [www.sclera.be](http://www.sclera.be). The system is complete with symbols described in Polish.

meanings. At the same time Krzysztof practised mixing colours and experienced a series of polysensory stimuli<sup>41</sup>. To the pictures we attached smaller stickers with particular times in the 6.00 to 22.00 range, in 24-hour system and 15-minute intervals (e.g. 6.00, 6.15, 6.30... etc.). The part of the doorframe closer to bed would hold the A.M. hours, while the P.M. would be stuck on other side, which served to provide a visual distinction between terms such as 'Ante- and Post-Meridieum'. Thus, the basic substructure of our *Day Plan* has been created. Using the ready pictographs and the pictures hand-made by Krzysztof we started to fill the day plan with activities to be completed at particular times - from getting up until the evening toilette.

The parents were tasked with cooperating with their son to create a plan for the following day every evening. Thanks to the watch signalling the passing quarters of an hour, Krzysztof was able to compare the dial with the hours stuck to the *Day Plan* and in this way know that the time for a particular task was imminent. This solution gradually taught him to be systematic and prompt, helped to arrange daily tasks and facilitated the planning and management of 'the family roster', not to mention the positive effect on Krzysztof's self-esteem due to the experience of autonomy. As a result, a greater sense of independence was felt by all of the involved; Krzysztof, his parents and myself as a therapist.

The following stage comprised of conveying the meaning and application of temporal expressions to Krzysztof. Before we started our cooperation, Krzysztof would treat all past events as having happened 'the day before', and any future event as supposed to happen 'on the following day', even though something could be planned a month in advance. He was thus able to discern particular events, as well as past from present, however he could not understand the extent of neither. Thanks to the fact that Krzysztof was relatively adept at counting (or rather counting down), we could

---

<sup>41</sup> M. Charbicka, *The All-Year-Round Sensory Integration (Integracja sensoryczna przez cały rok)*. Wyd. Difin, Warszawa 2017.

work by making him realise how many days were left until a particular event. At this stage we used a calendar with a date indicator. Firstly, in cooperation with his parents we established when certain events, which were important for the family, such as birthdays, anniversaries, holidays or vacation, would happen. Then Krzysztof would draw a picture to represent each event in the respective box in the calendar. As an example, a cake and a smiling face of a woman with curly hair would indicate his mother's birthday, while flowers and a man's face in glasses would be drawn on his father's name day. Every morning, after waking up, Krzysztof would move the calendar date indicator forward, to mark the present day, and thanks to the drawings at particular events to come we could practice counting down the days left until any of them, which also served as an exercise in counting as such. Moreover, during our sessions we would reach back to past events, where questions such as 'what happened three days ago?' or 'what holiday was on last Monday?' proved to be very practical, forcing him not only to actively use the calendar but also to browse his memory for past events.

At a further stage we were able to benefit from an auxiliary *timeline*, a simple graphic representation of the chronological sequence of events, both past and present, which is a widely suggested tool to practice the arrangement of information within the time continuum (such as historical events, but not limited to these) and thus to gain knowledge in a certain field as well as to broaden the comprehension of time as such. A personal diary can also be regarded as a type of a timeline, even though I should mention that the English-language context would differentiate the above two into a *timeline* and a *timetable*<sup>42</sup>. However, both remain useful in the 'time workshop'. A calendar with a date indicator(s), as was the case with Krzysztof, can serve as an introduction to working with both a diary (a *timetable*) and a *timeline*.

Consolidating the practised skills is where ready-made tools are quite useful, here it was the Think-Arrange-Check (PUS) set of

---

<sup>42</sup> Cf. <https://en.wiktionary.org/wiki/timeline> [accessed on 14 August 2017].

teaching aids. Using a set of building blocks and the booklet *Concrete Mathematics. Part 2, the Clock and the Calendar*<sup>43</sup>, Krzysztof was able to check his own efficiency in a self-reliant fashion and in a playful form, with the added benefit of the encouragement for Krzysztof to read books and making him realise that learning does not necessarily have to be unpleasant. The PUS series is a wide range of teaching aids in multiple topics, ready to use in developing various skills, when the beneficiary is familiar with how to use them and how to see for themselves if a task had been completed correctly.

### **The results of the ‘time workshop’ within the case study**

The first changes in Krzysztof’s behaviour were visible after roughly three weeks; he began to complete minor household tasks and take his medication without the need to be reminded, he was also actively using the calendar with indicator and the day plan, which helped him compose himself and relax, as the scheduled tasks had introduced a degree of routine and predictability into his life. The main goals of the ‘time training’ have been reached after roughly five weeks; Krzysztof developed a habit of taking his medication and cleaning his teeth and became willing to participate in minor household tasks. This in turn prompted his parents to modify the cork board and contract as they saw fit, adding new tasks and rewards. Thanks to the above his training (with later modifications) has been underway constantly for the past three years, by the decision of Krzysztof himself and his parents. Consequently, this activity ceased to be a training as such, but rather a manner of planning and management of everyday life in the family. Working with the PUS system encouraged Krzysztof to try other puzzle books and to solve the problems presented by his parents. The use of the calendar

---

<sup>43</sup> D. Pyrgies, *Concrete Mathematics. Part 2 The Clock and the Calendar (Matematyka konkretna, Część 2. Zegar i kalendarz)*, PUS Series, Wydawnictwo Epideixis, Lublin 2012.

with date indicator helped him develop his vocabulary by introducing expressions such as 'later' (instead of only 'tomorrow') or 'some day' instead of 'yesterday'. However, a more concrete cognition of time (as in 'last Monday'/'in four days'/'in July') remains out of his grasp due to the impaired abstract thinking. It is doubtful whether it will be ever possible, however, the expressions such as above are constantly addressed to him and visualised whenever possible.

Krzysztof learnt to use temporal expressions when speaking about matters of importance to him, e.g. *'During vacation, when it was warm, i was in the mountains with the "community"'*, which made understanding what time he refers to much easier for the listener. What it also suggests, is that Krzysztof has started to develop the need to arrange various events on a timeline. His calendar helped him systematise a number of activities as well as understand that certain events are inevitable, simply coming to pass with time. The pictographs with time captions have also had an unexpected and surprising effect, when Krzysztof started to read whole words. The parents welcome their son's new accomplishments with joy and affection, which additionally strengthens his existing reinforcers. All of the above facts demonstrate the value and significance of the long-term efforts in training with a person with a moderate intellectual disability.

In order to acquire sufficiently objective data on the research results, in January 2015, six months after the project had been launched, I repeated Krzysztof's diagnosis using the same *P-A-C 1 Chart* which was used for the initial diagnosis. The results comparison supported the conclusion, that the systematic and consistent cooperation allowed Krzysztof to progress in his social development. Not only did he retain all of the previous skills, but his range of independence was broadened in a number of areas, which obviously was the result of the conducted 'time training'. There were also improvements in other areas, which can be traced back to a better insight into Krzysztof's needs and capabilities - a result of the greater educational awareness of his parents. It is especially worth to note the following:

- Krzysztof started to take the initiative in self-help activities and household tasks;
- Krzysztof began to explore his home town on his own, even though he still requires support in crossing the street. As there were no traffic lights in close proximity and the traffic itself was quite heavy, we resigned from teaching this particular skill for safety reasons;
- To reduce the level of stress and avoid any kind of humiliation, Krzysztof started using shoes where the problematic shoelaces were substituted with Velcro. As a result, he is now capable of dressing in full by himself.;
- Thanks to the pictographs with time captions on the *Day Plan* Krzysztof started to read whole words;
- Krzysztof became more familiar with his digital watch and uses temporal expressions in a correct way when speaking;
- The augmented sense of autonomy resulted in better self-esteem, which in turn encouraged him to participate in group activities more often.

The six months of regular training and the thoughtful 'time training' helped to eliminate the difficulties which had previously been insuperable to Krzysztof's family. As a result, not only Krzysztof became a more socially adapted individual, but his whole family could function every day with greater level of comfort. The accomplished project served to prove that it is quite possible, and definitely worth the effort, to work to compensate the lacking social skills among persons with intellectual disabilities, even when they had already reached an adult age. The above is equally true with regards to time comprehension and management training.

## Conclusion

As is evident from the above case study, time comprehension and management are competences which lie perfectly within the capabilities of persons with moderate intellectual disabilities. Using



a very limited budget and a set of ideas embedded in the daily routine it is quite possible to create space for cooperation for the whole family and, more importantly, to train positive habits and systematicity as well as to make temporal arrangements for the beneficiary's daily life. However, none of the above will be possible without an accurate initial diagnosis of needs, assessment of the situation and existing assets and the systematic cooperation of the whole family. Preparing the pictographic displays and discussing the day plan works not only to deepen the relationships between family members, but also to teach the awareness and respect for other people's personal space and their time. In the case of Krzysztof, the participation on the side of his parents has brought the family closer together and helped them understand the difficulties he experienced in his surroundings. They are now better able to seek further solutions to augment their son's independence and broaden the initial goals of the 'time training'. Krzysztof himself began to understand and appreciate planning and promptness as well as systematicity, resulting in a sense of becoming independent and self-reliant, which in turn has a positive impact on his self-esteem. Consequently, he is more willing to train and undertake further challenges.

## References

- Ayllon T., *Jak stosować gospodarkę żetonową i system punktowy*, SPOA, Gdańsk 2000.
- Ayllon T., *Jak stosować gospodarkę żetonową i system punktowy*, SPOA, Gdańsk 2000.
- Bobińska K., T. Pietras, P. Galecki, *Niepełnosprawność intelektualna – etiopatogeneza, epidemiologia, diagnoza, terapia*. Wyd. Continuo, Wrocław 2012; Kijak R.J., *Niepełnosprawność intelektualną: Między diagnozą a działaniem*, Centrum Rozwoju Zasobów Ludzkich, Warszawa 2013.
- Brudnik E., Moszyńska A., Owczarska B., *'Ja i mój uczeń pracujemy aktywnie' – przewodnik po metodach aktywizujących*, Zakład Wydawniczy SFS, Kielce 2000.
- Červinková H., Gołębniak D. (Eds.), *Badania w działaniu: Pedagogika i antropologia zaangażowane*, Wydawnictwo Naukowe DSW, Wrocław 2010.
- Charbicka M., *Integracja sensoryczna przez cały rok*. Wyd. Difin, Warszawa 2017.
- Cytowska B., *Realizacja programu 'Wspomagane zatrudnienie osób z niepełnosprawnością intelektualną – Trener'*, [in:] Żółkowska T., Wlazło M. (Eds.), *Pedagogika specjalna*

- koncepcje i rzeczywistość. *Socjopedagogiczne aspekty rehabilitacji osób niepełnosprawnych*. Vol. III. Uniwersytet Szczeciński, Szczecin 2008.
- [http://www.poradnikautystyczny.pl/post/kwestionariusze/skala\\_umiejetnosci\\_spoecznych\\_gunzburga\\_pac](http://www.poradnikautystyczny.pl/post/kwestionariusze/skala_umiejetnosci_spoecznych_gunzburga_pac) (Accessed 31 December 2016).
- <https://en.wiktionary.org/wiki/timeline> (Access on 14 August 2017).
- Jurek P., Pawlicka P., *Kwestionariusz Diagnozy Funkcjonalnej: Podręcznik*, Wydawnictwo Harmonia Universalis, Gdańsk 2015.
- Kołodowski A., Pisula A., *Sposób na trudne dziecko. Przyjazna terapia behawioralna*, GWP, Gdańsk 2016.
- Kościelska M., *Przeżywanie własnej i cudzej dorosłości przez osoby z niepełnosprawnościami*, [in:] Kijak R. (Ed.). *Niepełnosprawność w zwierciadle dorosłości*, Oficyna Wydawnicza Impuls, Kraków 2012.
- Lausch-Żuk J., *Pedagogika osób z umiarkowanym, znacznym i głębokim upośledzeniem umysłowym*, [in:] Dykik W. (Ed.), *Pedagogik a specjalna*, Wydaw. Nauk. UAM, Poznań 2006, pp. 149-165.
- Majewski T., Miżejewski C., *Możliwości zawodowe różnych kategorii osób niepełnosprawnych*.
- Majewski T., Miżejewski C., Sobczak W. (Eds.), *Gmina a niepełnosprawność. Podręcznik dla samorządów gminnych z zakresu aktywizacji zawodowej i rehabilitacji społecznej osób niepełnosprawnych*, KIGR, Warszawa 2007.
- Meder J., *Rehabilitacja*, [in:] Bilikiewicz A, Rybakowski J., Pużyński S., Wciórka J. (Eds.). *Psychiatrii (Psychiatria)*. Vol. II. *Podstawy psychiatrii*, Wydawnictwo Medyczne Urban & Partner, Wrocław 2002.
- Piotrowicz R., Wapiennik E., *Charakterystyka osób z niepełnosprawnością intelektualną*, [in:] Piekut-Brodzka D. M., Kuczyńska-Kwapisz J. (Eds.), *Pedagogika specjalna dla pracowników socjalnych*, Wyd. APS, Warszawa 2004.
- Pisula E., *Dorosłość osób z niepełnosprawnością intelektualną – szanse i zagrożenia*, PSOUU, Zarząd Główny, Warszawa 2008; B. Tylewska-Nowak *Fulfillment of... (Wypełnianie zadań) ...*, op. cit.
- Piszczyk M.(Ed.), *Przewodnik dla nauczycieli uczniów upośledzonych umysłowo w stopniu znacznym i umiarkowanym*, CMPP-P, Warszawa 2001.
- Podgórska-Jachnik D., *Praca socjalna z osobami bezdomnymi*, Centrum Rozwoju Zasobów Ludzkich, Warszawa 2014.
- Podgórska-Jachnik D., *Praca socjalna z osobami z niepełnosprawnością i ich rodzinami*, Centrum Rozwoju Zasobów Ludzkich, Warszawa 2014.
- Podgórska-Jachnik D., Tłoczkowska D., *Ruch self-advokatów jako rozwijanie kompetencji w zakresie rzecznictwa własnego osób z niepełnosprawnością intelektualną*, [in:] Podgórska-Jachnik D., *Problemy rzecznictwa i reprezentacji osób niepełnosprawnych*, Wyd. WSP, Łódź 2009.
- Pyrgies D., *Matematyka konkretna, Part 2. The Clock and the Calendar (Matematyka konkretna, Część 2. Zegar i kalendarz)*, PUS Series, Wydawnictwo Epideixis, Lublin 2012.

- Sadowska K., *Podstawowe założenia i wartości metody ośrodków pracy w szkolnictwie specjalnym*, Nauczyciel i Szkoła, Issues 1-2(18-19)/2003.
- Stelcer Z., *Charakterystyka niepełnosprawności intelektualnej. Zagadnienia szczegółowe*, [in:] 'Dobry Start' – szkolenia dla usługodawców osób niepełnosprawnych, Poznań 2006.
- The International Classification of Diseases – ICD*, [online] <http://www.who.int/classifications/icd/> (accessed on 20 Dec 2016).
- Tylewska-Nowak B., *Wypełnianie zadań rozwojowych przez osoby dorosłe z umiarkowaną i znaczną niepełnosprawnością intelektualną*, [in:] Cytowska B. (Ed.), *Dorośli z niepełnosprawnością intelektualną w labiryntach codzienności. Analiza badań – krytyka podejść – propozycje rozwiązań*). Wyd. Adama Marszałek, Toruń 2011.
- Witkowski T., *Podręcznik do inwentarza PAC-1H.C. (Podręcznik do inwentarza PAC-1 H.C. Gunzburga do oceny postępu w rozwoju społecznym osób z upośledzeniem umysłowym)*, Katolicki Uniwersytet Lubelski, Lublin 1996.
- Witkowski T., *Podręcznik do inwentarza PAC-2 H.C. Gunzburga do oceny postępu w rozwoju społecznym osób z upośledzeniem umysłowym*, Katolicki Uniwersytet Lubelski, Lublin 1996.
- Wolska D., *Wpływ prawidłowego przystosowania społecznego na jakość życia osób dorosłych z niepełnosprawnością intelektualną*, [in:] Cytowska B. (Ed.), *Dorośli z niepełnosprawnością intelektualną w labiryntach codzienności. Analiza badań – krytyka podejść – propozycje rozwiązań*). Wyd. Adama Marszałek, Toruń 2011.
- [www.metologia-badan.wyklady.org/wyklad/7\\_badania-w-dzialaniu-action-rese-arch.html](http://www.metologia-badan.wyklady.org/wyklad/7_badania-w-dzialaniu-action-rese-arch.html) (accessed on 14 August 2017).
- Wyczesany J. (Ed.), *Dydaktyka specjalna wybrane zagadnienia*, HARMONIA UNIVERSALIS, Gdańsk 2014.
- Wyczesany J., *Pedagogika upośledzonych umysłowo. Wybrane zagadnienia*, Oficyna Wyd. 'Impuls', Kraków 2002.
- Zawiślak A., *Problemy autonomii osób dorosłych z niepełnosprawnością intelektualną: Nauki o edukacji*, Rocznik Naukowy Kujawsko-Pomorskiej Szkoły Wyższej w Bydgoszczy, Issue 3/2008.
- Zielińska M., Bagińska A., *Interwencja behawioralna w przypadku wystąpienia skrajnej selekcji jedzenia*, Psychologia Rozwojowa, Vol. 16, Issue 3/2011.