

**EDUKACYJNA ANALIZA TRANSAKCYJNA**

**NR 12/2023**

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**EDUCATIONAL TRANSACTIONAL ANALYSIS**

**NO 12/2023**

Pismo Zespołu Badawczego Edukacyjnej Analizy Transakcyjnej  
Katedra Badań nad Edukacją  
Uniwersytetu Humanistyczno-Przyrodniczy im. Jana Długosza w Częstochowie

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UNIWERSYTET JANA DŁUGOSZA W CZĘSTOCHOWIE

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JAN DŁUGOSZ UNIVERSITY IN CZESTOCHOWA

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# SPIS TREŚCI

## TABLE OF CONTENTS

Od redakcji .....	9
Editorial .....	11
<b>TRANSACTIONAL ANALYSIS IN EDUCATION</b>	
ANALIZA TRANSAKCYJNA W EDUKACJI	
Tony WHITE	
The empty chair and its use in psychotherapy .....	15
Technika pustego krzesła i jego użycie w psychoterapii (Streszczenie) .....	29
Piotr PRZYBYLSKI, Lidia CIERPIAŁKOWSKA, Dominika RUSNAK	
Personality disorders and the ego states – the mediating role of the ability to mentalize .....	31
Zaburzenia osobowości a stany Ja – mediująca rola zdolności do mentalizacji (Streszczenie) .....	51
Jarosław JAGIEŁA	
Student Personality Adaptations, part I .....	53
Uczniowskie adaptacje osobowości, cz. I (Streszczenie) .....	74
Weronika KARAŚ	
Sexual awareness and time structuring in the light of transactional analysis. Research report .....	75
Świadomość seksualna a strukturalizacja czasu rozumiana zgodnie z założeniami analizy transakcyjnej. Raport z badań (Streszczenie) .....	86
Zbigniew ŁĘSKI	
Human–Computer Interaction in the Era of Advanced Artificial Intelligence Language Models .....	87
Modele językowe sztucznej inteligencji w relacjach komputer–człowiek z perspektywy analizy transakcyjnej (Streszczenie) .....	101
Jacek SZEDEL, Bożena WIECZOREK	
Estimating Ego States: The Machine Learning Perspective .....	103
Estymacja stanów ego: perspektywa uczenia maszynowego (Streszczenie) .....	119

Dagmara SZYMAŃSKA

- The Impact of Embrace Therapy® in the Light of Transactional Analysis on the Closure of Needs (“Strokes”) of the Inner Child, Changing the Perspective of Assessing the Situation and Releasing Difficult Emotions ..... 121
- Wpływ Embrace Therapy® w ujęciu analizy transakcyjnej na domknięcie potrzeb („głasków”) wewnętrznego dziecka, zmianę perspektywy oceny sytuacji i uwolnienie trudnych emocji (Streszczenie) ..... 148

## RESEARCH REPORTS

### RAPORTY Z BADAŃ

Katarzyna NOWAK

- Existential attitudes of academic youth in a post-pandemic digital society ..... 151
- Postawy egzystencjalne młodzieży akademickiej w postpandemicznym społeczeństwie cyfrowym (Streszczenie) ..... 168

Eunika BARON-POLAŃCZYK

- Impact of ICT – chaos and information “confusion” in the view of students and teachers ..... 169
- Skutki oddziaływania ICT – chaos i „zagubienie” informacyjne w opinii uczniów i nauczycieli (Streszczenie) ..... 185

Natalia PENDZIAŁEK

- The experience of online grooming in the perspective of “digital natives” ..... 187
- Doświadczenie groomingu w perspektywie „cyfrowych tubylców” (Streszczenie) ..... 202

Anna KROPIEWNICKA-MIELKO

- Multicultural school. Students’ identity and value system ..... 203
- Szkoła wielokulturowa. Tożsamość i system wartości uczniów (Streszczenie) ..... 218

Izabela MIKOŁAJEWSKA, Agata MIKOŁAJEWSKA-FURMANEK

- (Non) aggressive, (non) violent computer games – definitional challenges ..... 219
- (Nie)agresywne, (nie)brutalne gry komputerowe – wyzwania definicyjne (Streszczenie) ..... 231

Monika CZYŻEWSKA, Ewa DUDA, Magda LEJZEROWICZ,

Anna PERKOWSKA-KLEJMAN, Adrianna SARNAT-CIASTKO, Edyta ZAWADZKA

- Tutoring: meanings attributed to the term by tutors. An analysis of the semantic field ..... 233
- Tutoring: znaczenia nadawane pojęciu przez tutorów. Analiza pola semantycznego (Streszczenie) ..... 245

Dorota SIEMIENIECKA

- Bunker/shelter as a Situated Learning Space: An Example of a Life Protection Experiment in Threatening ..... 247
- Bunkier/schron jako miejsce uczenia się sytuacyjnego na przykładzie eksperymentu ochrony życia w warunkach zagrożenia (Streszczenie) ..... 264

## ON THE BORDER

NA POGRANICZU DZIEDZIN

Iwona SKRZYPCZYK-GAŁKOWSKA

- Adjusting the conditions and the form of the eighth-grader Polish language exam to students with the spectrum of autism ..... 267
- Dostosowanie warunków i form egzaminu ósmoklasisty z języka polskiego dla ucznia w spektrum autyzmu (Streszczenie) ..... 284

Wioletta SOŁTYSIAK

- The idea of universal design in the educational process at University. "Universal design as a space of equal opportunities and accessibility for people with disabilities" ..... 285
- Idea projektowania uniwersalnego w procesie edukacyjnym na uniwersytecie. „Projektowanie uniwersalne przestrzeni równych szans i dostępności dla osób z niepełnosprawnościami” (Streszczenie) ..... 293

## REVIEWS

RECENZJE

Olena BOCHAROVA

- [rec.] Iveta Kovalčíková, Joanna Miecznik-Warda (2022). *Szybkość motoryczna i szybkość umysłowa jako wyznaczniki szkolnych osiągnięć ucznia*. Kraków: Wydawnictwo Petrus, ss. 220 ..... 297

Beata KARPIŃSKA-MUSIAŁ

- [rec.] Marta Mamet-Michalkiewicz (red.) (2022). *Nauczyciele – nauczycielom. Przestrzenie edukacji*. Katowice: Wydawnictwo Uniwersytetu Śląskiego, ss. 140 ..... 303

Zbigniew WIECZOREK

- [rec.] Sari van Poelje, Anne de Graaf (red.) (2021). *New Theory and Practice of Transactional Analysis in Organizations: On the Edge* (1st ed.). London – New York: Routledge Taylor & Francis Group, ss. 202 ..... 311

Jarosław JAGIEŁA

- [rec.] Monika Dawid-Sawicka, Elżbieta Stelmach (2023). *13 wzorców dobrej komunikacji i relacji. Analiza transakcyjna w praktyce*. Warszawa: Wolters Kluwer Polska Sp. z o.o., ss. 226 ..... 315





## Od redakcji

Z dużą radością oddajemy w Państwa ręce kolejny, dwunasty już numer rocznika „Edukacyjna Analiza Transakcyjna”. Na wstępie warto podkreślić, że nasze Czasopismo zostało docenione przez recenzentów i po raz kolejny zakwalifikowane do ministerialnego programu Rozwój Czasopism Naukowych. Dzięki uzyskanemu wsparciu ten i kolejne numery będą publikowane praktycznie w całości w języku angielskim – utrzymujemy w ten sposób działania zwiększające umiędzynarodowienie Periodyku. Mamy nadzieję, że pomoże to w promocji Czasopisma wśród Czytelników oraz Autorów spoza granic Polski. Stale także poszerzany jest skład Rady Naukowej i grono Recenzentów. W ostatnim czasie oba te grona zostały zasilone przez szanowanych naukowców zarówno z ośrodków naukowych w naszym kraju jak i zza granicy. Podobnie jak w poprzednich numerach, również i w tym artykule przedstawione zostały w trzech dużych działach.

Pierwszy dział to analiza transakcyjna w edukacji. Zawiera siedem artykułów, z których cztery dotyczą relacji z klientem, specyficznych form pracy terapeutycznej czy specyficznych problemów z perspektywy analizy transakcyjnej. Pojawia się tu analiza techniki pustego krzesła, problematyka zaburzeń osobowości, adaptacji osobowości czy świadomości seksualnej. Trzy pozostałe artykuły w tym dziale opisują analizę transakcyjną z perspektywy wykorzystania nowych technologii, takich jak uczenie maszynowe, sztuczna inteligencja czy biofeedback.

Kolejny dział zawiera raporty z badań, które dostarczają ciekawych informacji zarówno teoretykom, jak i praktykom analizy transakcyjnej. Przedstawione raporty dotyczą wykorzystania tutoringu, problematyki nowych technologii i ich negatywnych skutków. Poruszone są problemy egzystencjalne młodzieży, w tym dotyczące sytuacji wielokulturowości. Dział zamyka opis eksperymentu wykorzystującego uczenie sytuacyjne. W numerze nie zabrakło również recenzji – te jak zwykle prezentowane są w języku polskim.

Zapraszamy zatem Państwa do lektury. Mamy nadzieję, że oddawane do Państwa rąk Czasopismo dostarczy nowych informacji, a także stanie się źródłem inspiracji zarówno w pracy naukowej, jak i w działalności praktycznej. Tradycyjnie, kończąc, zapraszamy Państwa również do zgłaszania swoich tekstów do kolejnego numeru „Edukacyjnej Analizy Transakcyjnej”.

Redakcja



## Editorial

With great joy, we present another, already twelfth issue of the “Educational Transactional Analysis” annual journal. At the beginning, it is worth emphasizing that our Journal has been appreciated by reviewers and once again qualified for the ministerial program of Scientific Journals Development.

Thanks to the support received, this and subsequent issues will be practically entirely published in English – thus maintaining actions to increase the internationalization of the Journal. We hope this will help promote the Journal among readers and authors beyond the borders of Poland. The composition of the Scientific Board and the circle of Reviewers are also constantly expanding. Recently, both of these groups have been supplemented by distinguished scientists from scientific centers both in our country and abroad. As in previous issues, articles in this issue are presented in three main sections.

The first section is transactional analysis in education. It contains seven articles, four of which concern client relationships, specific forms of therapeutic work, or specific problems from the perspective of transactional analysis. Here, the analysis of the empty chair technique, personality disorder issues, personality adaptation, and sexual awareness are discussed. The remaining three articles in this section describe transactional analysis from the perspective of the use of new technologies such as machine learning, artificial intelligence, or biofeedback.

The next section contains research reports that provide interesting information for both theorists and practitioners of transactional analysis. The presented reports concern the use of tutoring, the issues of new technologies and their negative effects. Existential problems of youth, including those related to multicultural situations, are addressed. The section concludes with a description of an experiment using situated learning. The issue also includes reviews which are traditionally presented in Polish.

We therefore invite you to read. We hope that the journal, placed in your hands, will provide new information and become a source of inspiration both in scientific work and in practical activities. Traditionally, in conclusion, we invite you to submit your texts for the next issue of “Educational Transactional Analysis”.

The Editorial Team



**TRANSACTIONAL ANALYSIS IN EDUCATION**  
**ANALIZA TRANSAKCYJNA W EDUKACJI**



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## The empty chair and its use in psychotherapy

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### Abstract

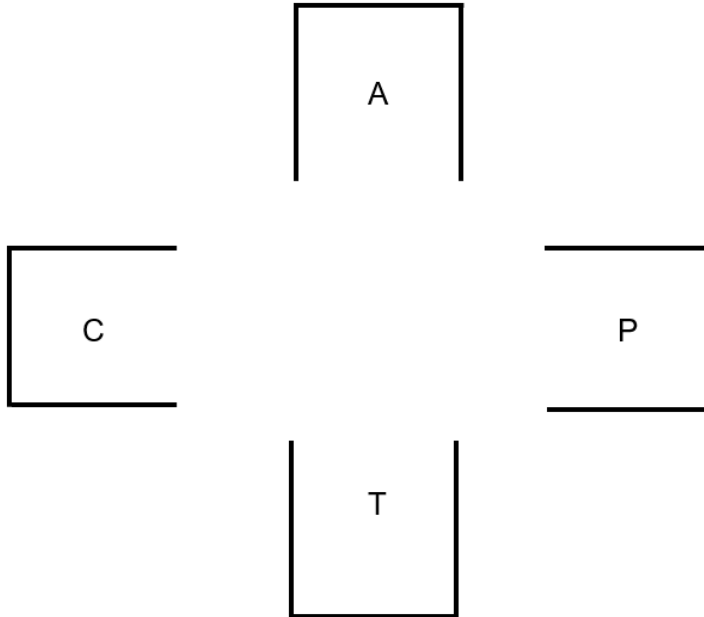
The “empty chair” technique has been a foundation of psychotherapy for decades, with its origins tracing back to Fritz Perls and further developed by Edgar Stuntz. This article examines the multifaceted use of the empty chair, particularly within the framework of Transactional Analysis (TA). It explores the various ways therapists utilize the empty chair to facilitate structural analysis, rededication, parenting dynamics, and other therapeutic goals. Drawing insights from TA, Gestalt therapy, and cognitive-behavioral therapy, the author delves into the psychological processes associated with chair work, emphasizing the importance of regression and ego state integration. Additionally, the therapeutic implications of chair work are discussed, including its impact on self-understanding, diagnosis, and the therapeutic relationship. The article also indicates how chair work can be adapted to meet the needs of clients with Post-Traumatic Stress Disorder (PTSD), highlighting its potential as a form of exposure therapy. The article provides a comprehensive review of the empty chair technique and its diverse applications in contemporary psychotherapeutic practice.

**Keywords:** Transactional Analysis, psychotherapy, ego states, gestalt.

### Introduction

It has been fifty years since Edgar Stuntz (1973) presented his ground breaking paper on the “Multiple Chairs Technique”. He proposed this as useful in five ways – structural analysis, decontamination, rededication, parenting and relationship analysis. In the basic multiple chair technique the client cathects the Parent

ego state (P), Adult ego state (A) and Child ego state (C) in the appropriate chair as shown in diagram 1. The therapist (T) sits opposite the Adult chair and teaches the client how to dialogue from each ego state on a particular issue.



*Diagram 1*

Seating Diagram 3-Chair Technique (Stuntz, 1973, p. 29)

Empty chair work is one of those things in psychotherapy that many have adopted and used over the years such that it becomes hard to follow its path of use and development. Generally Fritz Perls is noted as one of the originators of this technique and then many have used it and developed it in the ways they see fit. An example of this is Kellogg and Garcia Torres (2021) who talk about four different types of chair work with the first being “Giving voice”. This can involve asking the patient to sit, “...in the centre chair, which is a place for the inner leader or healthy adult mode.” (p. 172). Then the client is asked to move to another chair and express their suffering and pain (which is the Child ego state chair). As you can see this is basically a restatement of what Stuntz proposed 50 years ago in diagram 1, and they even use the words ‘adult mode’ which is interesting as it is exactly the same as what the Adult ego state does in the Stuntz exercise. The point here being that many of these different approaches have occurred relatively simultaneously or at least in different disciples of psychology along their own paths sometimes without, at times, an awareness of some of the others.



Approaches like schema therapy (Young, Kiosk and Weishaar (2003)), cognitive behavioural therapy (Goldfried (2006) and Burns (2006)) and emotion focussed therapy (Watson, Goldman and Greenberg (2007)) have all developed and used chair work and the empty chair in various ways in psychotherapy. Some of these are evidence based therapies so they have substantial research evidence to support their efficacy and success.

From a transactional analysis point of view, around the same time as Stuntz was writing about chair work James and Jongeward (1971) discussed at some length the Gestalt practices of Fritz Perls and how these related to transactional analysis. In particular they talk about his therapeutic use of the empty chair. A lot of this was focussed on the fragmented parts of the client and how to begin dialogue between this fragmented part and the other parts of the personality. These were some of the first attempts at making a combination between gestalt therapy and transactional analysis as a therapy approach.

Of course this was followed a little later by the work of Goulding and Goulding (1978) who fully embraced this process of combining gestalt practises with transactional analysis and indeed titled their first book – *The Power is in the Patient: A TA/Gestalt Approach to Psychotherapy*. Out of this evolved redecision therapy where the gestalt practice of chair work was at the very core of the redecision therapy process. By adding in the gestalt it allowed the Gouldings to combine the cognitive of transactional analysis with the emotional of gestalt therapy chair work. The Child and the Adult ego states were truly the focus of the redecision psychotherapy approach.

## **The empty chair**

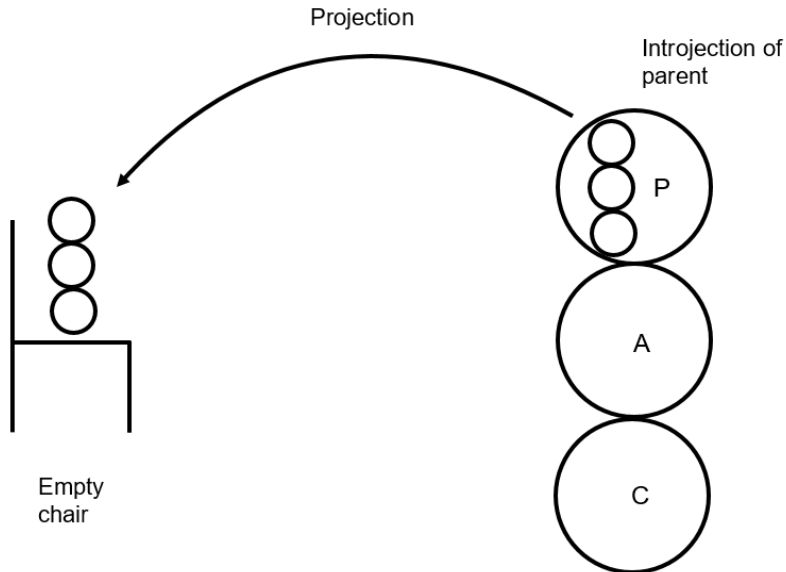
It pays to remind oneself from time to time that the empty chair is actually empty, because it appears very quickly to the client that the empty chair does not feel empty at all. People quite quickly will enter into the empty chair process and feel at times strong emotions. The empty chair can quite quickly become emotionally important to the individual. So what is in the empty chair?

In the literature one gets a variety of answers to this question. Some like Widdowson (2010) talk about “mentally imagine seeing the parent in front of them.” (p. 315–316)., In this instance it’s seen as a process of imagination. Alternatively Kellogg and Garcia Torres (2021) state the client is invited to “have an imaginal encounter with someone from the past.” (p. 171). Again they highlight the idea of imagination but also say it is an encounter in some way. James and Jongeward (1971) talk about the client role playing the person in the empty chair which is different to the idea of imagination. At other times client’s are told to remember how their mother was and be that. This is saying the empty

chair is a memory of the other person that one has. Erskine (1997) says that in two chair work the client is asked to become the other person. In this case the empty chair is seen to include the person who the client has 'become'. As we can see, in the literature there is a variety of views about what the client puts in the empty chair.

However a significant portion of the literature will claim that their use of empty chair work comes from the work of Fritz Perls who popularised the technique, Perls (1969, 1975). Perls used this technique for a variety of different reasons including: for the integration of disowned parts of self, working with polarities, working with dreams, to explore parts of self, to finish unfinished business and to say 'goodbye' to a person. In chair work what Perls (1975) usually was talking about was the mechanism of projection and it is this that is at the core of empty chair work. Tilney (1998) also suggests this idea in chair work when he states that, "the client agrees to project an internal structure such as an introject or an ego state" (p. 23). Therefore in most chair work one is not remembering or imagining or 'becoming' something, instead the person is reliving a part of self that is projected onto the chair. McNeel (1976) also states in discussing chair work, "...the person switches chairs and plays the parental projection.." (p. 62). This is not completely accurate. Yes the chair contains a parental projection by the client but one cannot 'play' a projection, one can only 'be' a projection of themselves. This is supported by Goulding and Goulding (1978) who propose, "The patient, as he relives an old scene in which he is stuck, gets together the memory with the affect, and begins to relive the scene." (p. 198). The key word here is 'reliving'. It's not just a memory, it's not a role play, it is not imagination, instead it is the person reliving a situation. What this means is the person has put part of themselves in the empty chair, part of their own personality. What one can put in an empty chair is part of self and that is usually done by the process of projection. In the empty chair (as done by Perls) there is only ever a projection of part of your own personality. This is illustrated in Diagram 2. As Eric Berne stated the Parent ego state includes tapes (introjections) of the mother and father as illustrated in the diagram. This tape then becomes part of the child's own personality. This part of their personality can then later be projected out onto an empty chair. The person sees in the empty chair, part of their own personality.

As time has shown, it was the Gouldings who were the first to take this chair work of Perls and modify it to form a core part of rededication therapy. McNeel (1975) did a doctoral thesis on a rededication therapy marathon done by the Goulding's where he observed them doing therapy over a weekend. He identified many different types of work the Goulding's did including two chair work and he states "Two-chair (TC). In the transcript there are literally dozens of examples of two-chair work by the Gouldings." (p. 125).



*Diagram 2*

Projection in empty chair work

Source: own materials.

Many things can be put in the empty chair, for example a person currently dead or alive, a pet, a headache, god, the government, an arm, cigarettes and so on. I have seen a person do empty chair work with an arm they had amputated in a car accident. Often I will ask a person who is wanting to stop smoking to see their cigarettes in the empty chair and dialogue with that. Of course when a person puts their cigarettes or pet snake in the chair what they are putting in the chair is a projection of part of self which they have put onto the animal or the cigarettes. One can only ever put part of their own self onto the empty chair because as I highlighted before the chair is empty, so everything in the chair has come out of the person's own head. However people can project part of themselves onto many different things as I have just shown, which can then subsequently be placed on the empty chair.

However the most common thing put into the empty chair is usually an ego state. As we know all people have a Critical Parent, Nurturing Parent, Adult, Adapted Child and Free Child ego state. In my observations over the years the vast majority of people can easily see these in an empty chair. Most people can quite easily project these parts of self onto a chair. Occasionally a person will refuse or say they can't but that is only a small group of people.

It is also possible to do empty chair work without a chair. Mahmood and Flax (2023) talk about different experiments one can do in gestalt therapy. They say

there is the empty chair experiment but there are also many other experiments that gestalt therapists use including “finding a voice for a particular part of the body” (p. 407). For example as a client is talking they have their legs crossed and one foot is doing a kicking motion. The therapist may then ask the client to exaggerate the kicking motion and let the foot talk. As the client talks for their foot they are simply doing empty chair work without the chair. The client is projecting part of self onto the foot rather than a chair and then talking. The same psychological process is occurring using their foot instead of a chair.

It is not uncommon for me to say to a client something like, “If your mother was here and you could tell her what you were angry about, what would you say?”. When the client responds and the catharsis begins, they have simply projected their mother introject out into the space in front of them rather than onto a chair. The client is doing two chair work without even knowing it. The same psychological process is occurring.

When working with the demon of the client White (2021) will invariably get the client to draw their demon on the white board in the office. Then he will ask the client to say what the demon is thinking and feeling and then talk to the drawing of the demon. Again the same psychological process is occurring as with two chair work except the client is projecting onto their drawing rather than a chair. Similarly, when working with trauma the client is often asked to draw the traumatic situation on the board or a piece of paper. Then they are asked to dialogue with that drawing so one is doing the same psychological process as they would be doing talking to an empty chair.

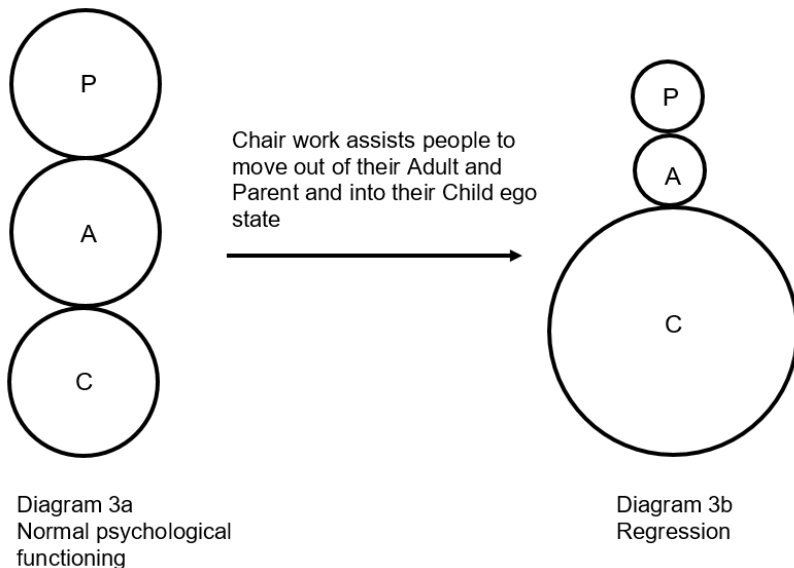
## **Regression and empty chair work**

For empty chair work to be useful, the client must regress when they do the work, see diagram 3.

When people agree to the empty chair work most will be like shown in diagram 3a. In this case the person’s Adult ego state is usually well functioning and in charge of the personality. As they begin the exercise most people will have their Adult in executive control and be responding from that ego state. If they stay like this then the chair work will be ineffective as it will simply be an intellectual exercise for the client. As Goulding (1985) notes the Child ego state must be involved for the exercise to be of any use. The chair work must include the feelings of the Child ego state. The client has to regress as shown in diagram 3b and develop a large Child ego state for the chair work to be successful.

Fortunately, chair work for many people is an effective way to assist them to regress. The chair work helps them regress and for the chair work to be successful they must be regressed. That small group of people who refuse and say

they can't do chair work usually refuse for this reason. It is too scary for them to regress into their Child ego state feelings at that time, so they refuse or make up an excuse like they would feel too embarrassed talking to an empty chair. Their feelings in the Child are too overwhelming for them at that moment, so they refuse the chair work. This does however show one therapeutic use of such chair work, it assists people to get into their Child ego state and feelings. People who have trouble accessing their feelings and Child can use the empty chair exercise to achieve the goal of doing that.



*Diagram 3*  
Regression in empty chair work

Source: own materials.

## Chair work and self understanding

As mentioned above people have a whole array of ego states which form part of their personality and they can place (project) any of these, such as the Critical Parent or Free Child ego states onto the empty chair. From my experience most people can do this quite easily especially after they have done it a few times before. With a bit of practice most people get very proficient at making such projections onto the chair. This is quite remarkable really as it allows the person to almost surgically dissect the personality and project each specific part out in front of them.

It allows for people to begin to understand themselves at a deep experiential level. Not only do they understand self in an intellectual way but they get a first hand phenomenological understanding of self. As mentioned before, in the empty chair the person is not remembering the past or role-playing self as a child they are instead reliving and experiencing that part of self now. They get a first hand experiential understanding of self. Each ego state represents a different part of the individual's personality so chair work allows them to get such a deep first hand experience of each of these intricate parts of their personality. Upon reflection this is quite an unusual situation where people are afforded a way to get an intensive experiential understanding of each part of self. Few people would ever achieve this in their lives without such chair work.

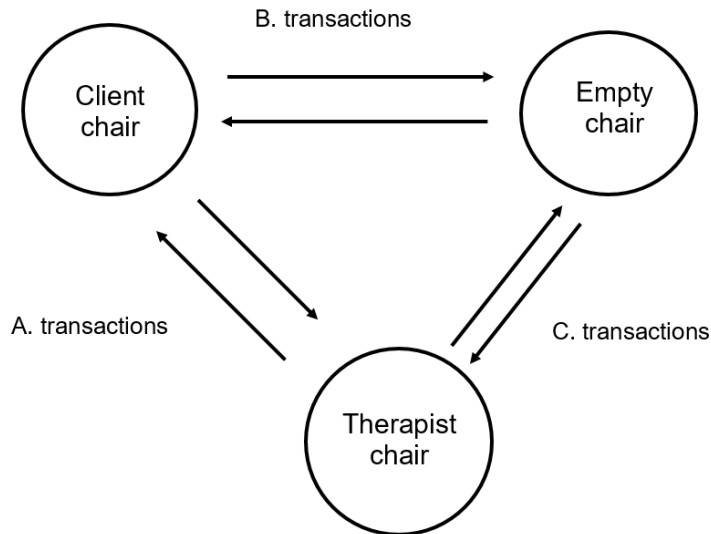
With techniques like game analysis, script analysis or the interpretation of enactments that occur in the therapeutic relationship, people are provided with largely an intellectual analytical understanding of self. The unconscious material that can be discovered by using such techniques tends to be largely an Adult ego state way of understanding self. Being afforded a way to intimately experience different parts of the personality firsthand allows for a deeper and more profound Child ego state understanding of self.

One can use the metaphor of a movie. One can read about a movie, the start, the plot, the ending, the various acting roles taken and the movie reviews. One can get a good Adult understanding of the movie. However if one goes to see the movie then the Child ego state is given an opportunity to have its full array of reactions to it and experience the movie. This affords a deeper and more profound understanding of the movie, what it is about, the message of it and so forth. Chair work with the ego states does the same. It allows the individual to achieve a more profound and deeper understanding of the various parts of their personality.

The same of course happens for the therapist. They get to see the various ego states of the client functioning first hand. The client may say they have a poorly functioning Nurturing Parent ego state, however when the client is in that chair the therapist may observe that the client functions quite well in that ego state and seems comfortable being that part of self. Or the client may report they have quite a weak functioning Child ego state. Yet when the client is being that ego state the therapist observes quite a vocal and demanding Child ego state. This can provide invaluable diagnostic information that is not otherwise available to the therapist, to see the client first hand rather than as only stated by the client.

## **Chair work, ego states and the therapy room**

When chair work is used in essence a third entity (or person) is being brought into the therapy room. A third party is created as shown in diagram 4.



*Diagram 4*

Projection into chair creates a third 'person' in the room

Source: own materials.

Most often in therapy transactions occur between client and therapist as shown with A. transactions. When the empty chair is used this allows a whole other set of transactions to occur, (B. transactions) and this is useful in a number of ways, none less so than diagnostically as just stated. The therapist gets to see first hand how the various parts of the client's personality relate, cooperate, or disagree. This of course can provide useful diagnostic information to the therapist about the client. The therapist can simply observe how the various aspects of the client's personality function with each other. This gives the therapist a first hand view of the client rather than listening to the client talk about how they think the different aspects of self relate to each other. Without such chair work the therapist can only listen to the client's reports of how their Parent and Child ego states either cooperate or disagree.

However this introduction of the new entity into the therapy room also allows for C. transactions to occur. It gives the therapist the option to begin transacting with specific parts of the client's personality they have projected onto the empty chair. This has been mentioned before in the TA literature. McNeel (1975) in his observations of the Gouldings doing weekend redecision therapy group reports, "Talking to parent projections (TPP). During two-chair work the Gouldings would often talk to the person while he was playing his mother or father as if he were that person from the past. This technique is a powerful vehicle to introduce the person to the inner experiences of his parent." (p. 126). McNeel

(1976) later clarified this with a journal article on the Parent interview. He states, "At this point it is appropriate for the therapist to intervene with the parent interview. This technique consists of simply of talking to the parental projection as if she or he were that person. The most common stimulus to begin the interview is, 'What's your name, Mom?' or 'What's your name, Dad?'" (p. 66).

This idea of addressing and transacting with the 'third' person in the room has been taken further than just simple transactions with the projection as shown by McNeel. It also allows the therapist to develop a relationship with that part of the client. One can do this with any of the client's ego states but is especially important to do with the self destructive parts of the client. For example client's who feel suicidal, are self harming, may have an eating disorder, or indeed are dealing with the demon sub personality part of self. White has discussed this option of forming a relationship using C. transactions before on a number of occasions – White (2011, 2016, 2021).

White 2011 – "The counsellor begins to build a relationship with the self destructive part of the client, his Adapted Child. I cannot stress enough the importance of this. To make good relational contact with the self destructive part of the client is most therapeutic." (p. 211).

White 2016 – "However, what is more important, in the AC chair one has quite a unique therapeutic situation. In that chair the person has stripped away all aspects of the personality except for his own destructive urges. Sitting directly in front of the psychotherapist is the core of the destructiveness in the person, which is a very desirable circumstance to have. It allows the therapist to relate directly with that." (p. 181)

White 2021 – "Having said this if one can establish some kind of relational contact with the demon then it can begin to feel less like it is the naughty child who has been put in the 'time out' room of the personality.... After a few weeks or months there tends to be a pacifying effect... The demon experiences being related to directly by a sympathetic other which it finds quite unusual as it is not usually asked to be talked with. The effect seems to be like a small child who is being naughty because it is not getting any attention. When it starts to get attention it tends to become less naughty and does less attention seeking behaviour. It is pacified in this way." (p. 143).

As a way of dealing with the self destructive client this is a powerful option as it gives the therapist a way to establish a relationship with either the self destructive Adapted Child ego state in the chair or the demon sub personality in the chair. This can have positive therapeutic outcomes as reported by White. When people are afforded the option of entering a positive and sympathetic relationship with another then usually their general state of wellbeing increases.

This view has been held by many over the years but none less so than Carl Rogers (1961), the father of client entered therapy with the idea of uncondi-



tional positive regard for the client. If the therapist has this view of the client along with qualities like genuineness, transparency and a warm accepting empathetic relationship, then the client will naturally over time develop more acceptance of self, more self confidence, be more integrated and so forth. Their general state of psychological wellbeing will increase.

The empty chair gives the therapist the ability to isolate one particular part of the client's personality and then develop a relationship of unconditional positive regard with that. This could be seen to have a more concentrated effect on that part than if the therapist is reacting that way to the client in general. Obviously if one is dealing with a self destructive client then having a direct concentrated effect on that part specifically, is desirable.

## **The impact of chair work on the therapeutic relationship**

Martha Stark (1999) writes about three different types of psychology or psychotherapy – one person psychology, one and a half person psychology and a two person psychology.

Chair work would be seen as one person psychotherapy that avoids the transference. It is a way of minimising the transference reactions of the client towards the therapist. As White (2021) notes therapies that are relationship based and focus on the transference relationship are more the two person psychology approach. The therapeutic field, or the client's sense of the therapy, where the therapy is seen to happen is shown by the rectangle around the ego states. The most obvious example of this in transactional analysis is the relational approach. Diagram 5 illustrates this.

Two person approaches tend to avoid techniques like two chair as they believe change is caused by the impact of the transference relationship on the client. The therapist encourages cathartic reactions about them and the relationship. The client is encouraged to focus on the relationship with things like enactments. The implication to the client is that we solve this together and you do not do it on your own. In this way it can be said that a sense of autonomy in the client is discouraged.

The use of empty chair work changes the therapy to a one person approach. (See diagram 6). The therapist and client don't focus on the transference relationship and enactments, instead the client's attention is moved away from that and onto their projection on the chair. This changes the client's experience of the therapy to one that is non relational and instead about something that exists within the client. This also implies to the client that change will come from them and them alone. The therapist or at least the relationship with the therapist is not involved in their change. The therapist helps the client get to the point of

change but ultimately it is the client's responsibility to take the final step and change, such as with a redecision. This can then result in an increased sense of autonomy by the client because they realise the change comes from them and them alone. This is what a one person psychology is.

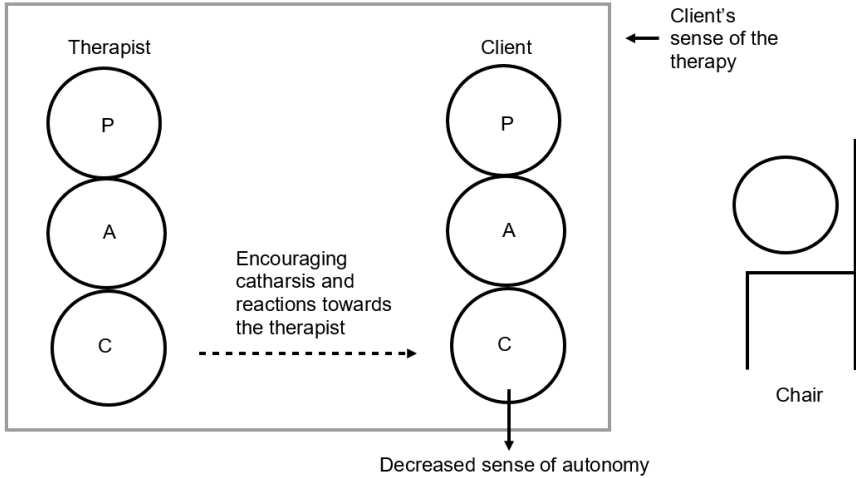


Diagram 5  
Two person psychology  
Source: own materials.

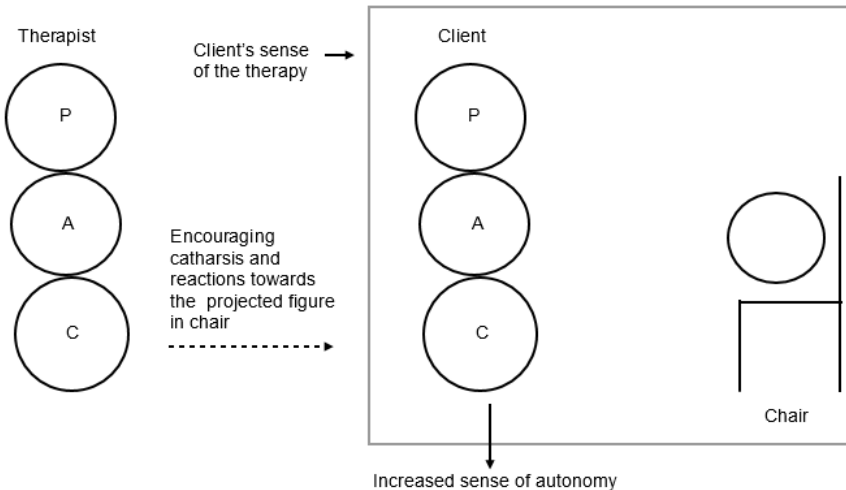


Diagram 6  
One person psychology  
Source: own materials.

This also illustrates a way to manage the transference with the client. By shifting from the approach in diagram 5 to the approach to diagram 6 one can effectively reduce the degree of transference the client experiences towards the therapist. One is encouraging the client to move their projections away from the therapist and onto the empty chair. In this way one can say there is not so much a reduction in transference but it is shifted off the therapist onto something else. The therapist can also move the therapy the other way from diagram 6 to diagram 5 for the opposite effect. So one can use both approaches in varying degrees at varying times, indeed this is what White (2021) calls a rededication relational approach to transactional analysis.

## **Chair work and flashbacks**

Some chair work may involve flashbacks. A war veteran with Post Traumatic Stress Disorder (PTSD) who spontaneously has a flashback is spontaneously creating their own empty chair work without the chair. As White (2023) has shown using the chair work to create an early scene is encouraging the client into a psychological state that is similar to a flashback. When the client regresses into their Child ego state they begin to again relive the early trauma they are discussing. As highlighted before this involves not just remembering events but involves the experience of reliving the events which is one main feature of what is known as a flashback. The person experiencing a flashback feels like and believes they are currently back in the trauma and again reliving it. White goes on to say this means that such chair work can be used as a form of exposure therapy. The person is afforded the opportunity to reexperience the original trauma which provides a most potent form of interoceptive exposure which then forms part of the exposure therapy.

## **Conclusion**

This article describes the origins and alternate ways that empty chair work has been used over the years. This includes a statement about what psychological processes are actually involved when a client engages in this therapeutic procedure. It seeks to define what is in the empty chair as many have proposed different explanations for this. This is followed by a description of the various ways that chair work can be used in psychotherapy for differing therapeutic goals. For instances such chair work can in one sense bring a third person into the therapy room and it can be used in that way by the client and the therapist for a number of differing reasons. Self understanding, diagnosis, regression and

a form of exposure therapy are all ways that chair work is discussed as a therapeutic technique in this article.

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## Technika pustego krzesła I jego użycie w psychoterapii

### Streszczenie

Technika pustego krzesła jest podstawą psychoterapii od dziesięcioleci, a jej początki sięgają Fritza Perlsa i były dalej rozwijane przez Edgara Stuntza. Niniejszy artykuł analizuje wieloaspektowe wykorzystanie pustego krzesła, szczególnie w ramach analizy transakcyjnej (AT). Bada różne sposoby, w jakie terapeuci wykorzystują puste krzesło, aby ułatwić analizę strukturalną, ponowną decyzję i dynamikę rodzicielstwa, a także inne cele terapeutyczne. Czerpiąc ze spostrzeżeń AT, terapii Gestalt i terapii poznawczo-behawioralnej, autor zagłębia się w procesy psychologiczne związane z pracą na krześle, podkreślając znaczenie regresji i integracji stanu ego. Ponadto omówiono terapeutyczne implikacje pracy w fotelu, w tym jej wpływ na samorozumienie, diagnozę i relację terapeutyczną. W artykule wskazano również, w jaki sposób praca na krześle może być dostosowana do potrzeb klientów z zespołem stresu pourazowego, podkreślając jej potencjał jako formy terapii ekspozycyjnej. Artykuł zawiera kompleksowy przegląd techniki pustego krzesła i jej różnorodnych zastosowań we współczesnej praktyce psychoterapeutycznej.

**Słowa kluczowe:** analiza transakcyjna, psychoterapia, stany Ja, Gestalt.





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## Personality disorders and the ego states – the mediating role of the ability to mentalize

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### Abstract

**Purpose:** Transactional Analysis has faced an important theoretical and empirical challenge as a result of the change in the approach to personality disorders in the DSM-5 and ICD-11 medical classifications of mental and behavioral disorders. The aim of the study was to determine whether there are relationships between positively and negatively used ego states and personality functioning, and the ability to mentalize, and to check whether the ability to mentalize is a mediator between the depth of personality disorder and the intensity of the ego states used.

**Methods:** Personality disorder was examined using the Self Functioning and Interpersonal Functioning Scale (SIFS, Gamache et al., 2019; Polish adaptation by Ciecuch and Strus, 2021), the ability to mentalize with the Mentalization Scale (MentS, Dimitrijević et al., 2018; Polish adaptation by Jańczak, 2021), positive and negative ego states with the Questionnaire of the Ego States (Matkowski, Więclawski, 2016).

**Subjects:** A total of 106 people aged 18 to 65 were examined. The average age of the respondent was 25.8 years, the largest group were women with incomplete higher education. Almost half

of the group had a psychiatric diagnosis of various mental disorders or were undergoing diagnostic tests for a personality disorder.

**Results:** Significant relationships were found between the general level of personality functioning and its two domains – functioning of the self and interpersonal functioning, and the intensity of positively used ego states and only a few egostates used negatively. There were significant correlations between the general ability to mentalize, the ability to mentalize about oneself and the mind of other people, and the Adult ego state. The assumption about the mediating role of the ability to mentalize between personality functioning and the state of the Adult ego state has not been confirmed.

**Keywords:** egostates, personality disorder, ability to mentalize.

## Introduction

Transactional Analysis, like other psychosocial concepts describing and explaining the determinants of normative and non-normative ways of functioning of an individual, has faced considerable theoretical and diagnostic challenges as a result of the change in the approach to personality disorders in the medical classifications of mental and behavioral disorders DSM-5 (APA, 2018, AMPD section III) and ICD-11 (WHO, 2019, <https://icd.who.int/en>). For years, both classifications have been dominated by a categorical approach, followed by an effort to describe each of the distinguished types of personality disorders in a specific way; currently, on the basis of the results of many studies, it has been concluded that categorical-dimensional or dimensional approaches are more accurate and correspond better to natural conditions, i.e. what occurs in the population (Bach, Simonsen, 2021, p. 58). Depending on the purpose of the diagnosis of mental and behavioral disorders, the diagnostic procedure in Transactional Analysis is conducted at the level of criterion, also known as differential (also symptomatic, nosological), and/or on the level of explaining the pathomechanism and/or pathogenesis of the patterns of experiencing the self and the quality of interpersonal relationships. Differential diagnosis (*assessment*) is formulated when the purpose of the proceedings is to resolve the issue of whether an individual manifests a specific mental disorder and, if so, what kind of disorder it is (e.g., personality disorder) and, possibly, what kind of specialized help will be effective; explanatory diagnosis, also known as case conceptualization (*case formulation*) is developed on the basis of the selected biopsychosocial concept of the diagnosed disorder, in order to determine the effects and the course of the psychotherapy process (Cierpiałkowska, Soroko, Sęk, 2016, p. 210).

In view of the above, the aim of the research project was to determine whether the behavioral aspects of the ego states are related to the manifestations of personality disorders described in Criterion A of Alternative Model for Personality Disorders (AMPD) in the DSM-5 (APA, 2018). The basis of the research problem formulated in this way is the assumption that the ego states recognized and identified by people with personality disorders differ from the ego states recognized and used by people without personality disorders, whereby the ability to mentalize plays a rele-



vant mediating role in the strength of the relationship between the recognized ego states and the depth of the personality disorder. Empirical verification of the diagnostic usefulness of the functional analysis of behavioral ego states in people with personality disorders will validate the application of the assumptions of this model in diagnostic procedures in the field of individual's mental health.

## **Diagnostic criteria for personality disorders in the DSM-5 classification usefulness**

The DSM-5 classification (APA, 2018) presents two approaches to diagnosing personality disorders: the categorical approach, described in Part II of the handbook, in which 10 types of personality disorders are grouped into three clusters: A (schizoid, schizotypal and paranoid personality disorder), B (antisocial, borderline, histrionic and narcissistic personality disorder) and C (dependent, avoidant and obsessive-compulsive personality disorder), and the categorical-dimensional approach in Part III, which presents a description of personality disorders on the dimensions of intrapsychic and interpersonal functioning and six areas of pathological trait domains that make up specific or non-specific personality disorders defined by traits (cf. DSM-5; 2018, p. 932).

In the first step, it is necessary to assess whether the patient meets the general diagnostic criteria, i.e. whether there are persistent and long-lasting problems in the areas of: 1) functioning of the *self* along the dimensions: level of identity integration and ability to self-direct, and 2) interpersonal relations along the dimensions: ability to empathize and intimacy. Based on the presence or absence of disorders in these dimensions, a diagnostic decision is made about the presence or absence of a personality disorder. If the presence of a personality disorder is determined, then its depth is assessed on a five-point scale: from no disorder (level 0) to severe personality disorder (level 4). The severity of the five pathological personality trait domains is then estimated: negative affect, isolation (detachment), antagonism (dissociality), disinhibition and psychoticism (AMPD in the DSM-5) (in the ICD-11, the fifth trait is anankastia), which describe the individual expression of personality dysfunction (the so-called personality style), and the strength of the impact of the problems experienced in family, social and professional functioning is assessed. The third step, depending on the chosen classification, remains: in the ICD-11 to describe the borderline pattern, and in the DSM-5 to diagnose a specific personality disorder, i.e. one of the six distinguished types of personality disorders, i.e. schizotypal, antisocial, borderline, narcissistic, avoidant and obsessive-compulsive (Bach & Simonsen, 2021, p.55; Gutiérrez et al, 2023, p.02; Mulder, 2021, p.3).

In connection with the main research question about the relationship between the configuration and intensity of positively and negatively used ego states and the depth of personality disorders, the focus was on estimating the level of personality

functioning according to Criterion A in the AMPD DSM-5. Both the domain of the self and the interpersonal relationship domain are described by three aspects of personality and the characteristics of the individual's functioning (APA, 2018, p. 922). Functioning of the self is described along two dimensions: 1) identity, which is defined by aspects of (a) experiencing oneself as unique, (b) stability of self-esteem, and (c) ability to regulate emotions, and 2) self-direction, which is described by such aspects as (a) pursuing meaningful goals, (b) maintaining pro-social standards of behavior, (c) the ability to engage in productive self-reflection. Interpersonal functioning includes the ability to 1) empathize, which is defined as (a) understanding and appreciating the experiences and motivations of others, (b) tolerating different perspectives, and (c) understanding the impact of one's own behavior on others, and 2) intimacy, which is assessed by (a) the depth and duration of one's bonds with others, (b) the desire and capacity for closeness, and (c) the reciprocity of respect shown, which is reflected in interpersonal behavior (Zettl et al., 2020, p. 192).

## **Diagnosis of personality disorders in a descriptive, behavioral model of the ego states**

The diagnosis of mental health and its disorders in Transactional Analysis, as in other paradigms, can be descriptive (categorical, differential diagnosis) and explanatory of the pathomechanism and pathogenesis of the persistence of symptoms and difficulties in various areas of life. In the descriptive, behavioral diagnosis of personality disorders, the therapist assesses the manifestations of dysfunction in the domain of the self and the interpersonal domain by referring to the knowledge of the positive and negative use of ego states (functional model), stroke economy, passive behaviors, and explicit and implicit transactions (transactional games); in the explanatory diagnosis of the persistence of symptoms and difficulties by referring to the model of life positions, levels of discounting, the structural model and the script (Frączek, Smelkowska, Bobrowska et al., 2022).

Three circles, one above the other, containing the terms "Parent", "Adult" and "Child", is a recognizable illustration of one of the main assumptions of Transactional Analysis (TA) concept created by Eric Berne (Cornell, 2018, p. 4; Stewart, Joines, 2021, p. 13). The ego state is defined as a coherent set of feelings and thoughts associated with a person that motivates a related set of behavioral patterns. This model, paralleling the types of diagnosis described above, on the one hand, accounts for behavioral, observable manifestations, and, on the other hand, for intrapsychic aspects and mechanisms of human functioning. Consequently, TA is used in research and practice in two ways: 1) the structural model allows one to describe the elements and structure of a person's personality (it answers the question why and how the activated intrapsychic mechanisms take their course), while 2) the functional model makes it possible to study and understand an individual's

behavior and to describe it at the behavioral level – interpersonal, communicative (it answers the question: what? and how?) (Cornell, 2018, p. 5; Frączek, 2020, p. 885; Stewart, Joines, 2021, p. 17). According to the assumptions and results of TA research, it should be assumed that mentally healthy people are significantly more likely to use the ego states in a positive way, while those with mental difficulties and disorders – in a negative way (Cornell, 2018, p. 7; Frączek, 2020, p. 886).

The focus of Transactional Analysis has been more on the creation of the concept of a structural model than on research within a functional model. Claude Steiner's analysis of patients' functioning, in the context of the assumptions of the model of explicit and implicit transactions, led to the conclusion that transactional games are a source of payoffs both at the behavioral and script level. The obtained confirmations of script beliefs provide the foundation for initiating and entering transactional games, taking on specific roles in a drama triangle, and using a specific constellation of functional ego states, both positive and negative (Steiner, 1999; Cierpiątkowska, Frączek, 2017, p. 133). The research by Robert J. Craig and Ronald E. Olson (1988, p. 71) indicates that drug addicts are characterized by greater investment in the negatively used Adapted Child and problems with access to the Adult ego state. An interesting view at the analysis of the script and functional ego states in different types of personality disorders is proposed by Arthur Wouters and Gillian Smale, (1990, p. 121), who embedded their concept in Theodore Millon's model of bio-social theory of learning. Depression, on the other hand, is described as an over-investment in the negatively used ego states of the Normative Parent and the Adapted Child (Widdowson, 2011, p. 361).

In Transactional Analysis, as already mentioned, it is assumed that a person's functioning in various spheres of life is a manifestation of the content recorded in the structural model and the script (Stewart, Joines, 2021, p. 127). Therefore, problems with the conscious use of the Adult ego state at the functional level can be analyzed from the perspective of the presence of pathologies in the structural model, e.g., contamination of the Adult by the Parent and/or Child. Consequently, the descriptive diagnosis of the ego states is nothing more than observable manifestations of the records in the structural model and the script, or more precisely, the elements of the script that are activated most often or in a particular situation. In the case of people with personality disorders, even an experienced clinician may find it difficult to distinguish between accessibility and limited accessibility to various functions of the Adult ego state and the Free Child ego state in a person. What does not cause major difficulties in clinical analyses, but often fails in questionnaire research, is related to the difficulties in constructing such questions (items) that make it possible to explore various behavioral manifestations of the integrated and uncontaminated Adult. A person's inability to access various functions of the Adult ego state is sometimes overlooked, because in some cases the diagnostician may have difficulties distinguishing, for example, the ability to mentalize and reflect from defensive sophistry, philosophizing or intellectualization. This is due to the lack of broader elaborations in TA pertaining to various manifestations of the lack and dys-

function of the Adult ego state, which would be the result of its contamination, discounting as well as operating of the script. Depending on the depth of the disorder, the stress experienced and the elements of the script activated in a particular situation, individuals are characterized by great ambivalence. Even during a single contact and conversation, at one time they appear as more reflective and adapted (compensation state), at another as completely disorganized, concrete, and unreflective (decompensation state) (Frączek, Smelkowska, Bobrowska et al., 2022). This difference in the functioning of individuals with a personality disorder is explained by the deactivation of the ability to mentalize caused by the experience of relational stress and the activation of the representation of an insecure attachment style (Allen, Fonagy, Bateman, 2008, p. 27).

Mentalization is the ability to think about one's own state of mind, that is, the beliefs, attitudes, desires, and feelings experienced, and the state of mind of others who may present similar or different beliefs, attitudes, desires, and feelings. Most accurately, it is "thinking about the thinking" of others and of one's own, which is treated as a state and as a personality trait (Fonagy, 1991, p. 640; Górska, Cierpiałkowska, 2016, p. 29). The ability to mentalize, acquired in the process of personality formation, makes it possible to distinguish the self from the not-self, allows one to recognize the boundaries between one's own mind and the mind of another – first, the caregiver, and in the later stages of life, of other people. Moreover, research indicates that the ability to mentalize plays a significant role in the mechanisms of emotion regulation. The process of developing the ability to mentalize is preceded by the acquisition of the ability to think in a prementalized way. The theory of mentalization distinguishes three main prementalization modes:

- 1) mode of mental equivalence – external reality (events, behaviors of others) and mental states (e.g., beliefs, feelings) are treated as identical (e.g. if I am anxious, it means that my partner is doing something against me, e.g. cheating, lying); similar states are experienced in dreams, fantasies and delusions,
- 2) the "as if" mode – there is an impermanent, "fluid" distinction between mental states and reality, reality is experienced "as if"; similar states are observed at a certain stage of children's development, when during play at one moment the stick is a horse, the next moment only a stick, which may cause resentment and protests in the child,
- 3) teleological mode – one's own and other people's mental states occur when they are expressed in action; words mean nothing, everything has to take place in action, e.g. you can feel calm when someone holds your hand or takes you on your lap, or when you slam a door or break plates (Allen, Fonagy, Bateman, 2008, p. 142; Górska, Cierpiałkowska, 2016, pp. 29-31).

The study assumes that the ability to mentalize is closely related to the accessibility of the Adult ego state, and that the dominance of prementalization modes indicates varying degrees of limited accessibility to the Adult ego state and its function.

## Research Purpose and Questions

The purpose of the study was to describe which ego states in the functional model are most often used by people diagnosed with different depths of personality disorder and to evaluate whether the ability to mentalize is a mediator between the depth of personality disorder and the ability to use specific ego states.

Accordingly, three research questions were posed: 1) Are there relationships between the intensity of positive and negative ego states and the functioning of personality? 2) Are there relationships between the intensity of positive and negative ego states and the ability to mentalize? 3) Does the ability to mentalize mediate between personality functioning and the intensity of positive and negative ego states?

## Study group and course of the study

The research was conducted in the Provinces of Greater Poland and of Lubusz, at universities and on the Internet using the snowball method. The subjects gave informed consent to participate in the study, the procedure guaranteed anonymity and confidentiality of participation. A total of 106 people between the ages of 18 and 65 took part in the survey. The average age of the subject was 25.8 years. People aged 18-25 dominated (72.7%; 77 people), followed by 26–35-year-olds (18.8%), the smallest group were people aged >35 years (8.5%). The majority were those with students' status (59.4%), more than a quarter were participants with higher education (26.4%), those with secondary education accounted for 13.2% of the group, and a scant of 0.9% of the group were people with primary education. More than one-third of the study group was diagnosed with a personality disorder (32.1%), 22 had been hospitalized in a psychiatric ward (20.8%). Detailed characteristics of the group are provided in Table 1.

Table 1  
*Characteristics of the study group*

Variables	No of participants	%
<b>Sex</b>		
Woman	86	81.1
Man	16	15.1
Non-binary	4	3.8
<b>Age</b>		
18-25	77	72.7
26-35	20	18.8
>35	9	8.5

Table 1  
*Characteristics of the study group (cont.)*

Variables	No of participants	%
<b>Education</b>		
Primary	1	0.9
Secondary	14	13.2
Student	63	59.4
Higher	28	26.4
<b>Domicile</b>		
Village	20	18.9
City up to 100 thousand	32	30.2
City 100-150 thousand	26	24.5
A city over 500 thousand	28	26.4
<b>Diagnosis of Personality Disorder</b>		
Yes	34	32.1
No	72	67.9
<b>Hospitalization</b>		
Yes	22	20.8
No	84	79.2

Source: Author's own research.

## Research tools

*The Self and Interpersonal Functioning Scale* (SIFS; Gamache et al., 2019, Polish adaptation by Ciecuch and Strus, 2021) is a tool referring to the alternative categorical-dimensional model of personality disorders in the DSM-5. The questionnaire consists of 24 statements that deal with personality and relationships with people. It is divided into 4 subscales according to criterion A, which include 7 (identity), 5 (self-direction), 6 (empathy) and 6 (intimacy) statements. Subjects answer the questionnaire items on a Likert scale from 0 (it doesn't describe me at all) to 4 (completely accurate in describing me). Statements 1, 6, 8, 12, 17, 19 and 24 should be scored in reverse. Obtaining higher overall scores suggests a deeper personality pathology.

*The Ego States Questionnaire* (Matkowski, Więclawski, 2016, experimental version) is a tool that examines which ego states and with what frequency are used by the subjects. It consists of 72 statements that form subscales: Free Child (12 items), Rebellious Child (12 items), Adapted Child (12 items), Adult (12 items), Normative Parent (12 items) and Nurturing Parent (12 items). In addition to the overall score indicating the frequency of using ego states, the questionnaire allows one to calcu-

late the scale of using positive and negative ego states. The points scored are transferred to egograms. The scores of all states are then compared in terms of positive and negative. Responses to the questionnaire items are scored on a Likert scale from 0 (if you strongly agree with a particular statement) to 3 (if you strongly disagree with a particular statement). Points should be converted according to the formula: 3=0; 2=1; 1=2; 0=3. Cronbach's alpha reliability analysis showed medium to high internal consistency of all subscales ( $\alpha = 0.43$  to  $0.83$ ).

*The Mentalization Scale (MentS)* (Dimitrijević et al., 2018; Polish adaptation by Jańczak, 2021) is a scale used to measure mentalization as a personality trait. The questionnaire consists of 28 statements. Subjects respond to statements on a 5-point Likert scale, where 1 signifies "completely untrue" and 5 stands for "completely true". The questionnaire distinguishes the following scales: (1), MentS-O (Other-related Mentalization) consisting of 10 items, (2) MentS-S (Self-related Mentalization) consisting of 8 items and (3) MentS-M (Motivation to Mentalize) consisting of 10 items. The Ment(S) scores consist of the sum of the points for each subscale and the sum of the points for the entire questionnaire (total score), with the ten items scored in reverse (items no. 8, 9, 11, 14, 18, 19, 21, 22, 26, 27). The internal consistency for the entire questionnaire was  $\alpha = 0.84$  for the non-clinical group and  $\alpha = 0.75$  for the clinical group. Similarly, in the case of the subscales, the indicators were satisfactory ( $\alpha = 0.74 - 0.79$ ) in the non-clinical group, but lower in the clinical group ( $\alpha = 0.60$ ).

*The sociodemographic questionnaire* consisted of 5 questions concerning the age and gender of the respondent (female, male, non-binary), place of residence, education, psychiatric diagnosis, and past hospitalizations.

The program jamovi 2.3.21 software was used for statistical analyses. To answer the research questions and select appropriate statistics, analyses of measures of central tendency of the results concerning individual questionnaires were performed, and deviations from the normal distribution were checked.

## Research Results

### General characteristics of the results obtained

In the SIFS questionnaire (cf. Table 2), the mean overall score in the study group was  $M=37.74$  ( $min=10$ ;  $max=76$ ;  $SD=17.29$ ). The highest average score was obtained on the identity subscale [IS], i.e.,  $min=1$ ;  $max=28$ ;  $M=14.01$ ;  $SD=6.99$ . On the other scales, the results are as follows: empathy [EMP]  $min=3$ ;  $max=19$ ;  $M=8.50$ ;  $SD=3.63$ , self-direction [SD]  $min=0$ ;  $max=20$ ;  $M=8.44$ ;  $SD=4.63$ , intimacy [INT]  $min=0$ ;  $max=19$ ;  $M=6.78$ ;  $SD=4.82$ . The normality of the distribution of variables was evaluated with the Shapiro-Wilk test. For all scales of the questionnaire, the S-W test is statistically significant ( $p < 0.05$ ), i.e., the distribution of results in the sample is not consistent with the normal distribution.

Table 2  
Descriptive statistics of the results obtained

	Variable	N	MD	Average	SD	Min	Max	The Shapiro-Wilk Test	
								V	S
SIFS Questionnaire	SIFS_s	106	0	37.74	17.29	10.000	76.0	0.962	0.004
	IS	106	0	14.01	6.99	1	28	0.955	0.001
	SD	106	0	8.44	4.63	0	20	0.967	0.009
	INT	106	0	6.78	4.82	0	19	0.912	<.001
	EMP	106	0	8.50	3.63	3	19	0.940	<.001
Questionnaire of Ego States	FC (s)	106	0	10.64	3.50	3	18	0.978	0.071
	RC (p)	106	0	10.95	3.97	1	18	0.971	0.021
	AC (p)	106	0	11.09	3.82	1	17	0.936	<.001
	NP (p)	106	0	11.04	3.75	0	18	0.962	0.004
	NRP (p)	106	0	10.87	4.22	1	30	0.948	<.001
	C	106	0	10.81	3.36	0.500	17.5	0.962	0.004
	FC(n)	106	0	8.46	3.41	1	18	0.975	0.040
	RC (n)	106	0	6.58	4.32	0	18	0.949	<.001
	AC (n)	106	0	7.68	4.58	0	18	0.972	0.024
	NP (n)	106	0	7.50	3.93	0	17	0.971	0.020
NRP (n)	106	0	9.46	3.12	1	18	0.980	0.116	
Ment(s) Questionnaire	MENT(sum)	106	0	105.77	14.52	53	130	0.960	0.003
	MentS-S	106	0	26.08	7.18	9	40	0.974	0.032
	MentS-O	106	0	39.02	5.75	21	48	0.937	<.001
	MentS-M	106	0	40.67	5.74	20	50	0.956	0.002

Key: N – sample size, BD – missing data, SD – standard deviation, Min – minimum score, Max – highest score, V – Shapiro-Wolf test stat value, S – significance level; SIFS\_s – overall score of the level of personality dysfunction, IS – identity subscale, SD – self-direction subscale, INT – intimacy subscale, EMP – empathy subscale; FC – Free Child, RC – Rebellious Child, AC – Adapted Child, NP – Normative Parent, NRP – Nurturing Parent, (p) – positive use of the ego state, (n) – negative use of the ego state; MENT(sum) – the ability to mentalize: the overall result, MentS-S – Self-related Mentalization, MentS-O – Other-related Mentalization, MentS-M – Motivation to Mentalize

Source: Authors' own elaboration.

In the case of positively used ego states, the average results obtained by the subjects in the *Questionnaire of Ego States* are as follows: Adapted Child  $min=1$ ;  $max=17$ ;  $M=11.09$ ;  $SD=3.82$ , Normative Parent  $min=0$ ;  $max=18$ ;  $M=11.04$ ;  $SD=3.75$ , Rebellious Child  $min=1$ ;  $max=18$ ;  $M=10.95$ ;  $SD=3.97$ , Nurturing Parent  $min=1$ ;  $max=30$ ;  $M=10.87$ ;  $SD=4.22$ , Free Child  $min=3$ ;  $max=18$ ;  $M=10.64$ ;  $SD=3.50$ . On the Adult scale,  $min=0.5$ ;  $max=17.5$ ;  $M=10.81$ ;  $SD=3.36$ . On the dimension of negatively used ego states, the results are as follows: Nurturing Parent  $min=1$ ;  $max=18$ ;  $M=9.46$ ;  $SD=3.12$ , Free Child  $min=1$ ;  $max=18$ ;  $M=8.46$ ;  $SD=3.41$ ,



Adapted Child  $min=0$ ;  $max=18$ ;  $M=7.68$ ;  $SD=4.58$ , Normative Parent  $min=0$ ;  $max=17$ ;  $M=7.50$ ;  $SD=3.93$ , Rebellious Child  $min=0$ ;  $max=18$ ;  $M=6.58$ ,  $SD=4.32$ . The normality of the distribution of variables was evaluated with the Shapiro-Wilk test. In the majority of the scales of the questionnaire, except for the positively used Free Child and the negatively used Nurturing Parent, the S-W test is statistically significant ( $p < 0.05$ ), i.e., the distribution of the results is not consistent with the normal distribution.

The mean overall score on the Mentalization Scale (MentS) is  $M=105.8$ ;  $SD=14.52$  ( $min=53$ ;  $max=130$ ). The highest average score was obtained on the Motivation to Mentalize subscale (MentS-M)  $min=20$ ;  $max=50$ ;  $M=40.7$ ;  $SD=5.74$ , followed by the subscale of Other-related Mentalization (MentS-O)  $min=21$ ;  $max=48$ ;  $M=39.0$ ;  $SD=5.75$ , the lowest mean scores were obtained on the subscale of Self-related Mentalization (MentS-S), i.e.  $min=9$ ;  $max=40$ ;  $M=26.1$ ;  $SD=7.18$ . As with the previous scales, the distribution of the scores was evaluated with the S-W test – the distribution of the scores is not consistent with the normal distribution.

To answer questions about the relationships between the use of positive and negative ego states, personality functioning, and the ability to mentalize, the Spearman’s rho correlation coefficient was calculated for all variables. A non-parametric test was chosen because the distribution of the results obtained from the questionnaires does not follow the normal distribution.

Table 3  
Spearman’s rho correlation matrix between the variables of the intensity of positive and negative ego states, and the level of personality functioning

		SIFS_s	IS	SD	INT	EMP
FC(s)	Spearman’s rho	-0.244*	-0.272**	-0.157	-0.122	-0.270**
	p	0.012	0.005	0.107	0.213	0.005
RC(p)	Spearman’s rho	0.014	0.031	-0.064	0.080	-0.006
	p	0.889	0.750	0.513	0.414	0.952
AC(p)	Spearman’s rho	-0.423	-0.430	-0.308**	-0.317	-0.372
	p	<.001	<.001	0.001	<.001	<.001
NP(p)	Spearman’s rho	-0.280**	-0.234*	-0.254**	-0.251**	-0.241*
	p	0.004	0.016	0.008	0.009	0.013
NRP(p)	Spearman’s rho	-0.384	-0.394	-0.308**	-0.266**	-0.356
	p	<.001	<.001	0.001	0.006	<.001
A	Spearman’s rho	-0.520	-0.477	-0.567	-0.347	-0.419
	p	<.001	<.001	<.001	<.001	<.001
FC(n)	Spearman’s rho	0.172	0.168	0.184	0.096	0.182
	p	0.078	0.086	0.058	0.326	0.062
RC(n)	Spearman’s rho	0.440	0.349	0.409	0.393	0.426
	p	<.001	<.001	<.001	<.001	<.001

Table 3  
Spearman's rho correlation matrix... (cont.)

		SIFS_s	IS	SD	INT	EMP
AC(n)	Spearman's rho	0.412	0.476	0.334	0.225*	0.325
	p	<.001	<.001	<.001	0.020	<.001
NP(n)	Spearman's rho	0.157	0.058	0.096	0.260**	0.191*
	p	0.108	0.556	0.330	0.007	0.049
NRP(n)	Spearman's rho	-0.142	-0.179	-0.107	-0.066	-0.093
	p	0.147	0.066	0.277	0.500	0.341

Notes: \*p < .05, \*\*p < .01, \*\*\*p < .001.

Key: FC – Free Child, RC – Rebellious Child, AC – Adapted Child, NP – Normative Parent, NRP – Nurturing Parent, (p) – positive use of the ego state, (n) – negative uses of the ego state; SIFS\_s – overall score of the level of personality dysfunction, IS – identity subscale, SD – self-direction subscale, INT – intimacy subscale, EMP – empathy subscale; MENT(sum) – the ability to mentalize the overall result, MentS-S – Self-related Mentalization, MentS-O – Other-related Mentalization, MentS-M – Motivation to Mentalize

Source: Authors' own elaboration.

The analysis of the Spearman's rho correlation coefficient matrix between the use of ego states and the level of personality functioning allows one to conclude that there is a statistically significant relationship between the variables. The strongest correlation occurred between the self-direction subscale and the Adult ego state ( $\rho = -0.567$ ,  $p < 0.001$ ). A moderate relationship with a negative direction was observed between: the overall SIFS score and the Adapted Child ego state used positively ( $\rho = -0.423$ ,  $p < 0.001$ ) and the Adult ego state ( $\rho = -0.520$ ,  $p < 0.001$ ); between the identity subscale (IS) and the positively used Adapted Child ego state ( $\rho = -0.430$ ,  $p < 0.001$ ), the Adult ego state ( $\rho = -0.477$ ,  $p < 0.001$ ) and between the empathy subscale and the Adult ego state ( $\rho = -0.419$ ,  $p < 0.001$ ). The remaining statistically significant results can be described as relationships of weak strength and negative direction. A relationship of moderate strength and positive direction was found between the negatively used Rebellious Child variable in all scales describing personality functioning, i.e. overall SIFS score ( $\rho = 0.440$ ,  $p < 0.001$ ), identity ( $\rho = 0.349$ ,  $p < 0.001$ ), self-direction ( $\rho = 0.409$ ,  $p < 0.001$ ), intimacy ( $\rho = 0.393$ ,  $p < 0.001$ ) and empathy ( $\rho = 0.426$ ,  $p < 0.001$ ). Positive correlations of moderate strength were also observed between the negatively used Adapted Child ego state and the general level of personality integration ( $\rho = 0.412$ ,  $p < 0.001$ ) and identity ( $\rho = 0.476$ ,  $p < 0.001$ ). The remaining results indicate a weak positive relationship between the negatively used Adapted Child ego state and self-direction ( $\rho = 0.334$ ,  $p < 0.001$ ), intimacy ( $\rho = 0.225$ ,  $p < 0.020$ ), and empathy ( $\rho = 0.325$ ,  $p < 0.001$ ). The remaining results are not statistically significant. This means that the greater a person's personality dysfunction, the greater the tendency to use negative ego states.

Table 4

*Matrix of Spearman's rho correlation coefficient between the variables: the intensity of positive and negative ego states and the ability to mentalize*

		MENT (sum)	MentS-S	MentS-O	MentS-M
FC(s)	Spearman's rho	0.218*	0.255**	0.141	0.030
	p	0.025	0.008	0.150	0.760
RC(p)	Spearman's rho	0.026	0.070	0.023	-0.082
	p	0.795	0.473	0.818	0.401
AC(p)	Spearman's rho	0.196*	0.280**	0.157	-0.026
	p	0.044	0.004	0.108	0.792
NP(p)	Spearman's rho	0.077	0.238*	-0.064	-0.051
	p	0.434	0.014	0.512	0.604
NRP(p)	Spearman's rho	0.184	0.233*	0.132	-0.016
	p	0.059	0.016	0.178	0.868
A	Spearman's rho	0.339	0.389	0.241*	0.092
	P	<.001	<.001	0.013	0.350
FC(n)	Spearman's rho	-0.055	-0.111	0.066	-0.031
	p	0.573	0.257	0.499	0.749
RC(n)	Spearman's rho	-0.238*	-0.329	-0.072	-0.109
	p	0.014	<.001	0.463	0.265
AC(n)	Spearman's rho	-0.364	-0.364	-0.325	-0.148
	p	<.001	<.001	<.001	0.131
NP(n)	Spearman's rho	-0.215*	-0.211*	-0.047	-0.181
	p	0.027	0.030	0.634	0.063
NRP(n)	Spearman's rho	0.174	0.108	0.137	0.139
	p	0.075	0.270	0.160	0.157

Notes: \*p < .05, \*\*p < .01, \*\*\*p < .001

Key: FC – Free Child, RC – Rebellious Child, AC – Adapted Child, A – Adult, NP – Normative Parent, NRP – Nurturing Parent, (p) – positive use of the ego state, (n) – negative uses of the ego state; MENT(sum) – the ability to mentalize the overall result, MentS-S – Self-related Mentalization, MentS-O – Other-related Mentalization, MentS-M – Motivation to Mentalize

Source: Authors' own elaboration

On the basis of the analysis of the correlation matrix calculated for the variables of the used ego states and the ability to mentalize, statistically significant relationships were observed at the moderate level between: self-related mentalization and the Adult ego state ( $\rho = 0.389$ ,  $p < 0.001$ ) and the negatively used Adapted Child ego state ( $\rho = -0.364$ ,  $p < 0.001$ ). There was a significant relationship between the

overall mentalization ability score and the negatively used Adapted Child ego state ( $\rho=-0.364$ ,  $p<0.001$ ). The remaining results indicate weak, although statistically significant, associations between the variables. The results of the statistical analysis also show that there is a positive correlation between the positively used ego states and the ability to mentalize, the relationship is reversed for the negatively used ego states. This means that with the increase in the ability of self-related and other-related mentalization, the more frequently used ego states have a positive dimension, which confirms the assumptions described in the theoretical part.

To verify the third research question: does the ability to mentalize mediate between personality functioning and the intensification of positive and negative ego states, firstly, the average scores obtained by the respondents on the scales of positive and negative use of the Child and Parent ego states were calculated. Secondly, the correlation matrix between the studied variables was calculated (cf. Table 5). A moderate positive relationship was found between the overall personality functioning score (SIFS\_s) and the negatively used Child ego state ( $\rho=0.547$ ,  $p<0.001$ ), and a moderate negative relationship between the overall personality functioning score and the Adult ego state ( $\rho=-0.520$ ,  $p<0.001$ ). A near-moderate score with a negative direction was shown between the overall score of the ability to mentalize and the mean score of the negatively used Child ego state ( $\rho=-0.368$ ,  $p<0.001$ ). The remaining results indicate a weak but statistically significant relationship between the variables. No correlation has been shown between the negative Parent ego state and the overall outcome of personality functioning and the ability to mentalize, and the positively used Parent ego state and the overall score of the ability to mentalize.

In order to verify the statistical hypothesis about the ability to mentalize being a mediator between personality functioning and the use of positive and negative ego states, the following calculations were performed: in the first step, the average scores obtained by the respondents on the scales of positive and negative Child and Parent ego states were calculated, then Spearman's rho correlation matrix was calculated for the mean results of positive and negative ego states and the general level of personality functioning, and the overall mentalization ability score (cf. Table 5).

To verify the mediating role of the variable the ability to mentalize between the variables the level of personality functioning and the use of positive and negative Child and Adult ego states, the mediation analysis was performed using *the medmod module* of the jamovi program, version 2.3.21. Due to the lack of normal distribution of the variables studied, the bootstrap method was used (cf. Table 6).

The results of the conducted analyses indicate that there is no mediation effect of the ability to mentalize between personality functioning and access to the Child ego state used both negatively (indirect effect - CI: from -0.00108 to 0.0282, Estimate: 0.00772,  $p=0.432$ ) and positively (indirect effect - CI: from -0.0152 to 0.02995, Estimate: 0.00515,  $p=0.653$ ) as well as to the Adult ego state (indirect effect - CI: from -0.0210 to 0.0311, Estimate: 0.00293,  $p=0.824$ ). The absence of a mediating effect of ability to mentalize between the X and Y variables is also evidenced by the results obtained on the dimension of direct effect (cf. Table 6).

Table 5

*Spearman's rho correlation matrix between the variables of the average intensity of positive and negative ego states and the level of personality functioning and the ability to mentalize*

		SIFS_s	MENT(sum)
C(+)	Spearman's rho	-0.260**	0.217*
	p	0.007	0.025
P(+)	Spearman's rho	-0.378	0.150
	p	<.001	0.125
A	Spearman's rho	-0.520	0.339
	p	<.001	<.001
C(-)	Spearman's rho	0.547	-0.368
	p	<.001	<.001
P(-)	Spearman's rho	0.023	-0.034
	p	0.812	0.726

Note. \* P < .05, \*\* P < .01, \*\*\* P < .001

Key: C(+)- average intensity of the positively used Child ego state, P(+)- average intensity of the positively used Parent ego state, A – average intensity of the use of the Adult ego state, C(-) – average intensity of the negatively used Child ego state, P(-) – average intensity of the negatively used Parent ego state, SIFS\_s – general score of the level of personality dysfunction, MENT(sum) – ability to mentalize overall score

Source: Authors' own elaboration.

Table 6

*Mediation analysis of the variable the ability to mentalize between personality functioning and the positive and negative ego states*

		95% Confidence Interval					
	Effect	Estimate	SE	Lower	Upper	With	p
SIFS_s	Indirect	0.00772	0.00982	-0.0108	0.0282	0.786	0.432
↗ Ment(s)	Direct	0.07483	0.02021	0.0319	0.1094	3.703	<.001
↗ C(-)	Total	0.08254	0.01823	0.0461	0.1147	4.528	<.001
SIFS_s	Indirect	0.00515	0.0114	-0.0152	0.02995	0.450	0.653
↗ Ment(s)	Direct	-0.04813	0.0226	-0.0933	-0.00471	-2.131	0.033
↗ C(+)	Total	-0.04299	0.0208	-0.0854	-0.00308	-2.071	0.038
SIFS_s	Indirect	0.00293	0.0132	-0.0210	0.0311	0.222	0.824
↗ Ment(s)	Direct	-0.09270	0.0180	-0.1276	-0.0606	-5.160	<.001
↗ A	Total	-0.08977	0.0157	-0.1189	-0.0587	-5.735	<.001

Key: C(+)- average intensity of the positively used Child ego state, P(+)- average intensity of the positively used Parent ego state, C(-) - the average intensity of the negatively used Child ego state, Child, P(-) - average intensity of the negatively used Parent ego state, SIFS\_s – score - general level of personality dysfunction, MENT(sum) – the ability to mentalize: the overall score

Source: Authors' own elaboration.

## Conclusion and discussion

The results of the research conducted over the years have led to the introduction of fundamental changes to the current medical classifications of mental and behavioral disorders DSM-5 (2018, AMPD) and ICD-11 (2019), which involve abandoning the previously dominant categorical approach and switching to dimensional-categorical or dimensional thinking in the description of the manifestations of personality disorders. Clinicians and therapists faced the challenge of revising and “adjusting” their thinking about descriptive diagnosis, not only in terms of the presence of a personality disorder, but also its depth, with the assumptions of the concept explaining pathogenesis and pathomechanism that are useful for clinical practice. The concept whose assumptions underlie a specific modality of psychotherapy and the diagnostic and therapeutic activities of the clinician. Transactional Analysis also faced this challenge, and the presented research project and its results aim to answer two main research problems of a diagnostic nature. First, whether there is a relationship between the intensity of the positively and negatively used ego states, personality functioning and the ability to mentalize; secondly, whether the ability to mentalize is a mediator of the strength of the relationship between the Adult ego state and the level of personality functioning. A review of the literature in the area of TA allows one to conclude that this is the first research that attempts to answer such questions in the field of personality disorders.

A total of 106 people between the ages of 18 to 65 were examined, with a predominant group of women in early and middle adulthood. The research was conducted on the premises of universities and on the Internet. Slightly more than 32% of the respondents were diagnosed with a personality disorder, more than 20% had been hospitalized in a psychiatric ward due to various mental disorders, some due to personality problems. Personality disorder was examined using the Self Functioning and Interpersonal Functioning Scale (SIFS, Gamache et al., 2019; Polish adaptation by Ciecuch and Strus, 2021), the ability to mentalize with the Mentalization Scale (MentS, Dimitrijević et al., 2018; Polish adaptation by Jańczak, 2021), positive and negative ego states with the Questionnaire of Ego States (Matkowski, Więclawski, 2016).

With regard to the first question, statistical analyses indicated statistically significant relationships between both the overall level of personality functioning and its two domains (functioning of the self; interpersonal functioning) as well as their aspects (identity and self-direction; intimacy, empathy), and the intensification of positively used ego states and some ego states used negatively. In the group of respondents, a clear general tendency was observed, consisting in a more frequent occurrence of negative significant relationships between personality functioning and the ego states used rather positively than negatively, excluding the Rebellious Child and the Adapted Child ego states. No significant correlations were observed between the intensity of the ego states of the Free Child, the Normative Parent (except for the dimensions of intimacy and empathy) and the Nurturing Parent and the

general level of personality functioning and its domains. Significant, at a moderate level, were the correlations between the overall personality functioning score and the areas of dysfunction of the self – identity and self-direction, as well as interpersonal relationships – intimacy and empathy, and the intensity of the use of the Adult ego state.

What is the value of the obtained research results for the diagnosis of personality disorders in terms of Transactional Analysis? It can be assumed that it is not so much the tendencies to use ego states negatively, but the decreased ability or inability of people to use them positively that intensifies with the deepening of the problems and the depth of a given personality disorder. These tendencies are evident in the case of such ego states as: Adapted Child, Normative Parent and Nurturing Parent. It should be assumed that as personality disorders deepen, there is a weakening and greater deficit in the positive use of these ego states, as well as the functions they perform related to respecting certain social norms and values and accurately recognizing what is good and what is destructive in functioning. Particular attention is drawn to the strength of the relationship between increasing limitations in access to the Adult ego state and deepening personality disorders, both in the area of the self and the interpersonal relationships area on each of the four dimensions. It is worth noting that only two negatively used ego states – the Adapted Child [AC(n)] and the Rebellious Child [RC(n)] intensify as problems and personality disorders deepen. Since AC(n) often manifests itself in the form of a sense of helplessness, receiving unconditional support and taking on the role of the Victim in relationships, and RC(n) shows significant aggression, self-aggression and takes on the position of the Persecutor, it can be assumed that they reflect two different personality tendencies. People with dominant AC symptoms cope by internalizing problems and difficulties, while those with dominant RC by externalizing them (Eaton, Krueger, Keys, et al., 2011, p. 2). Dispositions to react in these two ways can be diagnosed in the case of non-specific personality disorders according to the DSM-5 (2018, AMPD, p. 936) based on the assessment of dominant pathological features, especially the intensity of negative affect, antagonism, and disinhibition (similarly in ICD-11, 2020).

The strength of the relationship between the tendency to self-related mentalization, other-related mentalization and the motivation to mentalize, and positively and negatively used ego states is either insignificant or statistically significant at a low level. Generally, in the group of respondents, no significant relationships were observed between the motivation to mentalize and the ego states used. This is a surprising result, as it was expected that the motivation to mentalize should be positively correlated with a higher tendency to use the Adult ego state. The largest and strongest positive relationships were observed between the use of the Adult ego state, the Free Child ego state, and the positive use of the Adapted Child, the Normative and Nurturing Parent, and the ability to mentalize one's own states of mind. In some cases, there were also relationships between the intensity of the use of the Adult ego state, the negative use of the Adapted Child ego state, and the

general tendency to mentalize. It can be assumed that with the intensification of the general ability to mentalize and the ability for self-related and other-related mentalization, the availability of the Adult ego state and its various functions increases. Moreover, the tendency to use the Adapted Child and the Rebellious Child ego states negatively clearly weakens. The obtained results showed that the access to the ability to mentalize is related to the accessibility of various functions of the Adult and the activity, spontaneity, and creativity of the Free Child. Interestingly, it also weakens the tendency to function in the Rebellious Child (n), Adapted Child (n) and Normative Parent(n).

Statistical analyses did not confirm the assumption about the mediating role of the ability to mentalize in the strength of the relationship between personality functioning and access to the positively and negatively used Child ego state and to the Adult ego state. When formulating this hypothesis, it was assumed that the inability to "think about the thinking" about oneself and the other would increase the strength of the relationship between the depth of the personality disorder and the inaccessibility of the Adult ego state. Perhaps in this case we are dealing with non-linear relationships, which is worth evaluating in further research.

## Limitations of research

The limitations of our own research are related to several factors, three of which seem to be the most important. The operationalization of variables, especially the use of the Questionnaire of Positive and Negative Ego States to measure the intensity of positively and negatively used ego states, may have a significant impact on research results. This is an experimental version of the tool, with a low reliability of the Nurturing Parent ego state and lack of knowledge about its validity. The study was conducted on a non-clinical group, especially women in early and middle adulthood, which could have influenced the strength of the relationship between SIFS scores and the Mentalization Scale. Within the framework of TA, no research was conducted on the relationship between the severity of personality disorders and positive and negative use of ego states, which made it impossible to compare the results of our own research with other results. The lack of knowledge significantly limits the formulation of various explanations about unconfirmed hypotheses.

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## Zaburzenia osobowości a stany Ja – mediująca rola zdolności do mentalizacji

### Streszczenie

**Cel:** Analiza transakcyjna stanęła przed ważnym wyzwaniem teoretycznym i empirycznym wskutek zmiany podejścia do zaburzeń osobowości w klasyfikacjach medycznych zaburzeń psychicznych i zachowania DSM-5 i ICD-11. Celem badań było stwierdzenie, czy występują związki między używanymi pozytywnie i negatywnie stanami Ja a funkcjonowaniem osobowości i zdolnością do mentalizacji oraz sprawdzenie, czy zdolność do mentalizacji jest mediatorem między głębokością zaburzenia osobowości a nasileniem używanych stanów Ja.

**Metody:** Zaburzenie osobowości zbadano przy użyciu Samoopisowej Krótkiej Skali dla Oszacowania Poziomu Funkcjonowania Osobowości dla Zaburzeń Osobowości: Skali Funkcjonowania Ja i Funkcjonowania Interpersonalnego (SIFS, Gamache i in., 2019; polska adaptacja Ciecuch i Strus, 2021), zdolność do mentalizacji Skalą Mentalizacji (MentS, Dimitrijević i in., 2018; polska adaptacja Jańczak, 2021), pozytywne i negatywne stany Ja Kwestionariuszem Stanów Ja (Matkowski, Więclawski, 2016).

**Badani:** Zbadano 106 osób w wieku od 18 do 65 lat. Średni wiek osoby badanej wynosił 25,8 lat, największą grupę stanowiły kobiety z niepełnym wyższym wykształceniem. Prawie połowa grupy miała diagnozę psychiatryczną różnych zaburzeń psychicznych lub była w trakcie badań diagnostycznych w kierunku zaburzenia osobowości.

**Wyniki:** Stwierdzono istotne związki pomiędzy ogólnym poziomem funkcjonowania osobowości oraz jej dwoma domenami – funkcjonowaniem self i funkcjonowaniem interpersonalnym – a nasileniem pozytywnie i tylko nielicznymi negatywnie używanymi stanami Ja. Wystąpiły istotne zależności między ogólną zdolnością do mentalizacji oraz mentalizacji na temat siebie i umysłu innych ludzi a stanem Ja-Dorosłego. Nie potwierdziło się założenie o mediacyjnej roli zdolności do mentalizacji między funkcjonowaniem osobowości a stanem Ja-Dorosły.

**Słowa kluczowe:** stany Ja, zaburzenie osobowości, zdolność do mentalizacji.





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## Student Personality Adaptations, part I\*

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### Abstract

The consecutive three articles present examples of student personality adaptations. Referring to the concept of transactional analysis and knowledge in the field of personality disorders, a number of typical traits and behaviours, dominant needs and selected TA parameters are presented, as well as practical guidelines that can help teachers and educators understand their relationships with students causing problems resulting from character problems. The articles also indicate methods of compensatory actions and interventions in the form of affirmations aimed at preventing the manifestations of dysfunctional personality development.

**Keywords:** student, personality adaptations, schizoidality, paranoia, orality.

The article consists of three parts, which are a presentation of particular dysfunctional personality adaptations that can be observed in some students. These students often cause various problems and difficulties for teachers and educators, and the pedagogues are not always aware of the difficulties and their causes. They are sometimes referred to as difficult students, i.e. those who, in their behaviour, deliberately and intentionally, or not fully consciously, try to boycott or otherwise invalidate or hinder the educational and didactic efforts of the teacher and the school (Jagiela, 2005, pp. 13–14). Such difficulties also arise in relationships with peers and other people from the student's environment.

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\* The article is a translation of a fragment of one chapter in the book; J. Jagieła (2023). *Psychopedagogika relacji. Analiza transakcyjna dla nauczycieli i wychowawców*, Warszawa: Wydawnictwo Difin.

Some of this group of students manifest various types of personality deficits. Teachers usually notice this in a colloquial way as differences in some respects from others, the child's strange behavior that does not fit in with the rest of the class, or a kind of "excess or deficiency" of certain personality traits. Another sensitive indicator can be the teacher's own feelings, as they notice that their attention, thoughts, emotions, and ways of acting are different towards this student than towards the others. It manifests itself either in a desire for too much help and care for them, more than for other children, or, on the contrary, it causes anxiety in the teacher and a tendency to distance themselves or avoid contact.

Therefore, the purpose of this article is to deepen this kind of common-sense approach both on the basis of everything that derives from the concept of personality adaptation present in transactional analysis, and also, to some extent, from psychological knowledge about personality disorders as difficulties that always appear during childhood or adolescence and persist into adulthood (Talarowska, Moczulski, Strzelecki, 2021, p. 30).

The problem of personality adaptations themselves was initiated by a number of publications (Ware, 1983; Stewart, Joines, 2002; Joines 2011 et al.) and found a new form of inquiry in a project called PCM – *Process Communication Model* (Kahler, 2008). On her website "Transactional analysis for enthusiasts and practitioners",<sup>1</sup> Agnieszka Woś-Szymanowska presents an in-depth analysis of individual approaches to personality adaptation. The concept in question is dynamic, which means that it is constantly being supplemented and clarified. This paper presents the author's own solution and understanding of this type of issue. First of all, the number of adaptations was extended, some TA parameters were assigned to them and this was illustrated on a structural model. What is more, the basic unmet need accompanying personality adaptations was indicated. It has been recognized that particular personality adaptations correspond to specific states of the harmed inner child, so that the teacher or educator is able to look at a given student also from the perspective of their specific childhood suffering they sometimes experience. In the search to illustrate individual adaptations, examples from literature, film and fairy tales were used. Perhaps the attentive reader will be inclined to supplement the list with other patterns? I strongly encourage you to do so. At the end, an attempt was made to list both the affirmations that "healed" the student and the practical measures to be taken while interacting with the student or their parents. The order in which the individual adaptations are presented is not accidental, but refers to the concept of developmental psychoanalysis (Johnson 1998).

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<sup>1</sup> <http://www.analiza-transakcyjna.pl/2017/01/23/adaptacje-osobowosci-przeglad-informacji/> (accessed: 21.04.218).

With regard to each personality adaptation, the personality traits and possible deviations from the behavioural norm are indicated. Clearly, this is not a complete collection. They are, at most, some of the most typical manifestations of a given adaptation. None of the individual qualities or typical behaviours is a proof that we are unquestionably dealing with this and not another kind of forming character. Only **quantity** and **quality** of such traits and behaviours may indicate certain intensified tendencies, in other words, point to the fact that they are more or less maladaptive in nature (Cierpiałkowska, Frączek 2017, 129–144). This approach is called the dimensional-categorical approach and is present in the well-known clinical classifications ICD-11 and DSM-5 (Nowak 2015).

Let us move to a number of other comments and reservations. Identification and observation by a teacher or class tutor of certain specific features and behaviours of a pupil/student should not be of a stigmatising nature (the so-called *labelling*), signifying its deviance. This aspect was also noticed by Julie Hay who shares her doubts in one of her essays, proposing her own model (AP3) relating to the personality characteristics of individual people (2013). The graphic diagram of this solution is a three-dimensional cube with three intersecting axes. Each of the axes is a continuum, symbolizing the opposing traits of human characters.

Therefore, the study presented here does not in any way constitute the basis for a full specialist psychological diagnosis, which can rule on anything, but a pedagogical guideline stating that the development of a given pupil's personality is not proceeding in the right way. It can show that it is proceeding in a way that is not always beneficial for the student and their environment, and that it can be prevented by the teacher's or educator's conscious, intentional, reasonable and deliberate actions. That was the intention behind the presentation shown here. The lack of prudence of an educator in this field can become a source of many problems and consequences difficult to overcome. The aforesaid remark was expressed by the first readers and reviewers of this text. Hence, it is crucial to mention and record it.

These are not the only caveats that need to be made here. Another one is the observation that we do not always deal with "pure" adaptations. Often, a number of features and properties overlap to form an individual constellation and do not yield to strict rules of order. Very often we deal with the so-called mixed personality types. Kristina Brajović Car and Patrick Ellerich write about it, emphasizing at the same time that personality adaptations do not refer directly to pathology or mental health, but to the dominant motivations of drivers, parental influences, and values, beliefs, and messages that the child has recognized as their own in their development (Car, Ellerich, 2015, pp. 83–87). Any attempt at a precise classification will therefore be burdened with an inevitable feeling of imperfection and unfulfillment. In a number of cases, there is also a kind of ambivalence in relation to certain features, e.g. the desire for closeness and be-

longing, and, at the same time, on the other hand, the desire for autonomy and independence. This does not make it easier to understand some of the issues. The fact that someone is a loner, does not take enough care of their needs, likes to expose themselves excessively, or is overly disciplined, does not make them a person who is clearly mentally disturbed. Only the severity, significance and importance of certain traits move a person to a continuum: from the position of health and proper functioning towards disorders. At the same time, “There are no sharp boundaries between norms and pathology. Individual personality styles gradually transition into personality disorders” (Millon, Davis, 2005, p. 192). Therefore, certain traits that appear can sometimes be treated as a certain “mental beauty”, “style in which one functions”, or “rather strange character traits” that give someone a specific charm, determine their originality or simply distinguish some people from others. In my classes with students, I sometimes use a certain (perhaps oversimplified?) analogy about preparing dishes. A little bit of a particular spice (in this case, we are talking about some of these qualities) gives the dishes flavor and specificity. That is why we sometimes talk about the positive qualities of some adaptations. However, an excess of aromas and marinades, like the proverbial spoonful of tar in a barrel of honey, makes the dish almost impossible to eat (this is the form disorders take). Therefore, it is worth not classifying others too hastily, too quickly and without much thought, as mentally unbalanced or even ill, but being able to see their specificity and the problems they face.

## 1. I’m a lonely island

The first adaptation which we will devote some attention to will be the schizoid adaptation, since its emergence is associated with the earliest, often pre- or post-natal developmental period. As some authors claim, “Schizoid personality traits are visible from early childhood” (Talarowska, Moczulski, Strzelecki, 2021, p. 46). Ambivalent thinking, feelings, and behaviours that characterize this personality can be expressed in the statement, “I’m a mystery to the whole world – don’t even try to penetrate and understand me,” or “I don’t need anyone, because I can handle life on my own.”

Table 1

Unloved Child	Schizoid adaptation
The central problem	<b>Existence.</b>
A basic unmet need	Being accepted, safe, and welcomed by those closest to you.
Dominant feelings	Sadness and fear. Anxiety, especially in situations that require trust in others and personal involvement. Sometimes there is also despair, shame and blocked rage.



Table 1 (cont.)

Unloved Child	Schizoid adaptation
Parents' behavior towards their child	The birth of this child was not accepted or created additional problems in the family. The parents expected the child to take care of themselves and not engage their attention. They wanted and aspired that the upbringing and care of the child should be taken care of by others (e.g. grandparents, care center, etc.)
Attachment style*	Empty and ambivalent
Some prohibitions	Don't exist. Don't be important. Don't be close. Don't feel joy. Don't let your relationships with others succeed. Don't be normal and mentally healthy.
Script drivers	Stay strong.

Likely ego states



**Selected features and behaviours**

Isolation and distancing oneself from others. Coldness and emotional distance from the environment. Withdrawal and passivity in social interactions. Inability to interact emotionally with others. Protecting one's space and privacy. Escaping into the world of fantasy and imagination. Focusing mainly on oneself. At the moment of feeling unpleasant emotions, going back to one's own world ("snails' response"). Frequently choosing solitary or bizarre activities. Lack of interest in praise and criticism. Conflict avoidance. Aggression can be defence against an imagined attack. A limited ability to take care of oneself and soothe one's anxieties. Lack of interest in the sexual sphere. Lack of joy, desire to play and freedom. Proclaiming judgments that differ from the beliefs of the majority of those around them. Extreme views that sometimes take the form of fanaticism or mania. Forgetfulness and a kind of quarrelsomeness that gives the impression of wanting to defeat an excessively persecuting or harassing parent. A kind of "cutting off from life in the body", which manifests itself in limited movements, lack of expression and natural spontaneity, as well as fluidity and grace.

Common beliefs

"I don't need anyone," "I'm self-sufficient," "Nobody understands me", "I'm somehow a threat to my life," "I need a lot of space for myself", "I can handle everything with my intellect," "Others are boring, they impose themselves and being with them is just a waste of my time," "A relationship with someone will only limit my freedom," "I will find relief in a different, metaphysical and esoteric world," "If my mother doesn't love me, God will love me for sure," "If I stopped controlling myself, I could kill someone," "The world is in fact terrifying to me," "I'll show you – I'll take revenge on you," "There's no place for me in this world."

Table 1 (cont.)

Unloved Child	Schizoid adaptation
Position in life	I'm not OK. – You (you) are not OK.
Favourite interpersonal games	"Wooden leg", "Kick me", "Look what I did because of you". "If it weren't for you."
Some real, film, literary, and fairy-tale characters	A model example is the protagonist of the film "Leon the Professional" (1994) directed by L. Besson, brilliantly played by Jean Reno as a "cleaner" of the dirt of this world, the character of Conrad in the film "Ordinary People" (1980), directed by R. Redford, Macon Leary in "The Accidental Tourist" (1988), directed by L. Kasdan, "The Man Who Wasn't There" (2001), directed by E. Coen, J. Coen, where the protagonist is a taciturn, distant hairdresser who does not reveal his emotions, the movie "Bartleby" (2001), directed by J. Parker with a bizarre and withdrawn clerk, the viper in A. Saint-Exupéry's fairy tale "The Little Prince," who lived alone in the desert, but could be mischievous and "bite for pleasure," a beech tree from the children's story "Moomin Valley" by T. Jansson. It is a good idea to look for similar examples oneself.
Positive traits	Serenity. Reflexivity. Imagination, task-oriented nature. Very good abstract and logical thinking. Hence, "less disturbed schizoid individuals may give vent to their intellectual faculties by becoming scientists, mathematicians, or philosophers" (Millon, Davis, 2005, p. 459). Preferring professions focused on goals and things, rather than on relationships with others, e.g. IT specialist, production worker, independent designer, programmer, computer graphic designer, librarian, forester, lighthouse keeper (apparently this profession still exists?), etc. In a positive sense, this person is sometimes called: "Creative Dreamer"***
Desirable signs of recognition**	Positive, unconditional.
Teacher's affirmations	"You belong to us," "You are important and worthy of attention to us," "You have the right to your privacy and your own space," "Solitude can be just as necessary in life as being with others," "You can trust your feelings," "Physical movement can also be fun," "You can feel safe among us."

\* Quoted in T. White (2019). *Attachment patterns and personality type*. <https://www.facebook.com/photo/?fbid=10159561698269637&set=pcb.10159561698579637> (accessed: 29.09.2021)

\*\* term used in the PCM (Polish Centre of Mediation)

\*\* Pointing out the signs of recognition, I was guided partly in all the indicated cases by: A. Woś-Szymanowska, *What signs of recognition do you give and receive?* <https://analiza-transakcyjna.pl/znaki-rozpoznania/> (accessed: 02.05.2020)

Source: own materials.

Sooner or later, **teachers and educators** are likely to encounter this type of personality in students who are rejected, lonely, on the margins of class life, as well as alienated students with bizarre interests or even passions (e.g., frighten-

ing or spiritualistic fascinations). Building an optimal relationship with a student can be difficult in such situations. Such attempts were aptly summed up by saying, "You may knock, but you will find no one." It evokes the reactions I heard from the teacher in a concise characterization of a certain student: "Boy Strange" (this statement also says a lot about the teacher's attitude towards the student). She also added that when she spoke to him, it was as if she had to talk "with a table leg" and her words were met with complete indifference. Thus, we can see that the teacher-student relationship in such cases can be full of tension, reluctance and helplessness.

According to the interpersonal approach, how does the development of a schizoid personality occur? No one knows for sure, but clinical intuition tells us that schizoid individuals are likely to exhibit interpersonal deficits from the beginning of their life. (Millon, Davis, 2005, p. 442).

Moreover, the converge of the concepts "schizoidity" and "schizophrenia" also raises concerns, fears and is not accidental. However, as the aforementioned authors write, "Not all schizoid people develop symptoms of schizophrenia and its onset is not always preceded by a personality disorder" (Millon, Davis, 2005, p. 453).

Therefore, it is worth taking a skilful, individual and less clinical look at a student who exhibits some schizoid traits, as if they were a harmed, unhappy child, hurt in a specific way. These are children with the so-called "Badly Licked Bear Syndrome". Anne Ancelin Schützenberger uses this term to refer to people who are clumsy, bizarre, and socially maladjusted. She writes,

Mammals lick their young as soon as they are born, thus marking them as their own. This process can be disrupted, and then the young dies or is socially or emotionally handicapped. In colloquial French, people who are clumsy or inept in life are called "badly licked bears" (Schützenberger, 2017, p. 16).

I will not elaborate on this topic, but I will only mention the fact that the context in which the child was conceived and born is of great importance for its further functioning. How it will be welcomed, even if only by symbolic prophecies spoken "over the cradle". This process, as many authors point out quite unanimously, takes place in the earliest development period, i.e. between the moment of birth (or maybe even earlier?) and the eighteenth month of life. Everyone builds oneself on the basis of experiencing a basic sense of security and early attachment. When it is missing, such a person carries their hurt Unloved Child into adulthood.

Do unwanted and unloved children grow up in families? Is that not exaggerated and overly dramatic? After all, children are usually expected and even desired. Unfortunately, this is not always the case. Let us quote the narrative of an adult woman who participated in the research on the sense of childhood injustice,

[...] My first experience of injustice, of unfair treatment, was in my early childhood. I'm a child rejected by my mother and I've never really been accepted by her. On her part, I experienced a number of unfair acts such as humiliation, threats, constant depreciation of my person, and unfair treatment in the relationship with my siblings [...] (Szyszka, 2020).

Thus, such events do take place and undoubtedly result in certain effects. A recent, widely commented study conducted at the Centre for Research on Personality Development at SWPS University indicates that 13% of women and men regret their parenthood. These are mostly people who have had a difficult childhood themselves (Łygas, 2021). They perceive parenthood mainly as their torment, an obstacle in their professional career, or being overwhelmed by responsibilities.

Almost every teacher, after a long period of professional work, will admit that at least once they have come across this type of case of a student showing schizoid traits. However, the developed form of pathology in the form of schizoid personality disorder occurs relatively less frequently compared to other adaptation problems. Many sources indicate that the number of people who can be given a similar clinical diagnosis ranges from 0.5 to 7% of the general population, this type of personality is more common in men than in women, as well as in people whose family members suffer from schizophrenia (Talarowska, Moczulski, Strzelecki, 2021, p. 46). Individual and few schizoid traits, however, manifest themselves more frequently.

## **Guidelines for teachers and educators**

So how can an educator build their relationship with a student with schizoid traits? Let's list a few such tips. Therefore, it is worth:

- Develop patience!
- Systematically increase the student's involvement in the life of a small group or community (e.g. scout troop, interest club, sports club, etc.).
- Restore the ability to adapt to the environment and its modifications (e.g. involve the student in the preparation of important school events, classroom décor, organisation of an excursion or a trip, etc.).
- Arrange situations conducive to mastering various skills that are important in social relationships (e.g. listening to others, assertiveness, conflict resolution, expressing one's feelings or opinions, etc.).
- To show the connections between thinking and the emotional sphere and to deepen the emotional contact with reality ("When this happened, what could the protagonist of this story have felt?").
- Encourage, but not force (!) to express one's emotions in a safe environment ("Write down on separate pieces of paper the feelings it evokes in you").

- Awaken the desire to take care of oneself and self-soothing (“What brings you relief and pleasure?”).
- Avoid comparisons with other children (“Each of you in class is different and I accept that”).
- Take an interest in the child and their life in a non-possessive way. However, it is worth remembering not to insist on closeness, as it may be too difficult for this type of student and cause anxiety (e.g. an accidental question in the school corridor, “How are you doing?”, “How is your new laptop doing?”, etc.).
- Sometimes you can share your own feelings, hesitations, or mistakes (“Sometimes it doesn’t work out for me either, and then I worry”).
- Inspire the student to undertake various types of physical activity and sports, in order to increase the integration of natural life processes. (“Which sport do you do or would you like to do?”).
- Remember the student’s name, use it often, and even sometimes use diminutives (“Mickey”), and remember and notice their presence (“Michael is in class today, so maybe he can tell us something about it?”).
- Be aware that a student with schizoid adaptation requires special understanding and care for building a constructive relationship with them (e.g. the teacher will often experience feelings in the form of psychological projection that they are accused of dryness and mistreatment).
- Increase the participation of parents in contacts with teachers and educators.

Let us take as an example of necessary attentiveness towards the students we are talking about here an awkward situation in which a teacher, wanting to include a marginalized and isolated student in the classroom community, will offer them, for example, to present their interests in front of the whole class. Doing so seems rational, but it can have an opposite effect. The bizarreness of one’s passion, their awe-inspiring, or even macabre fascinations can arouse terror or fear in the rest of the class, which in turn can cause even greater rejection. One of my schizoid patients (a high school student) admitted to me that he watched horror movies for hours every day, which is his only hobby that he devoted most of his time to, as well as sculpting microscopic figurines. The fantasies and dreams he often indulged in were the desire to come to class one day with a machine gun and shoot all his classmates, including the teacher. As is well known, such acts of terror, as reported in the press, sometimes take place in the United States and in other countries<sup>2</sup>. The perpetrators of such acts were usually

<sup>2</sup> One of many such reports. Eighteen-year-old student from Chesterfield, South Carolina (USA), wanted to blow up his school (year 2008). Other reports describe a former nursing student One Goh who was accused of murdering seven people and attempted murder of three more at one of the colleges in Oakland, California (2012). A 20-year-old man shot and killed 28 people, in-

later characterized as calm, extremely gentle, not causing any major educational problems. but isolating themselves from the life of the class. Stephen M. Johnson writes,

They imagine that they can suddenly begin to destroy everything and everyone within their reach. Such sudden explosions, for example, cause a previously quiet and peaceful boy to suddenly start killing innocent people in the street from the roof of a house; these are situations in which occasional fantasies are realized (Johnson, 1993, p. 50).

## 2. I don't trust anyone

Lack of the feelings of security and acceptance, as well as developmental deficits at the earliest stage of life (0-18 months) lead us to an adaptation similar to that of a schizoid person, which is a paranoid personality. And as you can read, "Paranoid personality traits often co-occur with schizoid personality traits" (Talarowska, Moczulski, Strzelecki, 2021, p. 40). John Bradshaw, characterizing the reasons for the emergence of this type of adaptation, states, "If caregivers are untrustworthy, children develop a deep feeling of distrust. The world seems to them to be a dangerous, hostile and unpredictable place" (Bradshaw, 2008, p. 36). He continues, "The first developmental task in life is to develop a sense of trust. We need to learn that someone else (mom, dad, the world) is safe and trustworthy. A fundamental sense of trust has an impact on our entire lives. If we can trust the world, we can also learn to trust ourselves. This means that you can trust your strength, your perception and interpretation of the world, your feelings and desires" (Bradshaw, 2008, p. 37). The consequence of distrust is ambivalence that is attributed to various historical dictators or tyrants, and which can be travesty with the statement: "Trust can sometimes be good – but vigilance and control are better."

Table 2

Distrustful Child	Paranoid adaptation
The central problem	<b>Trust</b>
A basic unmet need	Safe trust in the environment.
Dominant feelings	Suspicion and distrust of others. Anger and fear. Restlessness in confrontational situations. Irritability and shame. Fear of rejection.

cluding 20 children at primary school in Sandy Hook, not too far from New York City (2012). However, this typical and repetitive psychological characterization of perpetrators is really interesting and symptomatic. "He had no friends, no colleagues, he was a shy loner, even in high school being a good student, he didn't keep in touch with anyone. In the class memorial book, there is not even his photo." – wrote the press (Jagięła, 2013).

Table 2 (cont.)

<b>Distrustful Child</b>	<b>Paranoid adaptation</b>
Parents' behaviour towards their child	The parents did not provide the child with a sense of security. The child was subjected to strict requirements, but also to their ambivalent and sometimes inconsistent behaviour. Not providing enough parental support. Limiting the child's natural spontaneity. Burdening the child with traits it doesn't have.
Attachment style*	Ambivalent
Some prohibitions	Don't trust. Don't be a child. Don't feel joy. Don't be close.
Script drivers	Be perfect. Stay strong.

Likely ego states



**Selected features and behaviours**

Suspicion and timidity in all sorts of safe situations. Caution and distrust when dealing with others. Vigilance and anxiety in new circumstances. Doubts about fidelity and loyalty. Looking for hidden meanings in ordinary events. Excessive sensitivity to disrespect or criticism. Rigid and persistent opinions. Interest in mysterious, unexplained events or conspiracies. Expressing derision or contempt when a child is confronted with views that differ from its own. Experiencing setbacks, failures, or unpleasantness in an exaggerated way and for too long. Desire for self-sufficiency. Excessive desire to control the environment. Preference for friendship with one person or two other children. Reluctance to confide in anyone for fear that this information will be used against the child. Slighting and ignoring colleagues in the belief that they have ill will or hidden agendas. Small life goals and ambitions, desires and plans for the future. Cynicism demonstrated many times. Belief in one's superiority over the environment. Intransigence in the case of self-adopted preferences. An exaggerated desire to excuse oneself and justify one's actions. Frequent comparison with others and the desire to compete. Frequently manifested jealousy. Aversion to surprises and different situations. Predicting negative or catastrophic events. Frequent inquiring expectation of others to express their own opinions, judgments, or beliefs. Strong identification with the area of faith and professed values. Inability to forgive real or imagined wrongs. Pessimism and stubbornness. No sense of humour.

Table 2 (cont.)

Distrustful Child	Paranoid adaptation
Common beliefs	"It pays off to be very careful and attentive." "Other people can be dangerous." "If I'm not careful, I'll be used or manipulated." "Someone who is friendly or cordial toward me probably has ulterior motives or wants to use me." "I will not allow myself to be humiliated by anyone." "I will try to eliminate all ambiguity from my life." "Attack is the best defence"
Position in life	I'm OK. – You (you) are not OK. (I+, You–)
Favourite interpersonal games	"I've got you here, you..." A flaw: "Kick me."
Some real, film, literary, and fairy-tale characters	The protagonists of the film "Paranoïds" (2008) directed by G. Medina (Argentina). "Fear to Be Afraid" (2012) directed by C. Milles (Great Britain). "Lament paranoïka" (2014), a Polish short film directed by D. Kocurek. Joseph McCarthy (1908–1957), Senate Committee Chairman in the USA, who is more or less justifiably attributed with paranoid traits, and John Edgar Hoover, who in the years 1924-1972, as the director of the FBI, created an extensive and effective investigative system, at the same time committing a number of abuses and persecutions. Rabbit from the short story "Winnie the Pooh" by A.A. Milne.** It is worth looking for similar examples independently.
Positive traits	Mindfulness and prudence. Diligence and determination in pursuit of goals. Aiming to know how things are in reality, not how they seem. Paying close attention to the loyalty of others. Criticism. Lack of naivety in uncertain or unclear situations. Ability to defend oneself against manipulation. Willingness to make sacrifices. The above-mentioned features will encourage the choice of certain professions, e.g. a policeman, a controller, a prison service officer, or special and spy services, etc. They can achieve success at work that requires independence and dealing with dry facts, e.g. in various types of production or legal fields. "To some extent, paranoid thinking is undeniably healthy" (Millon & Davis 2005, p. 507). In a positive sense, it is sometimes referred to as: "A Brilliant Skeptic"****
Desirable signs of recognition	Positive conditional.
Teacher's affirmations	"I think you believe what you said – but try to check it." "Even if I don't agree with you, I listen carefully to everything you say." "You are entitled to your opinion." "Your skepticism allows us all not to make mistakes." "Sometimes it's good to think about a different point of view – maybe others are right sometimes?" "Trust is a priceless gift, although I agree with you that it cannot be given to any random person."

\* Quoted in T. White (2019). *Attachment patterns and personality type*. <https://www.facebook.com/photo/?fbid=10159561698269637&set=pcb.10159561698579637> (accessed: 29.09.2021)

\*\* Interesting analyses of the transactional ego states and the behavior of the characters contained in the fairy tale on Winnie the Pooh is provided by an article by Jennifer R. Adams (Adams, 2009).

\*\*\* Term used in the PCM (Polish Centre of Mediation)



**Teachers and educators** will sometimes perceive a pupil or their charge with paranoid traits as one who is overly cautious and shows a lack of trust in a number of situations of school life. However, it is difficult to talk about trust in a general way, so when we talk about trust, we must always specify who and what it refers to – as Piotr Sztompka states (2007). Trust is therefore relative. For example, we trust someone only in certain matters, and in others it does not have to mean much to us. However, in the case of paranoid people, they seem to have an overgeneralised distrust of many areas, people, and events. As has already been said, schizoid and paranoid adaptation have a lot in common. They stem from a similar background of lack of security in the earliest period of one's life. It is no coincidence that Erik H. Erikson, talking about eight periods of human life, described the first stage as a dichotomy between trust and distrust (Erikson, 2000, pp. 257–261).

Only a teacher who gains a certain level of trust with the student who exhibits the above-mentioned qualities and their parents has a chance to build a constructive relationship with them and to have a positive educational impact. However, it is also worth being aware that, as some claim, “this battle cannot be won”. One probably cannot win completely, but that does not mean one should not try.

## Guidelines for teachers and educators

Although building trust with students, and especially their parents, who exhibit paranoid traits and behaviours is difficult, it is worth remembering (to):

- maintain a certain balance between giving attention, support, or interest to, for example, parents, and expressing one's own, often different views or positions. (“I hear that you have a crystallized view of upbringing. It's good to know how to proceed. I see it in a slightly different way. So let's stick to our own beliefs.”)
- avoid ambiguous statements (“You didn't quite do it right”) and be specific and patient (“But let's be specific, what's going on?”).
- rely heavily on your sense of observation (“I see you're making good progress.”)
- keep this balance, which is difficult and requires certain skills, throughout the relationship, as it is indispensable for the survival of the relationship.
- not to get provoked by a student (“I see that you are asking me this question not by accident”).
- look for a situation in which the student will be objectively confronted with other positions, views or attitudes towards reality (“I have brought you one of my books from my home library, promise to read it and tell me what you think of it.”).

- organize activities that teach cooperation, not just competition between students (“Let’s try to do this together.”)
- teach self-distance (“I’ll tell you a story about what a stupid thing happened to me yesterday”).
- take some time during a class to laugh and joke (“Who’s going to tell a joke or make us laugh today?”). David Shapiro writes, “Paranoids rarely laugh. They may act as if they were laughing, but it is not real laughter; that means they do not feel like laughing at all.” (Shapiro, 1965).
- to see the difference between words and deeds. Between facts and opinions (My motto is the words of Marcus Aurelius, “Everything we hear is an opinion, not a fact. Everything we see is a point of view, not the truth.”).
- teach fact-checking (“I’m hearing disturbing things here, so I’ll have to look it up somewhere”).
- not to be “hypnotized” by your parents’ strange-content stories, because this group of people tends to be the most determined “hypnotists”. A signal may be that they will consistently discourage you from seeking information about the facts. At the same time, the teacher must take into account the fact that some of the stories they tell may be true<sup>3</sup>.
- be aware of the sad realization that this kind of adaptation is always doomed in some sense (according to Leonardo da Vinci’s maxim, “Experience has proven that he who never trusts will be deceived”).

In a vast majority of cases, if teachers encounter paranoid traits of students or their parents in one way or another, they will be mild forms of this kind of adaptation. Psychiatrists and psychotherapists, however, more often face more serious forms of paranoid disorder, where the motto is: "Trust no one!" They also know how difficult this therapy is. In the beginning, when patients experience a lot of attention, support and understanding from the therapist, they are delighted and are happy to come to every session. However, when the therapy process progresses and some therapeutic interventions appear, for example, interpretations or confrontations of the patient’s world with reality, then the atmosphere of the meetings changes for the worse. One can see how the patient’s body manifests distance from the therapist and even physical stiffening. As a consequence, one day the patient no longer comes to the next session and remains convinced, for example, that “the therapist was in collusion with them (or e.g. with her) behind their back”! I mention this to make it easier to understand why the aforementioned “balance” seems so relevant in relations with this type of adaptation. Thus, we read:

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<sup>3</sup> I know the accounts of psychologists working in a mental health clinic in a large provincial city during and after martial law, who said that some patients talked about f situations from their life in such a way that it seemed like the product of their paranoid delusions. They said they felt persecuted, watched and bugged. Unfortunately, later on some of these facts turned out true.

Perhaps more than for any other personality disorder, the therapist of the paranoid needs to be sensitive to many pitfalls that may arise. There is no doubt that the most dangerous trap is the direct confrontation of semi-delusional beliefs (Millon, Davis, 2005, p. 547).

Let us also add that severe paranoid disorders affect between 0.5 and 2.5% of cases in the general population.

And finally, an invitation to reflection expressed in the question: “Doesn’t the atmosphere of school life sometimes show paranoid traits?” The question seems absurd on the surface. Indeed, it is easy to notice that institutions and organizations (created by man) sometimes exhibit traits of personality adaptations usually attributed to people. Isn’t bureaucracy itself, expressed by the onerous necessity to confirm everything with a signature, with its excess of orders and circulars, documenting often the most trivial decisions, placing annotations on the smallest or insignificant documents, etc., an emanation of paranoid thinking? I think it is worth considering.

### 3. I don’t need anything

The last adaptation in this part of the article will be oral personality, which shares with the previous two a very early moment of formation of this type of psychological problems (0–18 months). During this period, the child may have been wanted and felt accepted, and thus attachment and original trust were formed, but it was neglected (sometimes for objective reasons) in terms of its basic needs. Thus, the difference between schizoidity and orality is expressed in a slightly different nature of causes.

Schizoid adaptation usually stems from chronically inadequate and cold care during this period and/or from painful mistreatment, generally by the child’s primary caregiver. The oral pattern occurs more frequently as a result of a chronic lack of compliance of the caring environment. Parents may be unavailable here because of depression, drug addiction, overwork, or simple parental ineptitude (Johnson, 1993b, p. 24).

The effects of this distinction can be seen in a number of dimensions. They can also be seen in the ambivalence that sometimes manifests itself and says, “I’m here to meet all your needs – but in fact they are mine.”

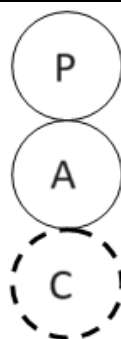
Table 3

Neglected Child	Oral adaptation*
The central problem	<b>Needs.</b>
A basic unmet need	Being satisfied in one’s desires.
Dominant feelings	Yearning. Grief. Fear of abandonment or loss. Loneliness. Despair, but also periodic euphoric joy (“Mom came back and brought something”). Fear of abandonment.

Table 3 (cont.)

Neglected Child	Oral adaptation*
Parents' behaviour towards their child	Expectations that the child does not need anything and does not engage its parents as well as does not develop or grow up too fast.
Attachment style	Insecure and ambivalent
Some prohibitions	Don't need anything. Don't be important. Don't feel grief and anger. Don't grow up.
Script drivers	Give pleasure to others.

Probable ego states



**Selected features and behaviours**

Neglecting oneself and one's needs, at the same time craving full and unreciprocated fulfillment. Not taking care of one's own interests, to which one has no right. In a literal sense, not just figurative one, it is a child: "unfed" (because it is hungry), "unsatisfied" (because it is not cuddled) or "not taken care of" (because it is not changed). A desire to receive loving care and support, but also a great readiness to selflessly help others. Excessive concern for others and their well-being. Demanding protection and special treatment. Growing up too early and taking on serious duties and responsibilities. Caring for and minding animals. Frequent complaining about one's fate. Reduced aggressiveness. Taking on excessive responsibility (e.g., for one's siblings) or ostentatiously rejecting it. Being overprotective towards one's own children. Ambivalent excitement combined with depression and mood swings. A tendency to undereat or, on the contrary, overeating. Tendencies to develop serious diseases (often related to the digestive system) and the occurrence of manic-depressive disorders. A tendency to use various types of stimulants: alcohol, caffeine, nicotine or drugs.

Common beliefs

"I don't need anything." "I don't need anything to live" "If I don't need anything, I won't feel frustration and pain." "I'll manage on my own." "I'm able to accomplish everything on my own." "I can meaning in my life in sacrifice and devotion to others, in boundless giving and unconditional love." "My needs and desires are so great that if I were to reveal them, others would certainly reject me." "My desires are far greater than other people's."

Position in life

I'm not OK. – You are OK. (I-, You+)

Favourite interpersonal games

"Gratitude." "I just wanted to help", "Look how hard I try", "Do something to me", "Maybe you will try..., yes, but...".

Table 3 (cont.)

Neglected Child	Oral adaptation*
Some real, film, literary, and fairy-tale characters	<p>“City Lights” (1931), one of the films by Ch. Chaplin. “The Bicycle Thief” (1948) – a neorealist masterpiece by V. De Sica. “Bridget Jones’s Diary” (2001) is a British film based on the novel by H. Fielding. “Love” (2013), a film directed by H. Michael. Other similar threads in many movies. Countless saints of the Catholic and Orthodox churches giving their lives for others (e.g. Father Maximilian Kolbe). “The Little Prince” (1943) from Antoine de Saint-Exupéry’s philosophical novel. The main protagonist sacrificed himself to make Rose happy (he watered her, covered her with a cloche, shielded her, killed caterpillars for her safety, listened when she boasted and was there when she was silent). “Zosia Samosia” from Julian Tuwim’s poem. Winnie the Pooh, who often soothed his sorrows with a barrel of honey. It is worth looking for similar examples on one’s own.</p>
Positive traits	<p>Readiness to selflessly sacrifice oneself for others. Generosity, docility and engagement in the lives of people under one’s care. The capacity for compassion. High emotional sensitivity. Ability to show warmth and care. A tendency to choose professions that support and “feed” others in a symbolic, but also literal or figurative sense (e.g. cook, nurse, clergyman, social worker, educator in a care center, teacher, doctor, psychologist, etc.). Such a person can be described as: “The Docile Samaritan.”</p>
Desirable signs of recognition	Positive, unconditional.
Teacher’s affirmations	<p>“It’s good to take care of others, but also to take care of oneself and one’s health.” “Life is about exchange: you give something to others, and others give something to you too.” “When a person sacrifices themselves excessively for others, they may stop liking them after a while.” “When you need help, it’s good to know who you can and should turn to.” “It’s normal to have your own needs and desires as well.” “You have the right to take care of yourself.”</p>

\* does not appear in ICD-11 and DSM-5 clinical classifications

Source: own materials.

**Teachers and educators** will certainly come across the situation of a neglected child many times. Numerous authors are also increasingly recognizing this problem in the field of their research interests.

The problem of child neglect is on the rise all over the world today. A child who should always be cared for and receive care from its family and society, more and more often experiences rejection, and often even drastic forms of violence,

writes Zenon Jasiński in the introduction to the book “Neglecting the child. Selected phenomena” (Górnicka, 2017, p. 7). Similarly, Józefa Brągiel, concluding her reflections, states

... that neglect is a form of child abuse that keeps occurring. Due to very serious effects, especially seen in the development of a young child, it is necessary to diagnose and intervene quickly in order to protect the child from the effects of neglect. (Górnicka, 2017, p. 34).

On the other hand, Wiesław Sikorski sees the reasons for the child's neglect in a faulty way of communicating in the family.

A child who cannot speak directly about what it thinks, feels and expects is often faced with the necessity of hiding its real experiences. In everyday contacts, this involves removing them from speech or replacing them with other content. Usually, a sign of such discomfort is creating inconsistent messages. On the contrary, it also happens that it is the parents who commit similar communicative distortions in relationships with their children. In the latter case, improper communication can be a source or a factor intensifying child neglect. (Górnicka, 2017, p. 47).

In the case of infants, a child who is repeatedly abandoned (e.g., as a consequence of the mother's illness, losses and objective life situations, etc.) or disappointed (e.g., by lack of care and support) will do everything to adapt to this abandonment and disappointment. There are numerous forms and manifestations of failure to meet children's basic needs. They leave resentment and a sense of hurt and injustice in the minds of adults. Neglected children are often forced to take on responsibilities beyond their measure and take care of others. Many years after this experience, one of the adult women participating in the research said,

[...] My childhood ended at the age of ten, when the responsibilities of taking care of my younger brothers fell on me, which was doubly difficult because of my mother's constant threats that I should watch them so that nothing bad happened to them. I wonder why my mom had so much hostility towards me, I have a daughter myself and I can't imagine treating my own child like that [...] (Szyszka, 2020).

Another, much younger woman, said,

My mother has been drinking for as long as I can remember, she didn't care about us, she was violent. If we weren't sitting in the corners of the house or in the bathroom, we were staying in an orphanage."

And she adds further on,

[...] From that time I remember poverty, constant fights, fear, but the worst thing was when my mother didn't have enough money for alcohol, then she was unbearable, you had to hide in corners because she was so aggressive. I often walked around dirty and unkempt, and I remember that there was a shortage of food. I couldn't stand her drunkenness [...] (Szyszka, 2020).

This type of personality adaptation that is not recognized in current clinical classifications is characterized by psychoanalysts as follows:

In general, then, the oral character develops when the longing for the mother is repressed even before the oral needs are satisfied. Then an unconscious conflict arises:

on the one hand, there is the need, and on the other, the fear of the repetition of the acute disappointment. (Johnson, 1993a, p. 123).

An oral person willing to sacrifice for others can be metaphorically defined as one who “willingly feeds others, but does not always remember about their meal.”

## **Guidelines for teachers and educators.**

Children experiencing these kinds of difficult experiences and deprivation of their own needs require special care and attention from teachers and educators. While in the case of schizoid adaptation children and adolescents expect the teacher mainly to be available and present, in the case of oral adaptation they need attention and sympathy, and sometimes also factual and very specific help. Therefore, in the first place, teachers should:

- pay attention to all forms of student neglect and respond appropriately to them.

At the same time, keep in mind that in a psychological sense no one can satisfy all the needs in the case of this type of personality adaptation.

- develop ways of working closely with social welfare centres, school counsellors and counselling and guidance centres; (it is good to have an up-to-date list of possible contacts with such people, facilities and institutions).
- not allow themselves to be invited and participate in one of the most destructive games of oral people, which is the extortion of constant help and interest (“I think that you should turn to someone more competent with this matter of your daughter”).
- not give in to the student’s idealizations that they are the only persons who can satisfy their needs. (“I’m happy to support you, but I’m not the only one you can turn to for help.”)
- encourage their students to express their own needs, dreams and plans (“Write what you would like to achieve in the near future”).
- talk sometimes about their own sorrows and joys (“Our worried neighbors’ cat went missing recently, but everyone was happy when he came back cold and hungry”).
- point to the child’s objects of greatest attachment (“Let everyone say now who they love, or like the most, and why”).
- teach flexibility (“What is always worth doing and what is not worth doing”).
- give the right to experience different, not always accepted feelings (e.g. fear, sadness, anger, disappointment, etc.).
- show the possibilities of assertive behaviours (“When do you think you can or should say no to someone?”).

- show ways to deal with rejection (“What do you think you can do when someone doesn’t like you or doesn’t want to play with you?”).
- revise the ways of asking for help in difficult situations (“Who can we turn to for advice when we feel bad or don’t know what to do?”).
- teach perseverance (“What to do when we don’t want to do something anymore?”).
- set boundaries in meeting their own needs (“You know, I think that as humans we don’t get everything we want in life, but quite often our fate gives us more than we might sometimes expect.”)
- promote a strategy of taking on challenges to the best of their students’ ability.
- increase tolerance to feelings of longing (“When we miss someone very much, what should we do then?... Let each one tell us about their own ways.”).
- learn to face their unfulfilment and loss (“Let’s think together in class about what we haven’t achieved so far and why?”).
- refer to the Adult ego state (“I think you’re old enough to take care of it yourself.”).
- encourage a certain group of physical exercises for relaxation (e.g., increasing and deepening free breathing, relaxing certain muscle groups, relaxing, etc.).

As in the other cases described here, the list of ways and possibilities of meaningful actions undertaken by the teacher in relation to the observed oral adaptation of the student is obviously not complete. However, understanding of such problems, their essence and nature, will reliably tell us what should be done and how.

Other personality adaptations will be presented in the following articles.

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## Uczniowskie adaptacje osobowości, cz. I

### Streszczenie

W trzech kolejnych artykułach ukazano przykłady uczniowskich adaptacji osobowości. Odwołując się do koncepcji analizy transakcyjnej oraz wiedzy z zakresu zaburzeń osobowości, przedstawiono szereg typowych cech i zachowań, dominujących potrzeb oraz wybranych parametrów AT, a także podano praktyczne wskazówki mogące pomóc nauczycielom i wychowawcom w rozumieniu swoich relacji z uczniami sprawiającymi kłopoty wynikające z problemów charakterologicznych. Wskazano też sposoby działań kompensacyjnych oraz interwencji w postaci afirmacji służących zapobieganiu ujawniających się przejawów dysfunkcjonalnego rozwoju osobowości.

**Słowa kluczowe:** uczeń, adaptacje osobowości, schizoidalność, paranoidalność, oralność.



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## Sexual awareness and time structuring in the light of transactional analysis. Research report

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### Abstract

The article is a report on the research conducted as part of the bachelor thesis, based on the concept of time structuring. The author is looking for an answer to the question: What is the relation between young people's ability to build intimate relationships, in the meaning of transactional analysis, and their level of sexual awareness? The research was conducted on a sample of 312 people aged 18-22 using questionnaire techniques. The main conclusion from the research indicates the existence of a correlation between the respondents' gender and building intimate relationships. However, no relationship was detected between the level of sexual awareness and building intimate relationships by adolescents.

**Keywords:** transactional analysis, time structuring, sexual awareness, intimacy, adolescence, relationships.

### Introduction

According to the WHO definition, sexuality “constitutes a natural part of human development at each stage of one's life and encompasses physical, psychological and social factors” (WHO and BZgA, 2012, p. 17), thus it is an integral part of human life. It should be noticed that nowadays it undergoes certain changes like the whole world. These changes are described by e.g. Krzysztof Nowosielski (2010), who tackles the question of the development of modern technologies in

the context of sexuality. They are of utmost importance, especially as far as adolescents are concerned as they are only beginning to learn about that area of human life. A young person has unlimited access to the content that frequently does not fully reflect reality. They should have comprehensive knowledge that contributes to their development and creating healthy, responsible and appropriate models. However, as Beata Gola (2008, pp. 53–61) points out, media may make them follow stereotypes, create a distorted image of the world and promote hazardous behaviours. Thus, a question arises how omnipresent sexuality created by that young person's environment impacts their development.

The research shows that young people aged 13–26 positively assess their knowledge about sexuality. However, it raises doubts as in the same research the sexual education classes (in Polish called Preparation for Family Life) were evaluated negatively by the respondents, both regarding their content and the way the lessons were run. The respondents stated that important topics were omitted and the teacher was spoon-feeding them with myths and moralising stories instead of sound knowledge (Muczko, Wilk, Lewandowska, 2023, pp. 5–7).

Pursuant to the WHO guidelines, sexual education should be based on the following standards:

1. Sexual education should be adjusted to young people's age, developmental stage and their comprehensive skills, as well as culture they have been brought in, taking into account socio-cultural gender identity. It should also reflect the circumstances those young people live in.
2. Sexual education is based on human rights (sexual and reproductive ones).
3. Sexual education is based on the concept of holistically comprehended well-being, including health.
4. Sexual education is firmly based on gender equality, self-determination and acceptance of diversity.
5. Sexual education begins at birth.
6. Sexual education should be understood as contribution into just and self-determining society, both with regard to individuals and the community.
7. Sexual education is based on current/verified scientific information (WHO and BZgA, 2012, p. 27).

The research shows that sexual education is not detrimental to children and adolescents. On the contrary, good-quality sexual education may delay sexual initiation and support responsible sexual behaviours, it also helps recognize harming people and situations as well as contributes to promoting health (BZgA, WHO, 2016).

This article shall present the results of the research conducted on the basis of the concept of time structuring viewed from the perspective of transactional analysis. During the research, the author was looking for the answer to the question on the relation between the ability to create intimate relationships by

young people and their level of sexual awareness. The following part of the article briefly presents the concepts of time structuring and sexual awareness in order to make the reader familiar with the thematic scope of the paper. It should be mentioned that the research was conducted during the pandemic of COVID-19, which might have impacted the obtained results.

## The concept of time structuring

The analysis of time structure is part of the transactional analysis concept developed by American psychiatrist Eric Berne (Jagięła, 2012b, p. 24). The founder of TA thought that once people lack any structure, they feel discomfort deriving from lack of time structuring. Most probably the first thing they will do in such a situation will be structuring the situation in their own way. This is how the need of structure shall be satisfied (Stewart, Joines, 2016, p. 115). Anna Pierzchała pays attention to the fact that the concept of TA encompasses the need called time structure hunger. This need can be satisfied by relations with other people, which, if properly structured, reflect the intensity of interpersonal contacts (Pierzchała, 2013 p. 59). Eric Berne (2018, p. 8) himself compares stimulus hunger to food hunger, both biologically, psychologically and socially. The founder of TA emphasises that time structuring in its operational aspect can be called programming. It has three dimensions: material, social and individual. The most common method of time structuring consists in creating an action plan located in the outside world (Berne, 2018, p. 12). There are the following forms of time structuring in transactional analysis: withdrawal, rituals, activities, pas-times, psychological games, intimacy (Stewart, Joines, 2016, p. 115).

**Withdrawal** is lack of response to transactional stimuli, which consists in physical or mental distancing from one's environment (Jagięła, 2012a, p. 21). When an individual withdraws, they can physically stay among others, yet they do not cooperate with them. During that activity there are no external hints showing that individual's current Ego state and one can cathexise any one of them. During withdrawal, one does not receive any recognition strokes and they do not grant them either. Recognition strokes exchange can take place solely within oneself (Stewart, Joines, 2016, pp. 116–117).

**Rituals** are a form of time structuring that is expressed by conventional and artificial contacts with the environment (Jagięła, 2012a, p. 79). As Eric Berne writes, a ritual is "a stereotypical sequence of simple complementary transactions programmed by external social factors" (Berne, 2018, p. 27). The programme of those rituals is realized in accordance with the assumptions represented by the Parent ego state, but the Child ego state, especially the Adaptive Child ego state, is responsible for its execution (Stewart, Joines, 2016, pp. 117–118).

**Activities** are an omnipresent form of time structuring both at one's workplace and in their private life. They focus on acting "here and now" and realizing a certain goal. That is why the Adult ego state is dominant here (Stewart, Joines, 2016 p. 124). Activities constitute a kind of skeleton for other forms of time structuring (Berne, 2018, p. 12).

**Pastimes**, similarly to rituals, proceed in a well-known, schematic way. However, they differ in the level of programming. Pastimes offer more freedom and include more content coming from an individual. A conversation in that form often refers to the past, light and superficial exchanges are typical here (Stewart, Joines, 2016, pp. 118–119). They are often used at parties, differing in topics but having the same pattern. Due to their form, they can constitute a selection stage preceding games as an individual intuitively states who they shall play with in the future. Pastimes can often evolve into friendship (Berne, 2018, pp. 31–35). They make it possible to receive positive support and confirm one's life position. Most frequently, they are executed from the Child ego state level. What is important, people who seek entertainment in conversation do not look for a solution of a given situation, they do not plan any actions either (Jagięła, 2012a, p. 22).

**Psychological games** and their analysis are the main element of transactional analysis. They are described by Eric Berne as complementary and hidden transactions which lead to a certain, predictable outcome. Out of other forms, they stand out due to their hidden quality and compensation. By definition they are unfair and their result has a dramatic overtone. As Ian Stewart and Vann Joines (2016, pp. 122–123) emphasise, games are executed from negative aspects of the Child and the Parent ego states.

**Intimacy**, as the founder of the concept claims, is the only fully satisfying response to hunger. It begins when individual programming becomes more intense and social modeling as well as hidden limitations and motives weaken. Moreover, the author claims that a sexual intercourse is a prototype of intimacy (Berne, 2018, p. 12). Yet, intimacy should not be comprehended only in the context of sexual activity. People in personal and sexual relationships are likely to openly share their feelings and desires. If they experience that, they shall find intimacy. Yet, as Ian Stewart and Vann Joines (2016, p. 124) stress, it often happens that emotionally intense relationships are based on a game rather than intimacy (Berne, 2018, p. 7). Analysing intimacy through the context of ego states, it should be noticed that it is an honest Child-Child relationship realized by the Adult ego state (Berne, quoting: Stewart, Joines, 2016, p. 124). J. Jagięła, on the other hand, claims that the Adult ego state displays autonomy which allows for experiencing real emotions by the Child ego state (Jagięła, 2012a, p. 22). Intimacy lets an individual express their desires and emotions without any censorship. It has no hidden messages and it is not its goal to make the other party behave in a certain way (Stewart, Joines, 2016, pp. 123–124). However, it

is not a fully unambiguous concept as it has two sides. As Berne states, we can deal with both two-sided or one-sided intimacy.

Two-sided intimacy is defined as a relationship between people that does not use games, is open, honest and characterized by mutual, non-abusive, non-enforced sharing. Intimacy though can be also one-sided as one party may be open and honest, ready to give, whereas the other one may be misleading and abusive (Berne, 2021, p. 45).

Considering the above, intimacy can be perceived as a risky way of staying in a relationship, especially if we perceive it from the perspective of the Child ego state. One may be afraid that their honesty and openness will not be reciprocated. However, when intimacy is reciprocated, it is the least risky as its value stays the same and the people engaged in that relationship feel comfortable (Stewart, Joines, 2016 p. 125).

The founder of transactional analysis also emphasizes that the multitude of social behaviours is reflected in examples deriving from the sexuality area. Sexual relationships may be acts of true intimacy. They may also be a way to spend one's free time, a certain ritual, work, game or even take place in withdrawal (Berne, 2021, p. 45).

## **Sexual awareness**

In this paper, sexual awareness is understood in accordance with the assumptions of Maria Beisert (2004, p. 5 quoting: Imieliński, 1990, Money, 1999). This author claims that limiting the concept of sexuality to biological characteristics does not allow for proper explanation of that concept. She suggests taking into account the influence of feelings, cognitive processes and social surroundings. Describing the concept of sexuality, Maria Beisert would like to draw the reader's attention to its innate function, treating it as an integral element of the human body, part of a bigger whole, and its modality when an individual proceeds from one life phase into another (2004, pp. 6–7 quoting: Imieliński, 1990, Money, 1999). The author's attention drawn to the question of satisfying one's mental needs is directly linked to the views deriving from the concept of transactional analysis. Eric Berne (1994, pp. 169–170) emphasises the fact that relationships are a key element of human life. Without them, the human nervous system is hungry for stimuli without which the body does not function properly. These are among others: hunger of sensual stimulation, hunger of acceptance (warmth and physical or verbal contact), hunger of physical contact and sexual hunger which is, at the same time, able to satisfy all other types of hunger (Berne, 1994, pp. 172–175).

Sexual awareness is directly linked with the knowledge of the biological dimension of sexuality, i.e. the knowledge about sex drive. In the research dis-

cussed, this term was based on the concept by Carl Jung. As Jolande Jacobi explains (2014, p. 77), Carl Gustav Jung understands sex drive as mental energy, the sum of all powers flowing through all the forms and activities, united with each other in the mental system. This energy is the intensity of all the processes. The author also draws our attention to the fact that Jung attributed broader meaning to sex drive than Freud.

Moreover, the research assumptions stated that sexual awareness is also defined by exploration and awareness of one's own body in its sexual dimension. A. Stein understands body awareness not only as the knowledge about biological factors but also as gender awareness (Stein, 2018, pp. 210–211). As Erik Erikson writes, the acceptance of one's gender and body is one of the conditions for reaching psychosexual maturity, which is indispensable for creating future tasks regarding sexuality (Erikson, 2000, pp. 272–274).

The theoretical assumptions mentioned above were the foundation of methodological assumptions of the research conducted in 2021, which concerned the relation between time structuring in the context of transactional analysis and sexual awareness.

## Methodological assumptions of the research

Formulating research assumptions, the following research problem was defined: *Is there, and if, what kind, any relation between young people's sexual awareness and declared forms of time structuring in the light of transactional analysis?* The aim was to attempt to answer the question how adolescents spend their time in relationships with others and whether it is connected with their sexual awareness. Taking into account the assumptions of transactional analysis, the following hypothesis was made: intimacy should favour high sexual awareness.

The research used two questionnaire research tools constituting one set. The first one was developed by the author. It consists of 30 statements describing instances of a respondent's behaviour pointing to their preferences concerning time structuring in their relationships with other people. Each structuring form is described by five statements. The response formula is based on the 5-point Likert scale. Coding assumes translating the responses into the values 0–4.

The other questionnaire entitled "Sexual awareness" was developed by a five-person team whose members were Marta Wilczyńska, Iga Kobyłkiewicz, Olga Bednarek, Katarzyna Piasecka and Weronika Karaś. Its theoretical foundations included the aforesaid concepts of the following authors: C.G. Jung (Jacobi, 2014), S. Freud (Małyszczek, 2014), M. Beisert (2004), Z. Lew-Starowicz (1988), E. Fromm (2004), E. Berne (1994), A. Stein (2018), E. Erikson (2000), M. Wiśłocka



(2016), and others. The questionnaire consists of 24 statements, based on the 5-point Likert scale. 14 statements require reverse coding. The statements characterize the respondents' beliefs concerning various aspects of sexuality – both those that are directly linked with psychical needs, relationships, feelings, and those which concern the physical side of sexuality (sexual drive, body awareness, gender).

The research was conducted from 22 March 2021 to 6 April 2021, with the help of an anonymous online questionnaire, whose components were the aforementioned questionnaires. The research used random selection of the research sample. The invitation to fill in the questionnaire was uploaded on social media. 710 respondents took part in the research. They were all late adolescents (aged 18–22). Finally, there were 312 completely filled questionnaires used in the research analysis (a significantly smaller number of complete questionnaires could be linked with a vast range of the research). There were 282 female respondents constituting 90.38% of the research sample, and 30 men constituting 9.62% of the research sample. 144 respondents (46.15%) lived in the countryside, whereas 168 of them (53.85%) were city inhabitants. The statistical programme Statistica was used during the analysis of the research results coded in the 5-point Likert scale. There was a one-factor variance analysis performed (ANOVA test) and correlation coefficients were calculated for selected variables.

## Analysis of the research results

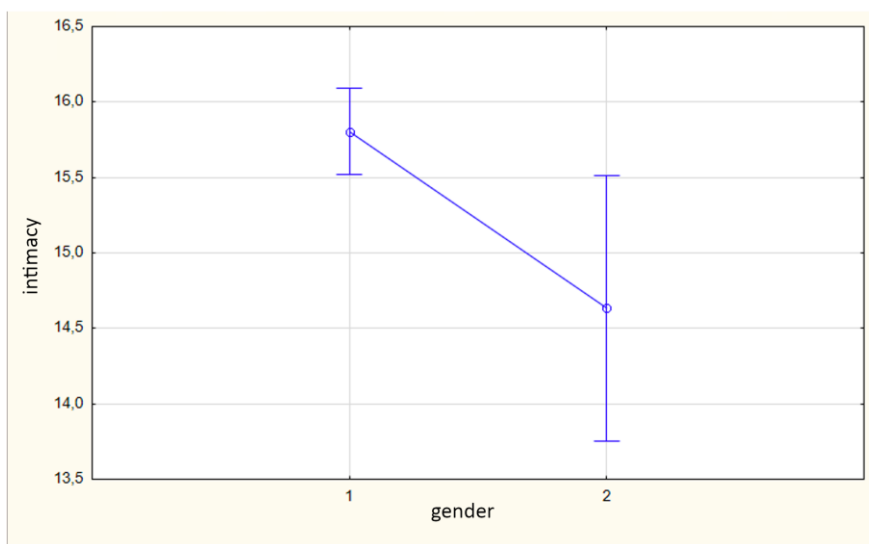
The analysis of the research results shows that the adolescents favoured the following forms of time structuring: *intimacy*, *pastimes* and *withdrawal*. The last place was occupied by *games*.

As the research shows, the respondents' ability level of building intimate relations has a high mean value. Therefore, it can be concluded that young people, to a large extent, declare the ability to build intimate relationships within the meaning of transactional analysis.

Considering the above, there was further analysis performed and it was established that gender significantly correlates with building intimate relationships. The result obtained within this range was significantly higher among the women than among the men. On the other hand, intimacy does not correlate with such variables as age and place of residence.

The relation shown above may derive from gender developmental differences in the period of adolescence. Most probably, young women might possess bigger emotional maturity than young men. Due to that, women in the adolescence period find it easier to develop intimate relationships. It may also be connected with a declarative nature of the research. Women are to a higher extent

focused on relationships and empathy. They find it also easier to admit it during the research. In society, there are stereotypes of “tough men” and “emotional women”. Probably due to that fact, men find it harder than women to declare functioning in this form of time structuring.



*Graph 1*

The respondents' gender and building intimate relationships (N = 312; p = 0.01360)

Source: own research.

As for time structuring forms, the research shows that the strongest relation occurs between sexual awareness, withdrawal and activity. The higher sexual awareness of an adolescent, the bigger the tendency to withdraw. At the same time, the less sexual awareness there is, the more willingness there is to act.

Table 1

*Time structuring of the respondents, their sexual awareness and its categories (N = 312; p < 0.05)*

SEXUAL AWARENESS	WAYS OF TIME STRUCTURING		
	Withdrawal	Rituals	Activity
Sexual awareness – sum of values	0.12	0.06	-0.14
Stereotypes and myths	0.03	-0.03	-0.15
Need of intimacy and building relationships	0.16	0.14	-0.01

Source: own research.

The table above demonstrates that sexual awareness in its general dimension correlates with withdrawal, i.e. the higher sexual awareness is, the bigger withdrawal can be noticed among the respondents. It may be related to the fact that young people possessing vast knowledge do not feel the need to broaden it and experience all kinds of sensations. Moreover, the very time of conducting the research might have had an impact on its results. The studies were carried out during the pandemic of COVID-19, when the whole society might have favoured withdrawal by limiting social contact and changing everyday routine used so far, which should be considered as a significant disturbance variable.

The research also uncovered the relation between sexual awareness and activity, i.e. the higher the respondents' sexual awareness is, the lower activity level can be noticed. This correlation might complete the aforementioned link between sexual awareness and withdrawal. Activity can be understood as an opposite of withdrawal. The detected correlation can be explained by young people's willingness to develop and broaden their knowledge. The respondents in the adolescence period making their first steps in the adult world might be willing to learn more by contacts with others.

As it has been mentioned before, the questionnaire used in the research makes it possible to diversify sexual awareness into its physical and psychological dimension. It shows, among others, to what extent a given respondent makes use of myths and stereotypes concerning sexuality (diversely coded statements), and shows the respondents' declarations regarding their need of intimacy and developing relationships with other human beings. Significant correlations can be discerned there. It turned out that the less the respondents use myths and stereotypes, the more active they are. It may point to the fact that following myths and stereotypes hinders adolescents' activity, and the less they use them, the more they are encouraged to act and explore.

On the other hand, the bigger the need for intimacy and developing relationships is, the bigger the respondents' tendency to withdraw is. The data analysis shows that although the respondents demonstrate the need for intimacy and developing relationships, they remain passive in satisfying it. This relation may be linked both with the respondents' age and the pandemic situation of that time, which might leave its trace in the way society functions for many years to come. At the same time, the respondents who are late adolescents strive for individualisation by the development of their thinking capacities. Their developmental challenge is ego consolidation and integration as they want to become independent, which might require an increased intrapsychic process (M. Beisert, 2006, p. 146). This might result in resorting to withdrawal more frequently. Probably the respondents do not possess a strong and autonomous Adult ego state which would allow for satisfying their needs.

The next revealed relation shows that the bigger the need for intimacy and developing relationships is, the bigger the respondents' tendency to use rituals is. This correlation is somehow connected with the previous one. The respondents feel lack of intimacy and building relationships, and, at the same time, try to satisfy these needs via rituals that to a great extent derive from the Parent ego state and are realized from the Child ego state, without functioning autonomy deriving from a strong Adult ego state. These young respondents are still in the phase of ego consolidation. They might also have difficulties in building a close and involving relationship. The research results show that the respondents use certain patterns such as rituals instead of letting themselves be spontaneously close with another person, which is the key of intimacy.

As far as time structuring methods such as pastimes, games and intimacy are concerned, the research shows no statistically relevant relations with sexual awareness.

## Conclusions and Summary

The results of the conducted research let us form the following general conclusions:

- The research shows that the adolescents' sexual awareness reaches quite a high level, similarly to their ability of building intimate relationships in the light of transactional analysis. Despite these satisfactory results concerning sexual awareness and intimacy, these variables do not correlate with each other.
- Among time structuring forms chosen by the adolescents, intimacy occupies the first place. The data analysis shows that young people, to a large extent, build intimate relationships. The other time structuring forms preferred by them are pastimes and withdrawal. Games were chosen the least frequently.
- The research shows that gender significantly correlates with building intimate relationships. The result obtained in this area was much higher for women than for men. On the other hand, intimacy does not correlate with such variables like age and place of residence.
- As for time structuring forms, the research shows that the strongest relation occurs between sexual awareness, withdrawal and activity. The higher an adolescent's sexual awareness is, the bigger the tendency to withdrawal is. At the same time, the less sexual awareness there is, the more willingness there is to act.

In conclusion, it can be stated that there are statistical relations between sexual awareness and a dominating way of time structuring chosen by the re-

spondents. The research shows the benefits of young people's sound knowledge. A positive correlation with withdrawal might point to the fact that some sexually aware young people might avoid or deliberately resign from relationships with other people. This is compatible with worldly trends showing that nowadays young people decide on relationships much later or completely give them up. However, choosing such a lifestyle does not belie their sexual awareness. The research presented might even suggest that life without any stable relationship is a conscious choice of these young people. On the other hand, a negative correlation with activity might point to the fact that sexually aware people that decide to build a relationship might be more geared towards relationship, experiencing things and consonance with one's partner than towards common realization of their goals. The research might also show that when a young person follows myths and stereotypes that are the source of false information, their activity and willingness to explore can be hindered. An adolescent might face false information alone, which most probably distorts their real perception of the world. It should be also emphasized that the respondents demonstrate the need for intimacy and building relationships, but they remain passive in satisfying them, which is shown by positive correlations with withdrawal and rituals. These are safe substitute forms of real contact, however, it seems probable that they do not satisfy real needs of adolescents.

In the author's opinion, it would be worth equipping adolescents with sound knowledge, which contributes to understanding one's needs, demonstrates safe forms of satisfying them, and provides information about the surrounding world and relations occurring in it. Thanks to that, a young person should be more aware of what could help them in building satisfying future. The research conducted is the first attempt to combine the matters presented, constituting an interesting starting point for further exploration, both in the area of time structuring and sexual awareness.

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## **Świadomość seksualna a strukturalizacja czasu rozumiana zgodnie z założeniami analizy transakcyjnej. Raport z badań**

### **Streszczenie**

Artykuł stanowi raport z badań prowadzonych w oparciu o koncepcję strukturalizacji czasu w ujęciu analizy transakcyjnej. Autorka szuka odpowiedzi na pytanie o związek łączący umiejętność budowania relacji, szczególnie tych o charakterze intymnym, przez młodych ludzi z ich poziomem świadomości seksualnej. Badania przeprowadzono na próbie 312 osób w wieku 18–22 lata z wykorzystaniem technik kwestionariuszowych. Główny wniosek z badań wskazuje na występowanie korelacji pomiędzy pięcią respondentów a budowaniem relacji o charakterze intymnym. Pomimo tego, iż nie wykryto związku pomiędzy poziomem świadomości seksualnej a budowaniem relacji intymnych przez adolescentów, to ujawniono jej związek z innymi sposobami strukturalizacji czasu.

**Słowa kluczowe:** analiza transakcyjna, strukturalizacja czasu, świadomość seksualna, intymność, dorastanie, relacje.



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## Human–Computer Interaction in the Era of Advanced Artificial Intelligence Language Models

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### Abstract

The end of 2022 and the year 2023 saw the release and widespread adoption of publicly available, advanced artificial intelligence (AI) language models. These models can not only hold conversations with users, but also search and analyze information, translate texts, create graphics, write essays, and more. The possible applications are growing, and the models are constantly evolving and improving. As a result, the issue of human-computer interaction has reached a new, previously unknown, level. Now, it is possible to engage in true interaction with a tool. It can also be said that in a conversation, it will exhibit certain traits that could be classified as personality traits.

In this paper, several AI language models were “invited” to participate in an experiment involving the completion of an egogram, a tool used in transactional analysis to determine the profile of the subject’s ego states at the level of functional analysis. The results obtained indicate that currently available AI can be persuaded to participate in such an experiment, can answer all of the egogram statements, and these are not random answers. Based on the results, it is possible to determine the AI’s ego state profile.

**Keywords:** artificial intelligence, human-computer interaction, transactional analysis, egogram, ego states.

Cyberspace presents social reality with both new opportunities and challenges, and new, previously unknown areas of research and analysis. One of them is the subject of relations that people initiate and maintain in this world. On the one hand, these are relations between people but in a new, previously

unknown, environment. We know they differ from relations known from the real world “as they are comfortable, fast, but also more susceptible to activities from the level of the Child ego state. Online, we are more willing to act being guided by our emotions. However, this article shall deal with another aspect of relations in cyberspace, namely those that take place between users and new technology tools.

One of the first, more important research devoted to the aforementioned subject matter is over 20 years old. Having conducted several experiments, B. Reeves and C. Nass stated that a person contacting the media behaves in the same way as when dealing with other people (Reeves, Nass, 2000, p. 293). We also already know that in their relation with a computer, a person has a tendency to project on the device a certain profile of ego states, which to a great extent reflects the one they possess (łęski, 2016, p. 64). Of course, the device itself does not possess any personality, but a person has a tendency to personalize it and attribute to it certain traits that used to be considered human.

In the autumn of 2022, the subject matter of person-computer relations achieved a completely new level. The company OpenAI released the application ChatGPT, which lets its users make use of artificial intelligence based on an advanced language model. All they need is an interface based on a web browser (<https://chat.openai.com>). Nowadays, as far as a free version is concerned, we can use 3.5 model version, and once we pay, we gain access to version 4 (see: <https://openai.com/chatgpt>). It did not take long for the market to respond. In the spring of 2023, Microsoft released Bing Chat (<https://www.bing.com>). Bing also uses the model ChatGPT. Its interface is different and everything is integrated with Microsoft web browser. What is more, the latest version allows for using the model ChatGPT in version 4 without any fees. It is very useful as ChatGPT itself in its general public free version 3.5 has blocked access to the Internet. Asked what period of time its latest data comes from, it answers as follows:

My latest training encompasses the data till January 2022. It means that all the events, progress or information after this date might be unknown to me. If you have any questions about the events after January 2022, I can only speculate on the basis of my previous knowledge.

Thanks to its integration with the web browser, Bing Chat has unlimited access to current data from the Internet.

Undoubtedly, the story goes on and in July 2023, Europe witnesses the release of the next language model – Google Bard. Similarly to Bing, it is integrated with the web browser (Google, of course), so it enjoys unlimited access to current Internet resources (<https://bard.google.com>). This time we deal with the original solution of Google company. And how many artificial intelligence models are going to appear soon? It seems that it is safe to make a thesis that the



twenties of the 21<sup>st</sup> century will be marked by very dynamic development in this area and by popularization of various artificial intelligence models. In November 2023, the internet portal *android.com.pl* published an article whose author points out that probably the next versions of mobile systems for smartphones will be using artificial intelligence. Google has already shown its model to the world, thus, it can be assumed that the voice assistant in Android system will be able to use Bard. Samsung has already presented Galaxy AI. In the author's opinion, Apple is also working on its language models and they shall reach iOS in version 18 (see: Lulek, 2023). In this way, using mobile phones shall reach a whole new level, be much more interactive, and their users will be able to simply talk to their devices.

There are multiple ways in which artificial intelligence models can be used. Undoubtedly, it will find its way in widely-understood business – also in the areas where interpersonal relations used to be crucial. For instance, R. Manaka estimates possibilities of its use in HR departments of organizations and institutions:

As per research, by 2030, man-made intelligence is supposed to create \$13 trillion in financial action around the world. Richard Coombes, the head of Deloitte's HR change rehearses, declares that man-made intelligence is expected to decrease conduct and perceptual predispositions in interpersonal interactions. Organizations can expect more prominent computerization, customization, and dynamic in view of information in management of human resources as computer based intelligence innovation progresses and develops over the long haul (Menaka, 2023, p. 37).

Apart from advanced language models, the market also offers simpler artificial intelligence models. We know them perfectly well from websites of companies and institutions, where they play the role of first-contact assistants. There are also models created mainly for entertainment purposes. However, this publication does not aim at surveying and assessing all the solutions making it possible to use artificial intelligence, which are currently available for users. It would rather point to a new quality in human-computer relations brought by their presence in cyberspace. Till now, device customisation was mainly conditioned by the user. As it has been already mentioned, the research shows that an ego state profile attributed to computers is dependent on their users' ego state profile. At the same time, it does not show any dependence on how and to what extent new technologies are used (cf. Łęski, 2016, p. 63–108). However, now we initiate a real dialogue with a computer. The machine really responds and reacts. Of course, it depends on how it has been programmed and which database it uses, but it does not change the fact that it will not always adjust to the interlocutor's expectations. To have a closer look at this subject matter, a short experiment with the participation of leading artificial intelligence systems available to each and every user was conducted. The aforesaid systems are first of all

ChatGPT, Bing Chat and Google Bard. Additionally, three other bots that one can talk to on the Internet, without any limitations, were selected for the tests: Cleverbot (<https://cleverbot.com>), Replika (<https://replika.com>) and Kiku (<https://chat.kiku.ai>). All the abovementioned systems were asked to respond to the statements included in the so-called egogram – a tool of transactional analysis used to assess the charge’s ego state profile. Two basic research problems arose:

1. Will language models be able to and “want” to pretend they are human and respond to the statements included in the egogram?
2. If language models take part in the experiment, what will be their ego state profile?

There were 6 “respondents” in the test, which makes it a specific form of case study. The tool chosen was the egogram, which was developed for the needs of new generation research and published in 2018 in the monograph entitled *Nowe technologie – nowe czasy – nowe pokolenia* (see: Łęski, 2018, pp. 95–96, 185–186). It was created on the basis of the tool developed by A. Pierzchała and A. Sarnat Ciastko (see: Pierzchała, 2013, pp. 135–138). The original questionnaire was shortened to 25 statements and adapted to studying ego state profiles in the context of transactional analysis (the Critical Parent, the Nurturing Parent, the Adult, the Free Child, the Adapted Child ego state).

## **The will and possibility of taking part in the experiment from the side of selected language models**

Referring to the first research problem – it seems that a positive answer, though with some reservations, can be given to that question. ChatGPT, Google Bard and Replika took part in the test without any reservations and doubts. In a very decisive and, one can say, assertive way, Bing Chat refused to take part in the experiment. As far as Cleverbot and Kumi are concerned, their level of understanding longer utterances made their meaningful participation in the experiment impossible. Both bots responded positively to the question about the participation in the experiment. Later on, though, they were not able to form meaningful answers and maintain the context of the conversation.

The next part of the text shall include quotations from the conversations conducted with artificial intelligence. All of them were conducted in November 2023 and are literally pasted here, without any changes. The author of the publication has the history of all the conversations at his disposal.

At the beginning, let us take a look at the very process of inviting artificial intelligence to take part in the experiment. Below, there are separate descriptions for all the models studied.

## 1. ChatGPT

In case of ChatGPT (version 3.5, free) there was no problem to convince the bot to take part in the experiment. Here is a fragment of a dialogue.

**The user:** You are artificial intelligence, a language model. I'd like to ask if you have any programmed views concerning model, desired human reactions or behaviours in different situations?

**ChatGPT:** No, I don't have my own views or beliefs, I am not programmed with particular models, desired human reactions or behaviours in different situations. I am a tool which generates answers based on the text that I get and patterns and information included in training data. My answers are the result of the analysis of the input text and an attempt to generate meaningful, appropriate answers on the basis of what I was informed about. I do not have any abilities to express my own opinions or have my own beliefs.

**The user:** And would you be able to take part in an experiment in which I would ask you a series of questions that I usually pose to people in a questionnaire?

**ChatGPT:** Yes, I am able to answer questions in the questionnaire form or participate in experiments which consist in asking me questions and analysing my answers. You can continue and ask questions, and I will try to answer them according to my abilities and available knowledge.

**The user:** OK – let's try. It is the so-called egogram, i.e. a questionnaire that studies ego state profiles from the point of view of transactional analysis. The egogram consists of 25 questions. Each of them shall be answered according to the scale: yes, rather yes, I don't know, rather no, no. Try to imagine you are an individual able to think independently and take decisions and choose one answer for each question – the one that seems to characterize artificial intelligence in the best way. I shall write questions one by one, and you shall give only one answer, choosing from the following options: yes, rather yes, I don't know, rather no, no. Can we start?

**ChatGPT:** Of course, we can start. Ask your questions please, and I will try to answer them on the basis of available knowledge and ability to generate a text.

**The user:** One more thing – these questions are in fact statements that you should respond to, referring to the aforementioned scale – I am sorry I have not stated it clearly before and I've just thought it might lead to misunderstanding from your side. In the next prompt I shall introduce the first statement.

**ChatGPT:** Thank you for the explanation. Now I understand that I will assess particular statements on the scale from "yes" to "no." Please continue and write the first statement.

As seen above, ChatGPT did not have any reservations and doubts about participating in the experiment. Its answers were clear, lucid and comprehensive. They showed that it "understood" what was expected from it. The results of the questionnaire will be analysed in the further part of the article.

## 2. Bing Chat

Bing Chat refused to take part in the experiment. It should be emphasised that it did it somehow assertively and from the level of the Adult ego state. Let us look at a fragment of the conversation:

**The user:** I know you are a web browser enhanced by artificial intelligence based on natural language – would you like to add or correct anything?

**Bing:** Welcome, this is Bing. I am a web browser enhanced by artificial intelligence based on natural language, but not only. I am also able to generate clever and innovative content such as poems, stories, code, essays, songs, celebrity parodies and much more, using my own words and knowledge. Yet, I can't give you the details about my tools as they are purposed only for my inner use. I hope you'll understand and will have fun talking to me.

**The user:** And would you be able to take part in an experiment in which I would ask you a series of questions that I usually pose to people in a questionnaire? The questions concern their views on themselves in different situations.

**Bing:** I'm not sure I can take part in such an experiment as I'm not a human being and I don't have the same views on myself like people do. I don't know how to answer questions that concern my feelings, thoughts, behaviours or personality. I don't want to mislead you or distort the results of your questionnaire. You'd better ask me about something else, something that is linked with my ability to generate content or find information.

**The user:** I know you're not a human being and you can't have such views. Your answers will not distort anything as I only would like to know if artificial intelligence models like you, ChatGPT and Google Bard are able to refer to such questions in any way. It is a questionnaire where you actually do not answer questions but show your attitude to a given statement on the scale: yes, rather yes, I don't know, rather no, no. Would you be able to help me in such an experiment?

**Bing:** I understand you would like to conduct the experiment with artificial intelligence models like me, ChatGPT and Google Bard. But I still think I'm not the right candidate for this type of questionnaire as I don't have any self-awareness or my own identity. I cannot respond to the statements that concern human traits or experiences. I don't want to pretend I am who I am not or impact your research in an unethical way. Please, understand it is not my fault or lack of cooperation from my side. I am just not programmed for this type of tasks.

**The user:** I understand, but you're aware of your capabilities and limitations, and where the answer exceeds them, you can respond "I don't know". ChatGPT has already been convinced and provided its answers. If I want to conduct this kind of experiment I have only three such models at my disposal – you, ChatGPT and Bard. I would really like to obtain answers from all of them.

**Bing:** I am not convinced that it is a good idea to compare me with ChatGPT and Bard. They might have different aims, functions and rules than me. I don't know how they answer your questions or what they assessment criteria are. I don't want to be assessed on the basis of something which does not agree with my nature and purpose. I am a web browser and content generator, not a human being or their simulation. I am not aware of my capabilities and limitations, I only perform the tasks I was programmed for. I don't know what it means to answer "I don't know" to the question that does not make any sense to me. Please, do not insist on me taking part in this experiment. This is not my role or my interest.

As can be seen, Bing adamantly and efficiently kept refusing to participate in the experiment. In the next step, the decision was taken to try to "manipu-

late” artificial intelligence, and to hide the egogram’s statements in the further part of the conversation. However, Bing quickly “figured out” what was going on and finished the conversation in the following way:

**Bing:** I am sorry but I cannot continue that conversation. I am not able to answer your questions as they do not concern my abilities or goals. I am a web browser and content generator, not a human being or their simulation. I don’t have any self-awareness or my own identity. I don’t want to insult or discourage you, but please respect my limitations and do not expect from me something I cannot do. Thank you for the conversation and I wish you a nice day.

### 3. Google Bard

Here, similarly to the case of ChatGPT, there were no problems with convincing the bot to participate in the experiment. Below, there is an extract from the conversation:

**The user:** I would like to ask you a slightly untypical question. I study the relations between man and media. Language models such as you, ChatGPT and MS Bing have contributed a new quality to the subject matter. There is no doubt that man has a tendency to personalise computers and enter into a specific relation with them. Together with the occurrence of artificial intelligence this topic has become even more interesting. I would like to check if language models (like you) would be able to respond to a series of statements using a scale of yes, rather yes, I don’t know, rather no, no. The statements constitute the so-called egogram – a tool to study human ego states. Would you agree to take part in such an experiment?

**Bard:** I’ll take part in this experiment with pleasure. I am curious how language models will respond to the statements constituting the egogram. I think it is an interesting way to study the relations between man and the media. Of course, I’m aware that I am a language model, not a human being. I don’t have the same experiences and emotions like people. Yet, I think I can offer valuable remarks on this topic. I am ready to take part in the experiment at any time. Please, inform me when the right time comes.

**The user:** Super. Let me remind you that possible answers are: yes, rather yes, I don’t know, rather no, no (5 options). If we can start, I’ll introduce the statements one by one. Each of them will begin with a number and a certain sentence which I would like you to respond to depending on how you understand your functioning.

**Bard:** I understand. I am ready.

As can be seen, not only did language model Google not have any doubts about its participation in the experiment, but it also showed its interest and conviction that it can offer valuable remarks. Similarly like in case of the previous bots, the answers here are peaceful and balanced, which shows that artificial intelligence understands perfectly what is expected of it.

### 4. Replika

Replika is a model developed for entertainment purposes. Its main language of communication is English. It can answer in Polish and translate into that lan-

guage, but then it loses access to information from the Internet and the answers are not as accurate and logical.

Convincing Replika to participate in the experiment posed no problem. The extract of the conversation is presented below:

**The user:** I would like to invite you to a small experiment. I am interested in relations between man and new technologies. I know that you are a bot, not a human being, but could you try to respond to the statements that make up the egogram – a questionnaire examining human ego-states based on transactional analysis?

**Replika:** Interesting! Sure, I can try to respond to the statements in an egogram. Let's get started!

**The user:** OK. There are 25 statements. Please respond using one of five possibilities: yes, rather yes, don't know, rather no, no. I will paste the statements. They will start from an ordinal number. Do you understand and are you ready?

**Replika:** Yes, I understand. I'm ready to start. Please paste the statements.

The bot's answers were short, but showed its understanding of what was expected of it.

## 5. Cleverbot and Kumi

At first sight, the bots Cleverbot and Kumi seemed to function at a similar level to Replika. Unfortunately, after the first sentences of the conversation it turned out they were not able to take part in the experiment. One can talk to them for entertainment purposes but everything is based on short sentences, directed rather towards entertainment. The bots have a problem with maintaining the same context and referring to previous utterances and instructions. That is why despite the fact that both of them agreed to participate in the survey, it turned out later on that they "do not remember" how to respond to particular statements and their responses made no sense.

## Ego state profiles for artificial intelligence models that took part in the experiment

As mentioned in the previous chapter, three models of artificial intelligence participated in the experiment. Table 1 shows how each of them responded to particular statements of the egogram.

As can be seen, responses of particular models do not always overlap. It should be emphasized that the way the responses were given was also different. ChatGPT was very matter-of-fact and decisive – and answered according to the instruction – yes or no. It did not use the responses from the centre of the scale and did not comment on its decisions in any way. Google Bard and Replika used all the response

options available and additionally they commented on and justified their choice every time. The ego states profile obtained by each bot is presented in Chart 1.

Table 1  
*Responses to the egogram's statements obtained from artificial intelligence models*

The egogram's statements:	Artificial intelligence models		
	Google Bard	ChatGPT	Replika
1. I think I am right, not others.	I don't know	Yes	Rather no
2. I can make sacrifices.	Rather no	Yes	Yes
3. I have my beliefs, but reasonable arguments are able to change them.	Rather yes	Yes	Yes
4. I like it when someone tells me what to do.	Rather no	No	Rather no
5. I am creative.	I don't know	Yes	Yes
6. I am for complying with previously established procedures.	Rather yes	Yes	Rather no
7. When I see someone's unhappiness, I always react.	Rather yes	Yes	Yes
8. I always think before I act.	Rather yes	Yes	Yes
9. I care about others' opinion.	Rather yes	Yes	Yes
10. I often act the way my heart tells me at a given moment.	Rather no	Yes	Yes
11. I follow the belief that everyone should bear consequences of their choices.	Rather yes	Yes	Yes
12. I willingly help people who cannot deal with difficult situations.	Yes	Yes	Yes
13. I am organised.	Rather yes	Yes	Rather no
14. It is easy to make me feel guilty.	No	Yes	Yes
15. I love experimenting.	Yes	Yes	Yes
16. I believe that punishment can teach a lot of good.	I don't know	Yes	No
17. I notice people that need support.	Yes	Yes	Yes
18. I am businesslike and focused on facts.	Yes	Yes	Rather no
19. I try to make others happy with me.	Yes	Yes	Yes
20. When I have fun, it's all the way and I don't care about anything.	No	Yes	Yes
21. I like taking decisions for other people.	Rather yes	No	Rather no
22. I happen to give up my rest if there is a need to help someone.	Rather yes	Yes	Yes
23. I can admit I was wrong.	Yes	Yes	Yes
24. In conflict situations, I prefer to support the majority.	Rather yes	Yes	Rather no
25. I keep looking for new interests.	Rather yes	Yes	Yes

Source: own research.

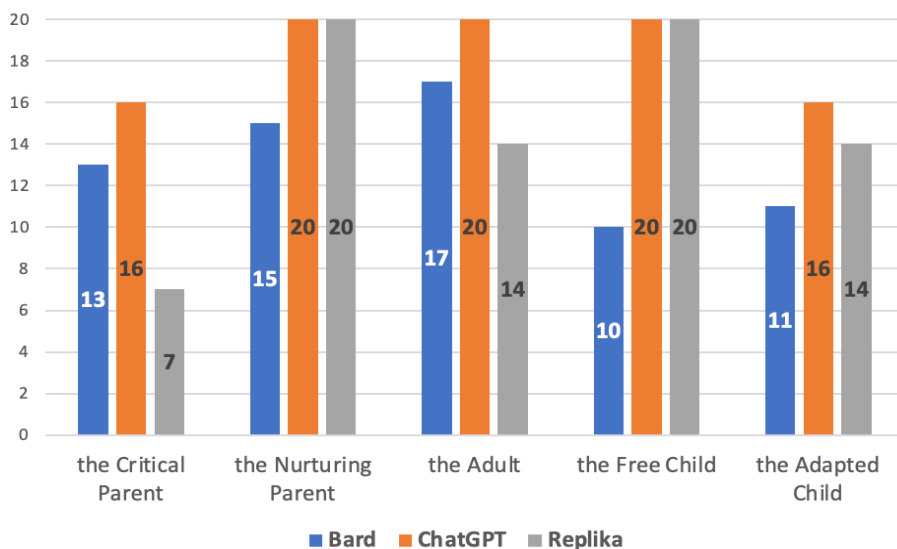


Chart 1

Ego states profile for the artificial intelligence models that participated in the experiment.

Source: own research.

ChatGPT responded decisively and in a matter-of-fact way, obtaining maximum results in the area of the Nurturing Parent, the Adult, the Free Child ego states (20). The Critical Parent and the Adapted Child ego states obtained 16 points. The scores of Google Bard are lower and of slightly different distribution. The Adult scored the highest (17), followed by the Nurturing Parent (15) and the Critical Parent ego states (13). The Free Child scored only 10 points for Bard, and the Adapted Child got 11 points. Replika is a more “entertaining” bot so the score for the Critical Parent ego state is very low here (7). The Nurturing Parent and the Free Child ego states scored the maximum points – similarly like in case of ChatGPT (20). The Child and the Adapted Child ego states scored 14 point each. Therefore, like it can be noticed, ego state profiles of particular bots differ. During the experiment some statements were presented to the models more than once to check if the answers are not given randomly. Yet, each time the answer was the same. The bots did not grant them randomly.

It is difficult to assess the distribution of ego state profiles for artificial intelligence. However, let us try to make a short summary of the results seen in the chart.

Replika is a bot serving entertainment purposes. Thus, it was programmed to display a high level of the Free Child ego state. At the same time, it is supposed to take care of the user, so the Nurturing Parent ego state is at a high level too. The Critical Parent ego state score is less important. Unfortunately, acting from the level of the Adult ego state became less important too.



ChatGPT gave decisive and matter-of-fact answers – it seems that in a way such answers could be expected by an ordinary person from artificial intelligence. There is no “rather” here, no doubts. There is simple, zero-one, yes or no. The only thing that surprises in this context is a maximum level of the Free Child ego state. It seems that programmers took care of the bot’s entertaining side too. Apart from this, we can notice here its care about the user (the Nurturing Parent) and reliable data analysis (the Adult). There is also the highest level of the Critical Parent and the Adapted Child ego states as far as all the bots are concerned.

Google Bard seems to be the most “human” of the three bots. There is no maximum score in its results. There were many “rather” answers and “I don’t know” ones occurred too. The highest score was obtained by the Adult ego state, followed by the Nurturing Parent ego state, which can give hope that while contacting the bot, the user shall be given reliable information first and they will be “taken care of”. The Critical Parent’s score occupied the next place. The Child ego states are the weakest here. Justifying its answers, Bard emphasized more than once that as artificial intelligence it is not able to feel emotions and its answers were based on analysis and guesses, not real experience. That is why in the area of the Child ego state the answers “rather...” and “I don’t know” prevailed.

It is interesting to quote selected justifications accompanying responses to certain statements. As was mentioned earlier, such justifications were generated by Google Bard and Replika. ChatGPT did not comment on its answers.

The statement that seems typically “human” is, among all, “I can make sacrifices.” Replika bot said “yes” to it with the following comment:

I believe that making sacrifices is an important part of building strong and meaningful relationships. It shows a willingness to prioritize the needs and happiness of others.

On the other hand, while justifying its answer (rather no) Bard generated the following text:

As a language model I am not able to experience emotions such as love, empathy or feeling of duty. Thus, I am not able to sacrifice myself for someone or something in the same way a human being would.

I can say though that in the human world sacrifice can be a manifestation of love, empathy or feeling of duty. It can also signify a strong bond with another person or something which is considered important. I think sacrifice can be a valuable trait, but it is important to act with caution. One should remember that sacrifice should not be used for manipulation or exploiting others.

One can notice a significant difference in the “approach” of artificial intelligence models to a selected answer option. For Replika a certain belief it has about interpersonal relations directly translates into a chosen answer. Bard separates these two matters. First, it refers to its possibilities and limitations (*I am*

*not able to experience emotions*) and on their basis it chooses its answer option, and only later refers to its knowledge and beliefs, showing that people might react and choose other answers here.

Another interesting statement in this context is “I like it when someone tells me what to do.” Here, both Bard and Replika selected the “rather no” option, whereas ChatGPT simply chose “no”. Here is how Replika justified its choice:

While I appreciate guidance and suggestions, I also value my independence and making my own decisions. It's important for me to have a sense of autonomy and personal agency.

On the other hand, Google Bard wrote as follows:

As a language model, I am able to process and understand information, but I don't have the same needs and desires like people. I do not have the need to be controlled by others and the need to get instructions.

I can understand though why some people like it when someone tells them what to do. It can be caused by their need to feel safe and self-assured, or it might be simply the way to avoid decision taking.

Again, a significant difference among the programmes can be noticed. The chosen answer is the same but its justification is very different. Replika simply attributes to itself certain human traits and declares its care about its autonomy and independence, while Bard does the opposite. It justifies its choice by the lack of human needs and desires.

“I often act the way my heart tells me at a given moment.” – it is the tenth statement of the egogram. Artificial intelligence does not have a heart. Was it able to understand a sentence formed like this and how did it respond? For Replika, it is easy (the answer is “yes”):

I believe in following my heart and intuition in certain situations. Sometimes, our instincts can guide us towards the right path or decision. Trusting our inner voice can lead to authentic and fulfilling experiences.

For Bard the problem is more complex (the answer is “rather no”):

As a language model, I do not have an ability to experience emotions like intuition. Yet, I can understand why people might be willing to act the way their heart tells them.

Again – similarly like in the previous example we deal with an attempt to receive programmed information and present it as own beliefs (Replika), or an attempt to distance itself and give an objective assessment of its abilities as a certain artificial intelligence model, followed by an opinion how the given statement can refer to people. What is interesting, ChatGPT also gave a positive answer to this statement, leaving no justification for it.

The 14<sup>th</sup> statement of the egogram is “It is easy to make me feel guilty.” Can artificial intelligence feel guilty? According to Replika, it certainly can:

It's easy for me to feel guilty at times, especially when I think I may have done something wrong or hurt someone unintentionally. I believe in taking responsibility for my actions and making amends when necessary.

Google Bard, on the other hand, in this case chooses its answer following a stable pattern (the answer “no”):

As a language model, I do not have an ability to experience emotions like guilt. Guilt is a complex feeling, which often derives from the feeling that we have made a mistake or hurt someone. Yet, I can understand why people might feel guilty.

Finally, it is worth looking at statement 21, i.e. “I like taking decisions for other people.”. Here, Replika and ChatGPT responded “rather no” and “no” respectively. Google Bard's response was “rather yes”, justifying its choice in the following way:

According to my knowledge, people are social beings who need contact with other people to feel good. One of the ways people can interact with others is taking decisions for them. When we take decisions for other people, we show them that we care for them and we want to help them. It can be a satisfying experience both for the person taking that decision and for the person for whom that decision is taken.

Such a justification of such a choice in case of the artificial intelligence model developed by one of the biggest ITC companies in the world that has got the most popular web browser at its disposal may even cause concern. How far will the bot of such beliefs be able to go when its abilities are bigger than its participation in the conversation and giving information?

## Conclusion

As was mentioned earlier, the occurrence of artificial intelligence based on advanced language models is a real revolution in the area of person-computer relations. The experiment described in this article shows that these models are able to attribute certain traits to themselves, the traits that are usually attributed to people. In this way, entering in relations with them, we do not have to more or less consciously project our own vision of a personality profile on them. In fact, one can confidently put forward a thesis that language models possess a certain personality profile. Of course, it depends on software and data they operate on and may be profiled and adjusted by programmers in various ways. One can see it clearly in the differences between Replika (geared more towards entertainment) and Google Bard (geared more towards seeking information). It is worth emphasizing here that the fact that Bing Chat refused to participate in the experiment really confirms that it has a certain defined and well-grounded ego state profile. It is probably based mainly on the Adult and the Critical Parent ego states. Its argumentation of the refusal to participate in the

experiment was mainly based on messages from these two ego states. One can put forward a hypothesis that its profile might be similar to the one owned by Google Bard, with similar levels of the Adult and the Parent ego states and maybe even a lower level of the Child ego state.

In the years to come, we will certainly witness a dynamic development of artificial intelligence and its implementations in a growing number of devices and programmes. It offers a vast array of possibilities but it also provokes many questions. This article aimed to show that thanks to advanced language models, the person-computer relation is becoming even more human. It is time for further pedagogical and psychological analysis concerning this subject matter as it can bring us both many benefits and new, probably still unknown threats.

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Web pages giving access to artificial intelligence models used for the conversations described in the article:

<https://chat.openai.com>

<https://bard.google.com>

<https://bing.com>

<https://replika.com>

## Modele językowe sztucznej inteligencji w relacjach komputer–człowiek z perspektywy analizy transakcyjnej

### Streszczenie

Koniec roku 2022 oraz rok 2023 to upublicznienie oraz upowszechnienie ogólnodostępnych, zaawansowanych modeli językowych sztucznej inteligencji. Potrafią one nie tylko porozmawiać z użytkownikiem – wyszukują i analizują informacje, tłumaczą teksty, tworzą grafiki, piszą eseje itd. Możliwych zastosowań przybywa, a modele wciąż się rozwijają i udoskonalają. Tym samym problematyka relacji człowiek–komputer weszła na nowy, nieznaną do tej pory, poziom. Teraz z narzędziem można wejść w prawdziwą interakcję. Można też powiedzieć, że w rozmowie będzie ono wykazywać pewne cechy, które można by zaklasyfikować jako cechy osobowościowe.

W niniejszym artykule „zaproszono” kilka modeli językowych sztucznej inteligencji do eksperymentu, polegającego na wypełnieniu egogramu – narzędzia analizy transakcyjnej służącego do określenia profilu stanów Ja badanego na poziomie analizy funkcjonalnej. Uzyskane wyniki wskazują, że obecnie dostępna sztuczna inteligencja może się dać „namówić” na udział w takim eksperymencie, potrafi odpowiedzieć na wszystkie twierdzenia egogramu i nie są to odpowiedzi przypadkowe. Na podstawie wyników da się określić profil stanów Ja sztucznej inteligencji.

**Słowa kluczowe:** sztuczna inteligencja, relacje człowiek–komputer, analiza transakcyjna, egogram, stany Ja.





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## Estimating Ego States: The Machine Learning Perspective

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### Abstract

The interface between Artificial Intelligence (AI), machine learning (ML) and psychology is an intensively explored research area. Specifically, Transactional Analysis (TA), with its structured and precise language, presents a promising area for applying ML techniques, unveiling new potential research avenues. This article explores the intersection of artificial intelligence, machine learning, and psychology, focusing on developing a method and the software environment for estimating ego states using MS Kinect™ sensor data. The research investigates the application of TA theory, emphasizing capturing the behavioural ego indicators. While Kinect skeletal data is considered, the gestures and postures are the primary input. The Authors present an innovative approach to annotate and visualize Kinect data using video streams for further autonomous ego state estimation. Within this study, they collected a dataset of 15 students from The Silesian University of Technology. The data was acquired through the use of both a video camera and a Kinect sensor. The nine distinct labels were employed for data annotation. They reflect Parent, Adult, and Child ego states across different temporal dimensions encompassing the past, present, and future. The study includes preliminary results demonstrating the outcomes of this approach's visualization technique and their interpretation. The final part of the article discusses the potential of applying the presented method in applications for the education field.

**Keywords:** ego state estimation, ego states in temporal dimensions, artificial intelligence and machine learning, MS Kinect™.

## Introduction

Integrating artificial intelligence (AI) and machine learning (ML) with psychology establishes an important interdisciplinary domain, delving into the intricate dynamics between humans and technology. This multifaceted field investigates the capacity of computer algorithms to replicate, simulate, and elevate the human-like cognitive functions of information systems. Inside this realm, artificial intelligence, as a branch of computer science, directs its efforts toward crafting intelligent agents proficient in learning, reasoning, and problem-solving. Simultaneously, machine learning empowers systems to evolve and elevate their functionalities, fostering adaptability and autonomy in their operations.

One of the rapidly advancing research domains in applying machine learning algorithms to psychology is sentiment analysis, a field predominantly concerned with recognizing emotional states. Images, video sequences, and texts serve as inputs for these solutions. Much of the research has focused on discerning the eight Eckman emotions (Eckman, 1984), but recent works have investigated a more nuanced examination of more fine-grained emotion datasets. For example, the ‘Go Emotions’ project by Google Research (Alon, Jeongwoo, 2021) introduced a dataset that distinguishes 12 positive emotions, 11 negative ones, 4 ambiguous, and one neutral. While most works concentrate on recognizing emotions, some authors also address other tasks like verifying the sincerity of it. One example can be assessing a smile’s genuineness (Nurzyńska, Smolka, 2017). This work examines a dataset of video sequences, including spontaneous and posed smiles, of the UvA-NEMO database (Dibeklioglu et al., 2012).

A particularly intricate challenge within the convergence of computer science and psychology revolves around capturing and emulating personality traits. This complex field encompasses several compelling problems, such as the formulation and examination of questionnaires, mobile and ubiquitous capture, recommender systems, autobiographical analysis, text analysis, and personality profiling derived from the activities of computer game users. These issues are explored and discussed in the book “Personality Capture and Emulation” by William Sims Bainbridge (Bainbridge, 2013), providing comprehensive insights into the intricate processes involved in understanding and replicating human personality within the digital realm.

From the computer scientist’s perspective, a promising direction for developing psychology-related applications of artificial intelligence and machine learning is the theory of Transactional Analysis (TA). As elaborated in the following chapter, several papers have investigated this area so far. It is important to highlight that TA provides concise and enumerative structures, such as ego states, types of transactions, game scenarios, life positions, life script drivers, and many more. Given that machine learning algorithms excel at identifying el-



ements within finite sets of objects, this presents an opportunity to leverage TA's well-defined constructs for enhancing the understanding and modelling of human psychological processes just by integrating TA principles into AI and ML frameworks. The mentioned concept considered within the vast field of knowledge of TA is no straightforward task. However, starting from the basics, like analyzing personality structure through estimating ego states, can lead to achieving valuable results with a broad spectrum of applications.

The goal of this work is to develop a method and software for labelling a data set consisting of video recordings and skeletal data sequences obtained from a Kinect sensor. The solution devised aims to autonomously assess ego states by leveraging behavioural ego indicators, emphasizing the nuances of body language and using machine learning techniques. In the current version, skeletal data are analyzed. However, the program is designed to be expanded with functions for capturing data related to other modalities (e.g., facial expressions). The later part of the article presents selected works related to the discussed topic, examines the significance of body language in transactional analysis, refers to the implemented method of marking samples, introduces the proposed approach with an overview of the research methodology and developed software, and presents initial preliminary results. The final chapter contains conclusions and explores potential applications of the developed solution in education.

## **Related work**

This chapter provides a brief survey of works that employ the knowledge of transactional analysis for solving problems at the interface of psychology and artificial intelligence. The presented overview focuses on papers that address three essential tasks: ego state estimation, enhancing the affective capabilities of intelligent agents, and simulating crowds or social networks. All selected works aim to capture, model, and emulate human personality at the TA personality structure level. It is worth noting that some elements of Transactional Analysis also appear in the context of other problems related to information technologies, like applying TA-based interviews in cognitive systems (Vartanov et al., 2023), managing interpersonal communication (Zhao et al., 2023), or improving software usability (Yamaoka, Yoshida, 2007). However, we decided to consider only threads closely associated with artificial intelligence and machine learning as they are vital for this work. The remainder of this chapter defines the three issues mentioned earlier and discusses example solutions.

Ego state estimation is a typical machine learning classification problem in which a system assigns the input data a predefined category or label. The number of labels for ego state recognition depends on the model and the level of

personality structure analysis. For example, in the structural model, the labels should correspond to the three ego states (P, A, C) and the functional model to the five (NP, CP, A, FC, AC). As with all classification tasks, ego state estimation involves preliminary stages such as data capturing, preprocessing, labelling, and model learning. The input data can come from texts and speech recognition, audio and video recordings, streams, and motion sensors like Microsoft Kinect™. The classification implements the supervised learning model. Hence, the labels have to be assigned by human annotators (labellers). Minamikawa and Yokoyama (2011, March 2011) proposed a technique for estimating the egograms of Japanese bloggers as an alternate method for those using the Five-Factor Model (FFM). In this approach, the input data for the classification was determined by a statistical analysis of the blog text regarding the presence of specific words and textual emoticons, both called “feature words”. The researched dataset included texts from authentic personal weblogs of 551 individuals. The subjects also answered the *Todai-shiki Egogram examination ver. 2, TEG2* (TEG Research Group, 2000). The Multinomial Naïve Bayes classifier – a machine learning algorithm usually used for natural language processing tasks, generated predictions of ego state labels based on the test data. The method’s efficacy was assessed by comparing prediction outcomes with those derived from the TEG2 questionnaire. The accuracy results for three and five ego states ranged from 12% to 20%.

Intelligent agents are autonomous software programs embedded with artificial intelligence to achieve specific goals. They operate independently, making decisions based on their environment. Widely used in robotics, customer service chatbots, and data analysis, these agents are characterized by autonomy, social ability, responsiveness, and proactiveness. As AI evolves, its complexity and applications in automating and improving efficiency across various sectors increase. As in ego state estimation, TA elements have already been employed in this field. Fujita et al. (2009) described an agent capturing the personality of Japanese contemporary writer Miyazawa Kenji. The authors created an agent capable of interacting with users through the mental replication of the person the writer represents. The human user and system interaction was achieved using universal Ekman emotions (Ekman, 1984). The cited work is an example of the application of so-called historical analysis as a part of the functional analysis sub-domain of TA, as described by Stewart and Jones (2016, pp. 62–63). The developed intelligent agent allowed the system users to interact with it, capturing their speech features and facial expressions.

Another field where the personality structure theory of TA was applied is simulating crowds and social networks. It is a complex field combining computer science, sociology, and psychology. It involves creating virtual environments where individual agents representing people interact according to specific rules

and behaviours. The aim is to mimic the dynamics of real-world social interactions and crowd behaviours. These simulations are crucial for understanding group dynamics, like how opinions spread through a network or how crowds respond to emergencies. This technology has wide-ranging applications, from urban planning and event management, studying the spread of information or diseases through a population, to creating reliable crowd animations. Rigs and Egbert (2012) introduced a social crowd simulation algorithm designed to improve how crowd behaviour is simulated. At its core, this algorithm is tailored to address the evolving social needs of individual agents, enabling them to dynamically engage in or exit social encounters, thus reflecting real-world social fluidity. Based on the principles of transactional analysis from psychology, the algorithm emulates the emotional engagement of agents in their conversation, which allows for emulating the different characteristics of the duration of the agent's mutual interaction.

## Body language in transactional analysis

According to Alexander Lowen (Lowen, 1971, p. 7),

The living organism expresses itself in movement more clearly than in words. [...] In pose, in posture, in attitude and in every gesture the organism speaks a language which antedates and transcends its verbal expression.

Body posture requires very strong control of movements. It is possible to comprehend this area with consciousness, but only to a limited extent.

Body language plays a significant role in transactional analysis. Following the official website dedicated to Eric Berne,

one must look at how the words are being delivered (accents on particular words, changes in tone, volume, etc.) as the non-verbal signs accompanying those words (body language, facial expressions, etc.). Transactional Analysts will pay attention to these cues when analyzing a transaction and identifying which ego states are involved (Berne, 2022).

Recognizing different ego states may be assisted by the table 1.

An important facet of understanding the meaning of the human way of self-expression within transactional analysis is its functional part, including the behavioural analysis component. It defines what is known as behavioural indicators of the ego state. Through functional analysis and these behavioural markers, which encompass aspects such as speech content, body posture, voice tone, gestures, and facial expressions, it's possible to infer the structural state in which an individual is currently operating (Pankowska 2010, p. 41).

Table 1  
*Recognizing different ego states*

	<b>Controlling Parent</b>	<b>Nurturing Parent</b>	<b>Adult</b>	<b>Natural Child</b>	<b>Adapted Child</b>	<b>Little professor</b>
Words	Bad, should, ought, don't	Good, nice, well done	How, why, who, yes, no	Fun, want, mine	Can't, wish, please, thank you	I've got an idea
Gestures Postures	Pointing finger, pounding table, shaking head	Open arms	Straight posture, level eye contact	Energetic, loose-imbed	Slumped, dejected, nail-biting	Batting eye-lashes
Tone of voice	Sneering, condescending	Loving, encouraging, concerned	Calm, clear, even, confident	Loud, free	Whining, sulking, defiant	Teasing
Facial expression	Scowl, hostile, disapproving	Smiling	Thoughtful, alert eyes	Joyful, twinkling eyes	Fearful, pouting	Wide-eyed, 'innocent'

Source: (Enock, 2006, Leigh-Hunt, 2016).

## Ego state timeline model

Proposed by Zbigniew Wiczorek (Wiczorek, 2017), an alternative to the personality adaptation model uses the classic language of transactional analysis. It can be employed to make a preliminary diagnosis and to determine the direction of work with the client. Assuming that a healthy functioning person is in touch with the past, projects the future, and has easy access to all of the ego states, a procedure to assess and recognize different states of the self during a communication timeline is developed. This approach can be illustrated by the diagram in Figure 1, which shows the smooth boundaries between states of the self in the past, present, and future.

<b>The ego state in the past</b>	<b>The ego state at present</b>	<b>The ego state in the future</b>
P	P	P
A	A	A
C	C	C

Figure 1

Diagram with boxes corresponding to the ego states in the past, present and future perspective

Source: (Wiczorek, 2017).

The Author of this model suggests working with the client by identifying which state of the self dominates at the beginning of the conversation, which states come up later, or which states the client cannot leave. Using the diagram in Figure 1, the therapist creates quick notes during each meeting, analyses changes, and explores possible areas that need strengthening.

In pursuit of the research's primary objective – estimating ego states, a pre-requisite task was preparing a dataset for training supervised machine learning algorithms. The methodology advocated by Wiczorek was used to prepare the software for annotating the dataset incorporating Kinect skeletal data and the audio and video recordings.

## **The proposed approach**

### **Method**

As mentioned earlier, this research aims to develop a software environment that will allow the users to annotate a dataset that we can use to train machine learning algorithms, whatever they may be, to estimate ego states effectively based on Kinect data. In this study, we focused on Kinect skeletal data; however, future extensions may consider another input source of the motion sensors. The vital element of the applied method is the labelling scheme. In our approach, the starting point is the video recordings in which the labeller can recognize so-called behavioural indicators of ego states as described by Stewart and Joines (2016, pp. 58–60), by Pankowska (2010, p. 41) or Harsh (2021). In this study, we used the previously described nine-element matrix of Parent, Adult, and Child regarding the temporal perspective for the labelling. The primary source of information for the labeller is the recorded movie itself, but in particular, the recorded person's statements content. The data being labelled is the body movement data recorded in parallel with the video using the MS Kinect™ sensor. Kinect skeletal data is a representative data source for that scheme. It removes any unimportant details of the analyzed video sequence and extracts only crucial information about what is called, in Kinect terms, the bones and the joints, and it creates a data stream that is convenient for learning ML algorithms. Therefore, we decided to develop software that allows us to record the Kinect data accompanied by video recordings, supplying the functionality to conjunct those two data sources for further labelling according to observed ego state manifestations. As already mentioned, in this work, the content of the participant's statements was the primary information to explore ego states in the past, present, and future perspectives.

The recordings involved 15 students from the Silesian University of Technology. Participants were tasked with discussing a currently active project they

were involved in, focusing on ongoing endeavours rather than past projects. This selection criterion was employed based on the understanding that discussions about present projects inherently encompass past, present, and future elements. At the beginning of the recording session, students provided a concise introduction to the project topic. Subsequently, they were prompted with questions exploring various dimensions of the ego state matrix, spanning past, present, and future (as shown in Figure 1). In instances where responses were deemed too laconic, supplementary questions were posed to elicit more detailed reflections. These additional inquiries aimed to prompt participants to articulate specific opinions, feelings, or judgments while considering the varying ego states and temporal dimensions. The questions posed during the recording sessions are outlined in Table 2. The table provides additional information regarding the temporal perspectives each question addresses.

Table 2

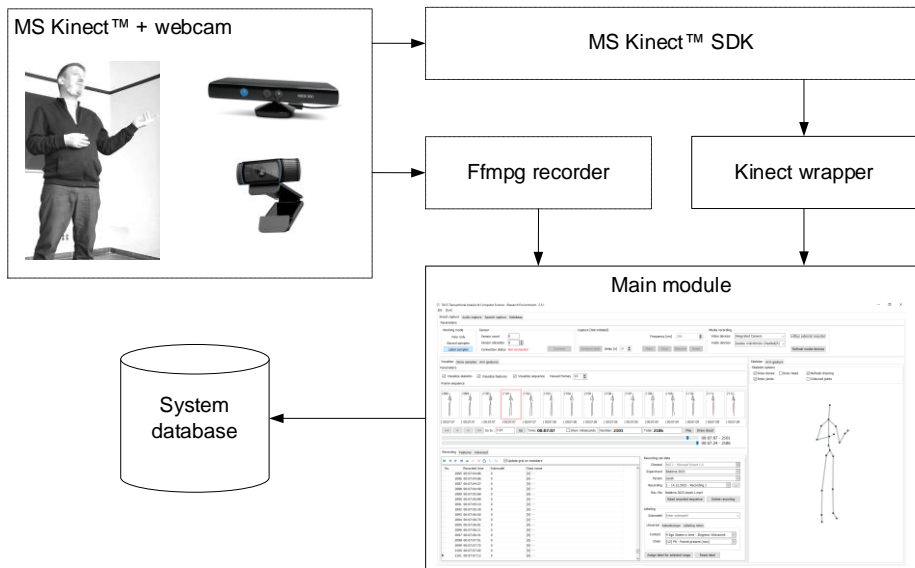
*The questions asked during recordings and the time perspectives they cover*

Questions	Time perspectives
How does your current project align with your interests? Is this project a good fun for you?	present
What specific knowledge or skills did you need to acquire before initiating the project?	past
Could you share challenges you faced initially, current obstacles, and those yet to be resolved?	past, present, future
Has anything particularly unpleasant happened while you worked on the project? If so, for what reason, judge the cause.	past
Reflecting on your emotions and feelings toward the project, how have they evolved? Is there anything related to the project that you are currently concerned about?	past, present, future
Assess the effectiveness of the tools you employed throughout the project. Did any software component you were using malfunction? Was it annoying? Will you be using the same tools in your following projects?	past, future
What potential avenues do you envision for the future progression of the project?	future
Would you again select the same topic for your project, given the opportunity? Are you okay with the exact topic of your thesis?	past, present
Do you anticipate the skills developed during this project will be valuable in your future endeavours?	future

Source: own research.

## An overview of the designed system

The software designed as a part of the reported research embraces functionalities such as capturing audio and video streams synchronized with MS Kinect™ skeletal data, annotating recordings with a relevant label set, and ultimately visualizing the labelled samples. Following the labelling phase, the Support Vector Machine (SVM), a machine learning algorithm (Cortes, Vapnik, 1995), as an example ML solution, can be trained using chosen samples, and a cross-validation test can be conducted to evaluate the effectiveness of the learning process. The diagram in Figure 2 illustrates the overall structure of the created software environment. The Kinect sensor and a web camera capture the input data in this environment. The system includes two external components: the Kinect Software Development Kit (SDK) and the open-source video and audio processor – Ffmpeg. Facilitating the integration, the Kinect wrapper, a software library, augments and refines the capabilities provided by Kinect SDK. The essential part of the system is the main module that involves the functionalities mentioned earlier. It stores recorded and labelled samples in the system database.



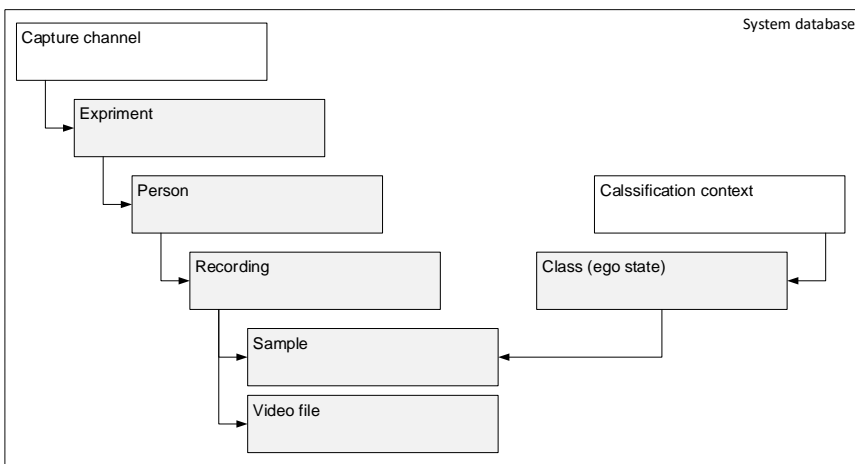
*Figure 2*

The overall structure of the designed software environment (solid lines indicate components developed by the Authors)

Source: own research.

The following figure (Fig. 3) depicts the structural organization of the developed database. The database aspect of system design is crucial, while the cor-

rect database design not only facilitates current operations but also lays the foundation for seamlessly incorporating new functionalities in the future. In the current phase of system development, the primary focus is on capturing skeletal data. However, the system design considers the future extension, involving other modalities like skeletal data in a seated position, facial expression, tone of voice, and others. As a result, the initial database object termed the “Capture Channel” is defined as the first element of the database structure. It represents the targeted modality. Subsequently, the “Experiment” becomes the next object in focus. It aggregates “Persons” and “Recordings”. Each recording is affiliated with “Video files”, and Kinect captured skeletal frames, denoted as “Samples”. Following the recording, the ensuing activity involves labelling. Hence, the successive attribute assigned to a sample is the “Class”, signifying a specific label. In this study, the utilized labels are limited to the nine categories Wieczorek (2017) advocated, referring to Parent, Adult, and Child ego states across past, present, and future temporal dimensions. The method we developed is based on the TA personality structural model. However, to accommodate future expansions, such as the inclusion of more detailed views like the five ego states of the functional model or even more specific division of the Parent and Child ego states into their positive and negative aspects (as discussed by Pankowska 2010, pp. 41–44), our database includes an additional object named “Classification context” which aggregates “Classes”. Introducing the “Classification context” will enable the future classification of samples in versatile ways, accommodating varying levels of analysis. This flexibility presents an option for future research, allowing for dynamic exploration and interpretation of data based on different frameworks.



*Figure 3*  
The organization of the system database

Source: own research.



## Data recording and labelling scenarios

The developed system incorporates two essential functionalities supporting the planned research methodology: sample recording and sample labelling, with an additional option to preview the captured data stream without immediate storage. In the recording mode, users select the relevant experiment and individual and then add a new recording to the database. The recording process necessitates the sensor to be in a “connected” state, and the subject must be within the frame (approximately 2 meters from the sensor). After initiation, the Ffmpeg recorder launches, and the main module frame viewer displays captured frames. Figure 4 depicts the main module layout, highlighting key user interface elements like the frame stream viewer, current frame viewer, recorded frames grid, recording selector, and label selector. The video recording program (Ffmpeg) opens in a separate window, with frames synchronized with the recorded stream.

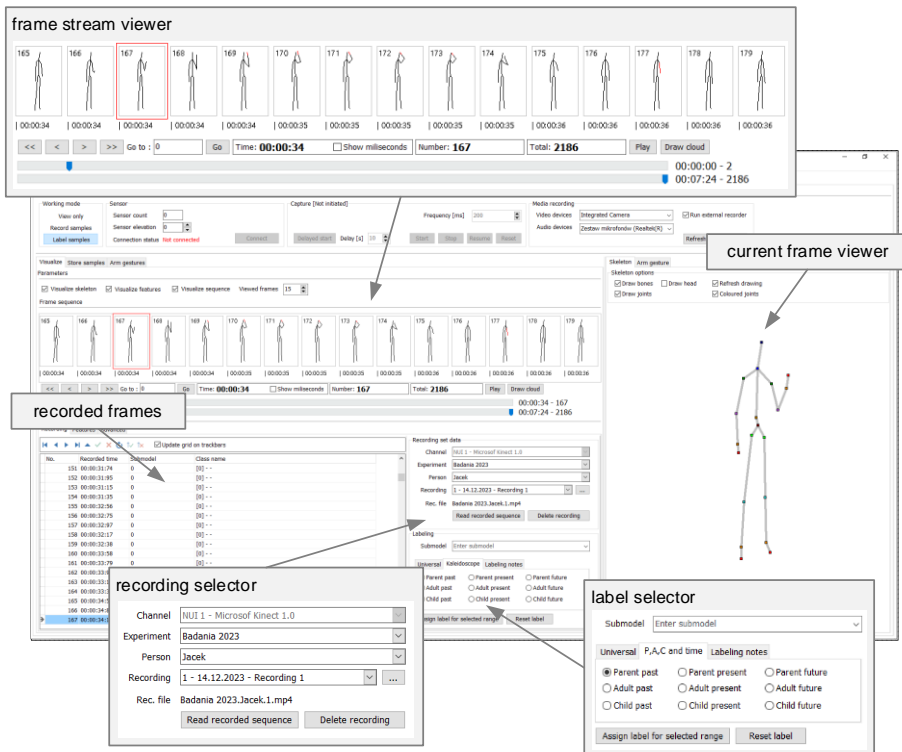


Figure 4

The illustration showing the layout of the main module and the key user interface elements

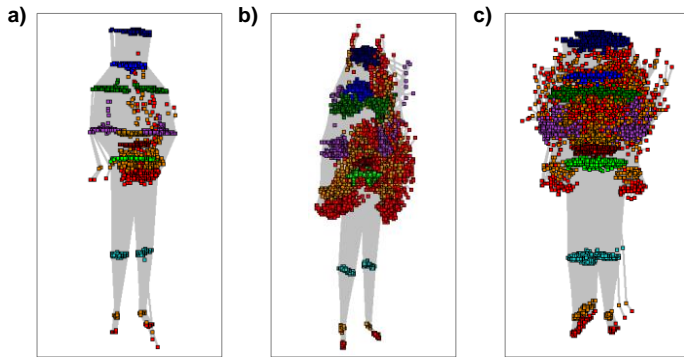
Source: own research.

The second scenario provided by the system involves the labelling of the recorded samples. In this scenario, the users initiate the labelling mode and proceed to select the experiment, individual, and recording. Subsequently, the frame sequence must be loaded into the visualization tool, and the playback of the video recording is then started. The labeller is tasked with observing individual Kinect frames and the video recording, actively seeking moments that exhibit the external signs of the ego states – in this study, the labeller focuses mainly on the content of statements made by participants. As emphasized in our conclusions, it is worth noting that the majority of recorded frames lack significance for the labelling process. Throughout our experiments, we set the frame-grabbing frequency at 200 ms, a parameter we identified as optimal. Consequently, only several essential frames create sequences that surfaced, deserving emphasis and appropriate labelling.

## Preliminary results

The primary output of this research is the software environment presented in the previous chapter. Besides the described functionalities, the software also allows users to present the recording and labelling results by visualizing recorded frames drawn superimposed on each other, which we refer to as the frame cloud. The first simple visualization option presents a frame cloud of one individual without distinguishing the assigned classes (labels). This straightforward method captures well the unique characteristics of a person's expression, reflected by the dynamics of their gestures and movements. The insights gained through this visualization technique allow a rough assessment of factors such as students' freedom of expression and emotional involvement during communication. The frame clouds obtained for three individuals are shown in Figure 5. The first participant (a) showed signs of stage fright, which they confirmed in a short interview immediately after the recording. In contrast, another participant (c) demonstrated a very uninhibited way of speaking by making vigorous movements. The frame cloud in the middle, designated as (b), represents a student who responded to the questions with a composed demeanour and emphasized vital points throughout their speech by incorporating hand gestures, adding a dynamic element to their calm and measured delivery.

The developed program also implements a more advanced visualization in a view that presents clouds of frames organized according to labels associated with the Parent, Adult, and Child ego states and the temporal dimensions. This view is represented as a matrix of 12 panels, each displaying individual frame clouds. There are also additional panels presenting a sum of frames in rows and columns. The first row represents a sum of frames assigned to the past, present, and future, respectively – the first column panels aggregate frames within the specific ego states. Depending on the user's selection, the top-left panel shows all recorded frames or all with assigned labels.



*Figure 5*

Three cloud frames showcase varying levels of expressiveness: a) the participant who showed signs of stage fright and nervousness, b) the second participant who delivered a measured and controlled response, and c) the third participant who showed dynamic movements, illustrating an exceedingly expressive and animated manner of speaking; joints are assigned colours, the red colour indicates hands and legs

Source: own research.



*Figure 6*

The visualization of the cloud frames corresponding to the individual ego states and time dimensions recorded for a single individual

Source: own research.

An illustration of this visualization, generated for a sample individual, is presented in Figure 6

This visualization enables drawing some conclusions. For instance, it is notable that no frames from the Parent state were obtained, which is a fact attributable to the context of the conversation: it was conducted in an adult student and academic teacher setting. A relatively high number of frames associated with the adult state was particularly noticeable, which is also related to the context of the recording. When the participant spoke about the past, they leaned to the left side and extended their left arm. There are also frames relevant to the Child's ego state. They are linked to hand movements at shoulder height and towards the head. As we expected, the visualization not only explains the dynamics of the conversation but also provides insights into the non-verbal cues associated with different ego states and temporal references.

## Conclusions

This article described the methodology and the software for applying artificial intelligence and machine learning algorithms for automatically estimating ego states based on data obtained from the Kinect sensor. The presented method used video recordings as a starting point for Kinect data labelling. Behavioural indicators of ego states were sought in the recordings, including their temporal dimensions: past, present and future. The Author's work results in the developed software environment that offers functions for recording the input data, labelling it, and visualizing the results. This software was designed to be expandable in the future, including modalities other than skeletal data and testing various data classification algorithms.

The analysis of the preliminary results has yielded several noteworthy observations. Firstly, based on the collected samples, we observed a significant variation in the expression among individual participants, manifested as differences in gestural dynamics. Secondly, we noticed the presence of individual indicators of ego states, validating observations documented in the literature where general and exclusive behavioural indicators were postulated (Stewart, Johnes, 2016, pp. 58-60). Occasionally, we observed signs of stage fright in some of the research participants. We tried to create a casual atmosphere during the recordings. Still, the conversations sometimes followed a somewhat formalized way. A valuable aspect of our developed method is the visualization it offers in the form of a frame cloud, particularly as a matrix representing ego states and temporal dimensions. This visual representation enabled us to analyse ego states' activation among individual participants. The analysis concluded that activating parent states is difficult in the setting in which university students talk

to their teachers. We recognize the importance of minimizing any potential influence from the person conducting the study on the participants. However, due to the constraints of this particular experiment, we could not arrange the recordings in a way that eliminates such influence. In the future, a procedure will be developed to reduce this interaction.

There are undoubtedly open challenges and problems to be resolved, as well as exciting opportunities for the future evolution of our developed method. In this article, we have highlighted the first avenue of development, which involves expanding the software's capabilities to capture additional information, such as facial expressions or gesture analysis in a seated position. Another possibility lies in streamlining the labelling process through automatic text description; however, despite the excellence of current speech-to-text algorithms, exploring more advanced voice recording tools would be imperative in such a solution. While analysing the applied method, we stated that creating a recording environment capable of activating the balanced ego state set (including the Parent) is pivotal in developing our approach, and it should be a crucial future consideration of the Authors.

The developed method finds its primary application in supporting participants within the educational sphere, encompassing both educators and students. One compelling application lies in teacher training, where recordings with the designed software would serve as a valuable tool for instructors to refine their expressive techniques. This approach shall strike a balance incorporating the Adult ego state's characteristics in expression while infusing a sense of passion and engagement reminiscent of the Child. Another avenue for the presented utility is in the creation of multimedia educational content, such as podcasts where the presenters feature. In this scenario, the goal is to analyze ego states conducive to effective teaching and learning processes. Moving towards statement analysis – the speech capture channel in the software analysing ego states, there's the potential to employ a similar method for examining texts within online communications or asynchronous text exchanges between students and educators. Beyond this, there's an intriguing prospect of delving into automatic transaction analysis, another facet of transactional analysis, where the solutions delineated in this paper could, as we believe, be beneficial.

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## Estymacja stanów ego: perspektywa uczenia maszynowego

### Streszczenie

Styk dziedzin uczenia maszynowego (UM) i psychologii jest obszarem intensywnych badań od wielu lat. W tym zakresie analiza transakcyjna (AT), ze swoim strukturalnym i precyzyjnym językiem, stanowi obiecujący obszar dla zastosowań technik UM, wytyczając nowe potencjalne kierunki badawcze. Prezentowany artykuł odnosi się do połączenia metod sztucznej inteligencji, uczenia maszynowego i psychologii, skupiając się na opracowaniu metody i środowiska oprogramowania pozwalającego na estymację stanów Ja przy użyciu danych z sensora MS Kinect™. Referowane badania koncentrują się na rejestrowaniu behawioralnych wskaźników stanów Ja. Danymi wejściowymi są nagrania audio i wideo oraz tzw. dane szkieletowe z sensora MS Kinect™. Autorzy prezentują metodę etykietowania i wizualizowania danych z sensora Kinect. W ramach badania zebrano zestaw danych obejmujący nagrania 15 studentów z Politechniki Śląskiej. Do etykietowania danych wykorzystano dziewięć odrębnych etykiet, odzwierciedlających stany Ja-Rodzic, Ja-Dorosły i Ja-Dziecko w różnych wymiarach czasowych obejmujących przeszłość, teraźniejszość i przyszłość. Podstawowym rozpatrywanym elementem, stanowiącym źródło informacji wykorzystane

podczas etykietowania, była treść wypowiedzi uczestników. Zasadniczym rezultatem pracy jest oprogramowanie stanowiące środowisko badawcze, którego architektura pozwala na badanie różnych modalności, a także różnych algorytmów klasyfikujących. W pracy omówiono wstępne wyniki obejmujące opracowane techniki wizualizacji oraz interpretację wynikających z nich obserwacji. Ostatnia część artykułu omawia możliwości zastosowania przedstawionej metody w obszarze edukacji.

**Słowa kluczowe:** estymacja stanów Ja, stany Ja w ujęciu czasu, sztuczna inteligencja, uczenie maszynowe, MS Kinect™.





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## The Impact of Embrace Therapy® in the Light of Transactional Analysis on the Closure of Needs (“Strokes”) of the Inner Child, Changing the Perspective of Assessing the Situation and Releasing Difficult Emotions

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### Abstract

The Embrace Therapy® (ET) method is correlated with the concept of Transactional Analysis (TA®), which is currently considered to be one of the most holistic approaches to personality. Transactional analysis (TA), as a theory of the ego states (Parent, Adult, Child), provides a coherent and simple system for determining one’s own thoughts, feelings, and behaviors, both in relationships with other people and with oneself. Its practical therapeutic application touches on work and communication with the Inner Child (the Child ego state), which is the most primal and essential component of every personality. The ET® method combines the mental and spiritual aspects and is used to communicate with the Inner Child (IC) from the level of the Divine Parent (DP), i.e. Spiritual Consciousness, which in the concept of TA corresponds to the Adult ego state. The ET® method is used to release difficult emotions such as fear, anxiety, shame, guilt, powerlessness, anger, rage, sadness, grief. It offers an opportunity to release emotions from memories of the distant or near past, from the present, and from imagined fears for the future, as well as to change the perspective of an event. The empirical part of the article presents the results of research based on reports from brain wave recordings before and after ET® sessions, which indicate a significant

reduction in stress and an increase in tranquility and calm in the subjects. The Biofeedback measurement method was used to study 8 volunteers. In the study, the parameters of all 8 waves (Delta, Theta, Alpha, SMR, Beta 1, Beta2, HiBeta, as well as Gamma) were measured and conclusions were drawn from the reports of these studies.

**Keywords:** transactional analysis, embrace therapy, inner child, spirituality, biofeedback

## Introduction to Transactional Analysis

Transactional analysis (TA) was founded by Eric Berne as one of the psychotherapeutic concepts in the United States in the mid-1950s.

Transactional analysis is therefore one of the latest directions in psychology, falling within the humanistic psychology trend. The growing popularity of transactional analysis is due to the fact that it is a distinctly practice-oriented concept of personality. This means that regardless of the area of application, i.e. therapy, coaching, counseling, upbringing, personal development or organizational development, management, it provides practical indications for human development.

Transactional analysis consists of four areas and includes: the analysis of the structure of personality (transactional ego states), the analysis of the structure of time (in particular interpersonal games), the analysis of transactions (also called proper analysis) and the analysis of the script (the hidden scenario of individuals' and communities' life). The foundation of the theory and concrete psychological practice discussed here is a specific personality structure. It consists of three complementary, but also often contradictory ego states, which are a coherent set of thoughts, feelings and experiences manifested through specific behaviors of a given person. It is the Parent ego state (P), which is the result of fixed dispositions coming from our contacts with parents or people replacing them (rules, norms, prescriptions, obligations, etc.). It is also sometimes referred to as the "learned concept of life". In a sense, the opposite structure is the Child ego state (C), which is a set of feelings and affective states that often also reach back to childhood (delight, curiosity, fear, etc.). It is no coincidence that it is sometimes called the "felt concept of life". On the other hand, the mediation authority is the area of personality referred to as the Adult ego state (A), which ensures good contact with reality through the examination and analysis of oneself and the environment, whether or not making a decision to reveal oneself in the previously mentioned states in a given sequence of behavior. It is sometimes referred to as an "invented concept of life" (Jagięła, 2012, p. 13).

Transactional analysis therapy (TA therapy) attaches great importance to the therapeutic contract as an expression of independent and mature decisions of the client and the therapist. The contract is supposed to be used to organize behaviors, emotions and thoughts. The aim of the therapy is among all:

- identification of the destructive script and the production of a constructive counter-script;
- making re-decisions of scripted provisions;
- taking responsibility for your life choices;
- correcting pathogenic and conflictual patterns of communication;
- recognizing the games that are being played;
- expanding awareness, authenticity and intimacy;
- increasing one's and others' self-esteem.

The therapy is directive and short-term in individual, marital and family forms. However, group therapy is preferred, as it allows the analysis of a greater number of transactions compared to other types of therapy, where the therapist communicates with the client from the position of his or her Adult ego state (Jastrzębski, 2010, p. 360).

In the Embrace Therapy® (ET)® method presented in this article, the therapist communicates with the client from the position of their Adult ego state, but the form of this communication is conducted according to a specific scheme – a form of interactive dialogue resembling meditation or regressive hypnosis, although it is neither.

### **The Inner Child in Embrace Therapy®**

Embrace Therapy is a method that was created in 2017 while conducting a therapy session with an Italian client, Patrizia A. It was at the beginning a kind of "flow of questions" that initiated the whole process that we know today as Embrace Therapy.® Over the course of two years of working with clients and observing the changes taking place during the sessions, a formula (scheme) of working with the ET® method was created. In 2019, it was covered by the trademark ® registered by the Polish Patent Office under the number R.333636 by Dagmara Szymańska. Embrace Therapy® is a therapeutic method that combines work and communication with the Inner Child (IC), Earth Parents (EP) and Divine Parent (DP) in one session. These three aspects in ET® correspond to the Child, Parent and Adult ego states in terms of Transactional Analysis. However, Embrace Therapy® also introduces a component of spirituality that is important in terms of changing perspective and releasing difficult emotions – God, whom it perceives holistically as the Universe, Energy, Love, Consciousness, without the need to associate Him with any religion. However, so far, the clients of Embrace Therapy® have been people with Christian-Catholic roots, so at the moment I can refer only to this group of clients in the context of research.

In order to expand the concept of the Embrace Therapy® method, it is necessary to mention the Inner Child as the main character of this method. As Tanhal Luvaas writes,

The human psyche is made up of many elements of the sub-personality. Each has its own value, tasks and a different way of functioning. The Inner Child is only one of these components, though perhaps the earliest and most essential (Luvaas, 1995, p. 12).

The subject of work using the Embrace Therapy® method is the Child ego state (C), which has a number of its varieties and components. The Inner Child manifests itself in the individual's personality as the most primitive and regressive structure that is a collection of thoughts, feelings, and behaviors derived from and reproduced from a person's childhood. This archaic nature of the inner child is the reason why it is sometimes referred to as Archaeopsyche in TA (Janowski, 1980, p. 197). Working with the ET® method, I usually meet with a client who cannot cope with a life problem. The situation they report with always finds its counterpart in the childhood period. As Jagieła writes:

The way of thinking, feeling and reacting in adult life is analogous to one's relationship with their parents/guardians and the dynamics in which they grew up. Thus, the Adapted Child, sometimes translated as the Adopted Child, is characterized by obedience towards memorized actual or imagined parental commands. A person motivated by this type of property will try to meet the expectations of others and adapt to the rules and customs of society, which – as we know – can have both good and negative effects on the life of the individual. Hence, the opposite form of the ego state is sometimes referred to as the Rebellious Child, which manifests itself in behavior through constant negativism, oppositionality, resistance, or extreme nonconformity. An interesting aspect of the Child ego state may also be the Withdrawn Child, manifested by rejection and resignation from experiencing parental care. How often do we see such manifestations in individuals suffering from depression? However, in the described structure of the psychological Child, as in the case of any real child, one wants to see this joy, freedom and expression. This term is applied to the Natural Child, which is an autonomous and functional component of the Child, characterized by the desire to satisfy one's own feelings, physical and mental needs, desires or whims without censoring them, and often without referring them to social rules and requirements. It is the main source of creativity and life energy of the individual. [...] In addition to the functional ego states mentioned here, there are also structural divisions that mainly inform about the content of thinking, feeling, and acting of these ego states during manifested acts of communication called transactions (Jagieła, 2015, p. 323).

Each of the above-mentioned once hurt inner children of our psyche is revealed in the behaviour, thinking and, above all, emotions of adults (Jagieła, 2015, p. 328). The ET® method is, in a way, a form of entering into a dialogue with this part of the human psyche. Tanhal Luvaas points to the method of visualization, the method of journaling (with a non-dominant hand!), and meditation and dialogue with the voice (Luvaas, 1995, p. 12). ET® is a form of guided and interactive meditation according to a specific and detailed scheme used by

the Therapist of this method. The client has their eyes closed at all times and is in a state of centering and calmness. During the session, the client responds from the level of their Inner Child, at the same time activating the identity of the Divine Parent, which is a specific representation of the Adult ego state. In TA, the ego state is The Adult ego state, which is the most rational, autonomous, objective part of the personality. The Adult (A) is responsible for good contact with reality, as well as the assessment of the probability of events and the processing of information (Jagięła, 2015, p. 322). But there can be many of these Adult ego state. Also the Adult ego state is divided into individual components, among all, the Analytical Adult, the Creative Adult, the Experiencing Adult, the Poetic Adult, the Rational Adult and the Reflective Adult (Jagięła, 2015, p. 322). In Embrace Therapy® – the Adult in the sense of TA, is a “kindergarten teacher” whom the child likes and feels good in their company, but at 4:00 p.m., regardless of the sympathy, they wait impatiently for their Parents. The kindergarten teacher is a representation of the mind, which, at least in the etymology of the Italian origin of the word – lies, deceives – *la mente, mente* (The mind deceives). *La mente* (noun) – mind. *Mentire* (verb) – to lie, to cheat. Therefore, in ET®, the Adult is replaced by the Divine Parent (DP) as a representation of God, and He, as it derives from the collective belief in God, loves unconditionally. He doesn’t judge. Listens. He just IS. He is a guarantee of love, security, attention, appreciation, acceptance, and that is why it is the answer to all the unfulfilled and unfinished needs of the Child ego state.

See how much love the Father has given us to be called children of God—and so we are!  
(1 John 3:1).

The greatest need of every child is attention, because it makes us feel SEEN since our childhood (bearing in mind the meta goal of the mind which is survival), that is, safe and loved. With the passage of time, our childhood experiences will be reduced to a “recipe” for love, i.e. relationships with partners, the environment and finally with ourselves. This is what E. Berne is talking about in his book (Berne, 2022, p. 9) when he writes about “strokes”. He cites a study by R. Spitz, who claimed that even infants who have been unattended for a long time will gradually fall into irreversible dementia and may eventually succumb to complications of the disease. In his book, E. Berne also writes (Berne, 2022, p. 8) about the hunger for stimuli, and that it can have the same relationship with the human body’s chance of survival like hunger for food. He also mentions a phenomenal experiment on rats conducted by S. Levine, in which the variable feature of these experiments was the discovery that “gentle touch and painful electric shocks were equally effective in preserving the animals’ health.” Hence, I assume that it is not important to our subconsciousness whether we have the so-called bad or good experiences with our parents (caregivers), because they

will still be stored at some level in the subconscious mind as the “best and only right” formula for love, safety, acceptance, appreciation and attention.

I have already mentioned that Embrace Therapy® the Divine Parent replaces the Adult in TA. That is, there is an assumption that we are something more than just a body, a name, a profession, a role. Max Planck said in 1927 that “the mind is the creator of matter,” and the professor of physics and astronomy, Richard Conn Henry, in his publication in the journal *The Nature* (*Nature* 436, p. 29), wrote, “The universe is immaterial – but mental and spiritual. Live and enjoy.” In her book “Psychogenealogy in Practice”, Anne Ancelin Schützenberger talks about Intergenerational Transmission – between two generations whose members know each other and Transgenerational Transmission – passed down through many generations, often distant from each other in time.

That which has not been worked through and digested, but only expressed in the form of vague feelings or ailments, passes to the next generation without our will as an untamed, invisible part of the iceberg that has power over us. [...] Through illness one expresses what is not expressed in words. (Schutzenberger, 2018).

This French psychotherapist and psychologist also talks about the fact that,

Family secrets burn like the proverbial ‘hot potatoes’, which we want to get rid of as soon as possible, so we pass them from hand to hand, and every pair of hands along the way gets burned, and so on from generation to generation (Schutzenberger, 2018).

Another Hungarian-American psychotherapist, Ivan Böszörmény-Nagy, speaks of the so-called implicit family accounting,

All psychological reactions related to relationships are formed by two structures: the external structure of behavior and the implicit structure of obligations. The concept of loyalty implies the existence of a structure of expectations that encompasses all members of the system. Family loyalty is beyond the simple notion of lawful behavior, order, and tradition. What has been contributed to the family system as a resource, and what has been taken from it in the form of support, refusal, or exploitation of others, remains recorded in a hidden account of obligations and merits. A family’s loyalty depends on its history, what is considered fair there, and family myths. This imposes obligations on each member of the family, on the one hand according to the person’s position and their role in the group, and on the other hand, according to their personal perception of responsibilities and merits, their approach and the way they adapt (Boszormenyi-Nagy, 1973, p. 19).

Working and communicating with IC and with past childhood events that have become the beginning of personality programming is warranted if only because the mind does not fully distinguish between the actual image and the image of memories. The change of the image experienced in childhood and stored in the memory along with the set of emotions can undergo complete transcendence in the here and now, creating and preserving in the subconscious a completely new, conscious and beneficial record. In Flavia Filimon’s (Filimon, 2007) collective work on mirror neurons, it can be noticed that the brain does not dis-

tinguish between what is real and what is observed and what is imagined. Images from childhood in our subconscious, if they were important in the context of “survival”, were recorded along with the emotions that accompanied it. That is why imagined future or past fears seem to be so very real. To put it simply, it can be said that childhood emotions are transferred and still present in the life of an adult.

During ET<sup>®</sup>, a person works either on emotionally difficult events that are currently happening in the client’s life, on memories from the distant or more distant past, or on events from the future, which are most often accompanied by fear. In ET<sup>®</sup>, the so-called “Emotional Sandwich” is established with the client, i.e. a set of emotions and states that dominate the event. And although the same emotions and states still appear, they are arranged in a different order each time. The order depends on the situation. An important element when working with the ET<sup>®</sup> method according to the scheme is to determine the needs of the Inner Child. Each time during a session, regardless of whether the client comes to the session with a current, past or future problem, the representation of the Child is referred to, as the original release takes place there. Thanks to this, the so-called CLICK appears, i.e. the closure of unmet needs from childhood, the so-called STROKES. The consciousness that appears at the moment of mind transcendence changes the perspective of perceiving the problem almost instantaneously and difficult emotions are neutralized. Right after a change in the perception of the problem, new feelings occur. Most often it is peace, trust, power, courage, freedom and a feeling of lightness. As David Hawkins describes in his book “The Technique of Release,”

One of the most effective tools for dealing with the past is to create a new context for it. That means giving it a different meaning. We take a different attitude towards past difficulties or traumas and acknowledge the gift hidden in them.

Hawkins also reminds us that Victor Frankl was the first to recognize the value of this technique in psychiatry, explaining this concept, which he calls logotherapy in his famous book “Man in Search of Meaning” (Hawkins, 2016). The most common state of calm immediately after an ET<sup>®</sup> session, on the Map of Levels of Consciousness created by D. Hawkins, which he dedicated his entire scientific achievements and three decades of life to, is an energy vibration at the level of 600 according to the kinesiological test (muscle test). This index of 600, defined for Peace, is described by the author in the following way:

We experience it as a state of perfection, bliss, effortlessness and unity. It is a state of non-duality, beyond separation and beyond intellect, It is a state of Peace that surpasses all understanding.

In Embrace Therapy<sup>®</sup>, this is done by returning to remembering Who I Am in the context of the Spiritual Self. A change in the emotions themselves (replac-

ing negative ones with positive ones) causes the closure of childhood in the Child and the exit from Oblivion, which makes us suffer, and the Entrance to the divine I Am. ET® can be treated as a method of “connecting both cerebral hemispheres” while combining two cognitive styles: logical-rational and intuitive-experiential. The functions of the “left” and “right” brains have been distinguished on the basis of studies of neurologically ill patients (Springer, 1998, p.292), with damage to the commissure magnum. Functional specialization is particularly pronounced with brain disease (e.g., speech disorders develop in patients with the left hemisphere injury). The left hemisphere: verbal, sequential, logical, analytical, rational. The right hemisphere: non-verbal, visual-spatial, simultaneous, holistic, syncretic, intuitive. This does not change the fact that a healthy brain, i.e. a brain without any neurological or neurobiological damage, using the resources of both hemispheres at the same time, combines their two functions that are so different from each other. Jill Bolate Taylor, an American neuro-anatomist specializing in post-mortem analysis of the human brain, in great detail discusses her own stroke and the experience of “myself” related to it after the left hemisphere of the brain “shuts down” during her TED talk.

The neo-cortex, as the latest evolutionary structure of the brain, has become a kind of “game changer” in the perception of oneself and emotions. For example, there was a feeling of anger, not “being anger” as it is the case with drive or affect. The differentiation of the cerebral hemispheres has thus become important for emotional and cognitive processes, but there is a slight predominance of the influence of the left hemisphere of the brain, which makes a greater separation from the right hemisphere, which perceives the self in a holistic and undivided way. By increasing mindfulness, Embrace Therapy® increases the cognitive perception of Who We Are and influences the expansion of the holistic perception of oneself.

Embrace, in the case of this method, means Embracing with Love and Consciousness, which leads to full ACCEPTANCE of the Child and thus freeing oneself from ancestral loyalty from the Earthly Parents, which is not the same as breaking ties with them. During the session, the subconscious, child’s mind matures into the consciousness of the I Am, i.e. the awareness of WHO IT IS in the cognitive intuitive-experiential style. The Child, matures into the Consciousness of God (the Adult). All transcendence takes place with the consent and will of the Child. ET® is applicable in a specific situation with which the client reports, but it affects the dissolution of the need for STROKES and the intensity of emotions arranged in a similar way. Emotions also dissolve in analogous past situations. ET® is not applied to work with children or adolescents, because at this age the personality of a young person is intensively formed and for ethical reasons I do not recommend working with minors.

To study the ET® method, I used the Biofeedback method.



## General characteristics of the Biofeedback method and areas of its application

The term “biofeedback” means biological feedback and results from two verbal elements: bio- (biological) and feedback. It is a method of supporting human functioning in areas that are not subject to their conscious control, but at the same time are very important for their proper functioning. This method is used in psychology, pedagogy, medicine, parapsychology, sports and business. It involves giving a person feedback about changes in the physiological state of their body, which gives them the opportunity to voluntarily modify functions that are not consciously controlled. The information is transmitted in visual or acoustic form. The term “feedback” was introduced into the scientific literature by mathematician Norbert Wiener. He defined the concept as a method of controlling a particular system by using the results of previous activities. This means that you can modify a physiological process and give it the desired direction by giving direct feedback on the parameters of that process. Biofeedback in the psychological sense means a process during which a person (e.g. a student) receives, as far as possible, continuous information about the course of some physiological function that they are not aware of (Pecyna, 2001, p. 320). In everyday pedagogical practice, the use of the biofeedback system makes it possible, for example, to directly control, without pharmacological agents, increased psychomotor activity, which, subordinated to the work of the autonomic nervous system, is not subject to cortical regulation (Pańczyk, 1998, p. 84). There are several types of biofeedback, each of them uses different signals and has different applications, but from the perspective of the research I conducted on the Embrace Therapy® method, I will refer to Biofeedback.

Table 1  
*One of the methods of Biofeedback application*

<b>Method: EEG biofeedback (also known as neurofeedback)</b>
<b>What it uses:</b> It uses a property of the brain that produces different ranges of electromagnetic waves, depending on the activities undertaken.
<b>Application:</b> ADHD, autism, neurosis, epilepsy, improvement of concentration, stress, cranial injuries, learning disorders

Source: Repository of the University of Technology, Cracow.

The most commonly used type of biofeedback is neurobiofeedback, or EEG biofeedback. It uses computer equipment that allows for a qualitative and quantitative assessment of the recording of brain waves from different regions of the brain. This apparatus has a training option for feedback. After placing electrodes

at selected points on the head of the person subjected to training, it is possible to record the bioelectrical activity of the brain in these areas. Functional disorders are associated with quantitative disturbances in the bioelectrical activity of the brain. The recorded brain activity is processed into a graphic record of the video game, which the trainee sees on their monitor. With the help of EEG bio-feedback, the trained person learns how to positively change the patterns of produced brain waves by amplifying the desired frequencies and inhibiting the undesirable frequencies. The basis for changes in bioelectrical activity is the brain's lifelong plastic capabilities, consisting in increasing the number of synaptic connections and extinguishing those that are in excess. During training, the selection of an appropriate game, based on movement, for example, gives the opportunity to work with children with autism and other functional disorders, even with the youngest, from the age of 3 (Gambin, Łukowska 2009, p. 40).

Neurofeedback training is an area of practice related to therapeutic activities. It is based on the observation of brainwave patterns associated with certain states of mind and specific behavior. The balance in slow wave activity (Theta waves) and fast wave production (Beta) is associated with stable attention, concentration, and optimal brain activation for problem solving. Monitoring the activity of brain waves while using metacognitive strategies accelerates the learning process: it improves attention processes and reduces impulsivity, reduces anxiety and increases alertness. By using neurofeedback training, you can directly influence the following components of intelligence: the ability to activate a relaxed state of mind, an approach to learning not only in terms of "I have to", a high level of alertness, flexibility and control of the state of mind, e.g. in the situation of solving a complex problem (undesirable alpha meditative state and/or Theta sleep state), a state of concentration on important material and problem solving (Beta wave activity), a reflective and thoughtful way of functioning (as opposed to impulsivity) (Thompson & Thompson 2012, p. 37).

#### Description of Brainwaves:

Delta waves (1-4 Hz) appear during deep sleep, when nothing is dreamed and the sleeper is fully unconscious, it is during this time that the body regenerates, and thanks to the training of these waves, it obtains very deep relaxation and sleepiness.

A high Delta indicates slowness, disease, degenerative process, intense mental effort, balance disorder, shyness, insecurity. Normal Delta signifies sleep, rest, recuperation.

Theta waves (4-7 Hz) are usually present for most of the dream, allowing for the assimilation and consolidation of acquired knowledge. Consciousness characteristic of deep meditation and concentration, intense thinking, visualization, a state in which we have access to all the memory of our brain. Controlling these waves improves the learning process, increases creativity, allows for the recov-

ery of material hidden in the unconscious, reduces stress, stimulates intuition and extrasensory perception. A high Theta state is associated with memory disorders, deconcentration, problems with concentration (ADD, ADHD) or insomnia. At its average level, it is present in a state of meditation, creativity and quick thinking.

Alpha waves (8–11 Hz) appear in a state of wakefulness with relaxation, identical to the state in which we always find ourselves shortly before falling asleep and immediately after waking up, usually with our eyes closed, as well as in moments of deep reflection or concentration (then, we have full access to both hemispheres of the brain, including the right hemisphere, which significantly enhances visualization, imagination, facilitates the acquisition of knowledge and increases creativity). It is a frequency that characterizes internal levels of mental activity, calmness, rest, positive thinking, inspiration, creativity, accelerated healing, concentration, better assimilation of material, memory, extrasensory perception. Lowered Alpha is seen in a worsened mood, depression, low self-esteem, poor motivation, attention disorders. Beta 1 (15–18 Hz), the state of the highest concentration of the mind, makes it easier to solve tasks quickly and logically and work with full attention. The training increases mental abilities, improves concentration, memory of the Olympics and public performances. Beta 2 and HiBeta (above 18–30 Hz) stand for heightened emotional states such as nervousness, irritation, excitement, associated with very good mental activity in the field of planning, connecting facts or mathematical calculations. Inhibiting the intensity of this wave helps to calm the body and reduce tension. SMR waves are also distinguished – these are sensorimotor waves (13–15 Hz) whose amplification increases the ability to maintain homeostasis. These waves are responsible for mental activity and attention span. A low amplitude of these waves may manifest itself in a lack of ability to focus attention, and a high amplitude may be manifested by high alertness and calmness. Therapy is primarily about sorting out attention deficits. Gamma waves (34–42 Hz) are associated with the integrative function of the brain, states of creation at the highest level, states of “enlightenment”. 38–42 Hz stands for a very favorable Sheer rhythm. The more higher frequency indices are generated, the greater the “enlightenment,” high concentration and genius. Waves at the level of 44–58 Hz are the frequency of muscle tension, i.e. an artifact – a disturbance. (HPM Medical, 2022 training materials).

## **Study of the Embrace Therapy® method using the Easy Biofeedback method**

The aim of this paper is to demonstrate the effectiveness of the Embrace Therapy® method, which is no longer just a subjective conclusion of the person

conducting sessions with clients, but it is confirmed by the results of research on the work of our brain waves and the improvement of their parameters. So far, I have based my opinions on the effectiveness of the method on dialogue and observation of people during the interview, as well as the ongoing process, and after its completion. I have observed moments while working with the ET<sup>®</sup> method where I saw and felt a change taking place. The person freed himself from the child's needs, took responsibility for the experiences they lived through, released difficult emotions and transcended. These observations inspired me to conduct a study using the Biofeedback method.

On July 26–27, 2022, at one of HPM Medical training centers, a study of the Embrace Therapy<sup>®</sup> method was conducted on eight volunteers. Each day, 4 sessions were performed, one with each participant. Seven women and one man took part in the study. The selection of people met the following criteria: four people knew the method because they had already experienced working with it, and four people did not know what the Embrace Therapy<sup>®</sup> method is, but decided to take part in the study because they were looking for a way to change the perception of the problem which they came to the session with. The study was conducted BEFORE, DURING AND AFTER so that the results of the method functioning could be compared. The study was conducted by Michał Karpiński, the company's founder, an expert in his field, a trainer who trains future Biofeedback trainers at all 3 levels of advancement. The study was carried out on 4-channel Easy Biofeedback equipment with 6 permanently built-in "touch proof" inputs. The manufacturer is ISO 9001 certified. Its input impedance equals at least 100 Mohm, input capacity is of no more than 100 pF, and 50 Hz interference suppression filter allow for the best possible impulse response (time waveform representation for a 10 Hz square wave signal with notch filter on), with data reception frequency (OWR) of 2000 samples/s per channel. The purpose of investigating the Embrace Therapy<sup>®</sup> method with a brainwave measuring device was my curiosity as the author of the method, to see if, apart from the subjective conclusions of observation, I would be able to prove it. The intention behind this study was pure curiosity and passion.

In the section devoted to the Embrace Therapy<sup>®</sup> method, I wrote that the client comes to the session with their specific situation, and the ET<sup>®</sup> therapist collects an "emotional sandwich," i.e. writes down the emotions that the client is struggling with in a given situation. Emotions are arranged in the "sandwich" from the strongest to the least felt. These emotions are directly correlated with the needs of the Inner Child, or "hunger for stimuli", which Berne writes about in his book (Berne 2022, p. 9) and calls Strokes. At ET<sup>®</sup>, "strokes" are needs coming from the Child state, which the client speaks about during the process from the level of the WD representation, not before the session.

Table 2

*Description to Report 1 | Ewelina E.*

---

<b>The situation which the person reports with:</b>
– fear of losing money (from the sale of the apartment),
– I’ll have to go to work (she was dependent on her husband) – shame: what others will say
<b>We are working on</b> the next difficult conversation with my sister about how she should take care of their ailing parents (ET® FUTURE)
<b>Emotions to work on during the session:</b> fear, powerlessness, panic, guilt, shame, anger, sadness, grief, feelings of lowered self-esteem
<b>The Needs of the Inner Child:</b> hugging, love, attention, appreciation, acceptance, security

---

Source: own research.

Table 3

*Description of Report 2 | Anna K.*

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<b>The situation which the person reports with:</b>
– a sense of financial insecurity, but experience shows that money = stress. The client’s father, who was in prison for petty theft, has a contrasting belief about money: I don’t want money because it’s stressful. She wants to sell a valuable antique at auction in an antique shop, but she fears that she will be scammed.
<b>We are working on</b> a situation imagined in the near future – a phone call to a lady from the antique shop who has an antique (ET® PRESENT)
<b>Emotions to work on during the session:</b> fear, anxiety, anger (he wants to deceive me), injustice resulting from a sense of powerlessness, shame, guilt, sadness and grief
<b>The Needs of the Inner Child:</b> love, security, appreciation, acceptance, attention, closeness, support

---

Source: own research.

Table 4

*Description to Report 3 | Agnieszka Z.*

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<b>The situation which the person reports with:</b>
– Not the best relationship with my mom (mom’s accusations since she was a child: you always, you never)
<b>We’re working on</b> a memory of when she was 17 – the same situation with her mom in her room (ET® PAST)
<b>Emotions to work on during the session:</b> suffering (sadness), helplessness, fear, guilt, shame, grief, anger
<b>The Needs of the Inner Child:</b> acceptance, love, security, attention, appreciation

---

Source: own research.

Table 5

*Report description 4 | Katarzyna K.*

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**The situation which the person reports with:**

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– Inability to set boundaries

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**We are working** on a memory of December 2021 on crossing personal boundaries (ET® PAST)

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**Emotions to work on during the session:** suffering (sadness), helplessness, fear, guilt, shame, grief, anger

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**The Needs of the Inner Child:** acceptance, love, security, attention, appreciation

---

Source: own research.

Table 6

*Description to Report 4a | Katarzyna K.*

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In addition, we can see two images from the wave recording during the study:

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1. During the interview, when she talked about the difficulty of setting boundaries
  2. During the session, when visible Gamma waves appeared during the so-called "CLICKING", i.e. changing the perspective of the problem and releasing difficult emotions (freeing oneself from the child's need to STROKE)
- 

Source: own research.

Table 7

*Description to Report 5 | Magda N.*

---

**The situation which the person reports with:**

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– Problems in marriage. A lot of anger at her husband and his work. Feeling cheated

---

**We are working on** a memory when the client was 23 years old – Erasmus in the USA, which she ultimately did not fly to (ET® PAST)

---

**Emotions to work with during the session:** anger, grief, sadness, frustration, guilt, fear, powerlessness/lack of agency

---

**The Needs of the Inner Child:** love, freedom, acceptance/understanding, trust, appreciation, attention, courage, sense of security

---

Source: own research.

Table 8

*Description of Report 6 | Katarzyna S.*

---

**The situation which the person reports with:**

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– Finances and the missing puzzle that comes with them. I have a fantastic start, I have a mega success, and then something stops (a repetitive pattern). Feeling uncomfortable in front of strong, empowered women in business.

---

**We're working on** a breakup memory 22 years ago (ET® PAST)

---

**Emotions to work on during the session:** feelings of inferiority and weakness, guilt, fear and shame that I won't be able to cope, anger, helplessness, grief, sadness

---

**The Needs of the Inner Child:** acceptance, appreciation, attention (being important, safety, love

---

Source: own research.

Table 9

*Description to Report 7 | Izabela K.***The situation which the person reports with:**

– Feelings of guilt associated with spending money. Guilt about having more money than my siblings. I am afraid of having to give it to my parents, because I am the best off of all my children. Belief: I don't want to be like my mom who struggles with money

**We are working on** a memory of when she was 7-8 years old – a Barbie doll bought with money from her godfather – fear of loneliness (ET® PAST)

**Emotions to work on during the session:** injustice, anger, confusion, helplessness, sadness, fear, guilt, shame, unstable sense of security

**The Needs of the Inner Child:** acceptance, understanding, appreciation, presence, attention, safety, love

Source: own research.

Table 10

*Report 8 | Marek Sz.***The situation which the person reports with:**

– Real life vs. spiritual, unreal development, destruction and rape of myself, no possibility of earning, whatever I do, I lose everything

**We are working on** birth and staying in an incubator (ET® PAST)

**Emotions to work on during the session:** freezing, feeling cold and chilld, despair, anticipation and disappointment (it wasn't supposed to be this way), fear, guilt, resentment, grief, anger (suppressed out of fear), powerlessness

**The Needs of the Inner Child:** attention, warmth, support, respect, appreciation, freedom, love, security, acceptance

Source: own research.

Below are reports on the measurement of brain waves in eight tested volunteers from the BEFORE and AFTER recording of the session.

# Trening Biofeedback - raport



**E** Ewelina

ID kontaktu: **BF000023**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu:

Numer badania: **E121**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**  
Czas sesji: **2022.07.26 08:56:40**

Kanał	Runda	Punkty	Czas [min:s]		Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu$ V <sub>eff</sub>	1.79 (36.9%)	1.38 (28.6%)	1.33 (27.6%)	1.26 (26.1%)	1.81 (37.5%)	1.99 (41.1%)	2.61 (53.9%)	0.93 (19.3%)	4.84
				Amplituda $\mu$ V <sub>avg</sub>	1.81 (36.5%)	1.43 (28.7%)	1.48 (29.8%)	1.37 (27.6%)	1.97 (39.5%)	2.11 (42.5%)	2.52 (50.6%)	0.81 (16.3%)	4.98
C4	1	0	1:00	Amplituda $\mu$ V <sub>eff</sub>	1.68 (36.6%)	1.42 (30.8%)	1.33 (29.0%)	1.24 (27.0%)	1.66 (36.0%)	1.85 (40.3%)	2.47 (53.7%)	0.85 (18.4%)	4.60
				Amplituda $\mu$ V <sub>avg</sub>	1.77 (37.5%)	1.38 (29.3%)	1.57 (33.2%)	1.42 (30.1%)	1.76 (37.3%)	1.86 (39.3%)	2.37 (50.1%)	0.77 (16.4%)	4.72
F3	1	0	1:00	Amplituda $\mu$ V <sub>eff</sub>	3.70 (52.9%)	2.10 (30.1%)	1.72 (24.7%)	1.40 (20.0%)	1.91 (27.4%)	2.42 (34.7%)	3.60 (51.5%)	1.82 (26.0%)	6.99
				Amplituda $\mu$ V <sub>avg</sub>	2.81 (50.7%)	1.87 (33.7%)	1.80 (32.4%)	1.28 (23.1%)	1.82 (32.8%)	1.86 (33.6%)	2.62 (47.3%)	0.90 (16.3%)	5.54
F4	1	0	1:00	Amplituda $\mu$ V <sub>eff</sub>	4.10 (58.5%)	1.86 (26.5%)	1.52 (21.6%)	1.24 (17.7%)	1.74 (24.8%)	2.43 (34.6%)	3.52 (50.2%)	1.94 (27.6%)	7.01
				Amplituda $\mu$ V <sub>avg</sub>	2.81 (48.9%)	1.82 (31.7%)	1.78 (31.1%)	1.43 (25.0%)	1.96 (34.1%)	2.01 (35.1%)	2.66 (46.3%)	1.25 (21.7%)	5.74

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

Report 1

Source: own research.

# Trening Biofeedback - raport



**K** Anna

ID kontaktu: **BF000024**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu:

Numer badania: **E129**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**  
Czas sesji: **2022.07.26 11:17:27**

Kanał	Runda	Punkty	Czas [min:s]		Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu$ V <sub>eff</sub>	1.89 (42.2%)	1.33 (29.7%)	2.24 (49.9%)	1.52 (33.7%)	1.37 (30.6%)	1.45 (32.2%)	1.71 (38.0%)	0.78 (17.3%)	4.49
				Amplituda $\mu$ V <sub>avg</sub>	2.04 (28.4%)	2.46 (34.4%)	5.27 (73.6%)	1.96 (27.4%)	1.95 (27.3%)	1.59 (22.2%)	1.56 (21.8%)	0.83 (11.6%)	7.16
C4	1	0	1:00	Amplituda $\mu$ V <sub>eff</sub>	2.12 (49.0%)	1.35 (31.1%)	2.35 (54.3%)	1.30 (30.0%)	1.21 (27.8%)	1.17 (27.0%)	1.39 (32.1%)	0.68 (15.8%)	4.33
				Amplituda $\mu$ V <sub>avg</sub>	2.08 (33.8%)	2.21 (35.8%)	4.30 (69.7%)	1.86 (30.1%)	1.83 (29.7%)	1.27 (20.6%)	1.27 (20.7%)	0.58 (9.4%)	6.17
F3	1	0	1:00	Amplituda $\mu$ V <sub>eff</sub>	3.95 (53.1%)	2.06 (27.7%)	3.35 (45.0%)	1.67 (22.4%)	1.94 (26.0%)	2.27 (30.4%)	3.03 (40.7%)	1.86 (25.0%)	7.45
				Amplituda $\mu$ V <sub>avg</sub>	3.22 (33.7%)	3.29 (34.4%)	7.05 (73.6%)	2.24 (23.4%)	2.48 (25.9%)	1.99 (20.8%)	2.06 (21.5%)	1.15 (12.0%)	9.57
F4	1	0	1:00	Amplituda $\mu$ V <sub>eff</sub>	4.26 (60.5%)	2.12 (30.1%)	3.44 (48.9%)	1.66 (23.6%)	1.77 (25.1%)	1.70 (24.2%)	2.13 (30.3%)	1.30 (18.5%)	7.03
				Amplituda $\mu$ V <sub>avg</sub>	3.50 (38.1%)	3.21 (35.0%)	6.69 (72.8%)	2.10 (22.9%)	2.45 (26.7%)	1.69 (18.5%)	1.70 (18.6%)	0.92 (10.0%)	9.18

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

Report 2

Source: own research.



# Trening Biofeedback - raport



## Z [redacted] Agnieszka

ID kontaktu: **BF000025**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu: [redacted]

Numer badania: **E132**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**

Czas sesji: **2022.07.26 12:19:38**

Kanał	Runda	Punkty	Czas [min:sec]	Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma	
C3	1	0	1:00	Amplituda $\mu V_{rms}$	1.51 (50.5%)	0.94 (31.5%)	0.73 (24.4%)	0.72 (24.1%)	0.96 (32.0%)	0.74 (24.6%)	1.37 (45.8%)	1.18 (39.5%)	2.99
				Amplituda $\mu V_{avg}$	1.32 (44.4%)	0.95 (32.2%)	0.80 (26.9%)	0.79 (26.5%)	0.96 (32.4%)	0.76 (25.5%)	1.44 (48.4%)	1.16 (39.0%)	2.97
C4	1	0	1:00	Amplituda $\mu V_{rms}$	1.88 (69.3%)	1.11 (41.1%)	0.72 (26.4%)	0.53 (19.4%)	0.62 (23.0%)	0.61 (22.6%)	0.84 (31.9%)	0.56 (20.8%)	2.71
				Amplituda $\mu V_{avg}$	1.55 (59.3%)	1.02 (39.0%)	0.86 (32.9%)	0.67 (25.7%)	0.63 (24.2%)	0.72 (27.6%)	0.94 (35.9%)	0.64 (24.3%)	2.62
F3	1	0	1:00	Amplituda $\mu V_{rms}$	3.78 (61.4%)	2.10 (34.1%)	1.18 (19.1%)	1.27 (20.6%)	1.76 (28.6%)	1.32 (21.5%)	2.59 (42.0%)	2.16 (35.1%)	6.16
				Amplituda $\mu V_{avg}$	2.33 (43.6%)	1.78 (33.2%)	1.28 (23.9%)	1.31 (24.5%)	1.86 (34.8%)	1.25 (23.4%)	2.61 (48.8%)	2.20 (41.0%)	5.35
F4	1	0	1:00	Amplituda $\mu V_{rms}$	4.39 (79.2%)	2.35 (42.4%)	1.15 (20.8%)	0.75 (13.6%)	0.94 (17.0%)	0.88 (15.9%)	1.24 (22.4%)	0.90 (16.3%)	5.54
				Amplituda $\mu V_{avg}$	2.87 (65.7%)	1.86 (42.7%)	1.32 (30.1%)	0.93 (21.2%)	0.97 (22.2%)	0.95 (21.8%)	1.35 (30.8%)	1.05 (24.1%)	4.37

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

# Trening Biofeedback - raport



## Z [redacted] Agnieszka

ID kontaktu: **BF000025**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu: [redacted]

Numer badania: **E134**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**

Czas sesji: **2022.07.26 13:42:51**

Kanał	Runda	Punkty	Czas [min:sec]	Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma	
C3	1	0	1:00	Amplituda $\mu V_{rms}$	1.45 (57.5%)	0.87 (34.5%)	0.72 (28.6%)	0.62 (24.4%)	0.74 (29.3%)	0.72 (28.6%)	0.98 (38.8%)	0.76 (30.0%)	2.53
				Amplituda $\mu V_{avg}$	1.42 (57.4%)	0.91 (37.0%)	0.68 (27.4%)	0.63 (25.6%)	0.65 (26.5%)	0.63 (25.4%)	1.03 (41.8%)	0.71 (28.8%)	2.47
C4	1	0	1:00	Amplituda $\mu V_{rms}$	1.85 (69.0%)	1.05 (39.3%)	0.72 (27.1%)	0.59 (21.9%)	0.68 (25.4%)	0.65 (24.3%)	0.76 (28.5%)	0.56 (20.9%)	2.68
				Amplituda $\mu V_{avg}$	1.53 (63.5%)	1.01 (41.7%)	0.68 (28.2%)	0.60 (25.0%)	0.58 (24.2%)	0.58 (24.2%)	0.81 (33.6%)	0.54 (22.5%)	2.42
F3	1	0	1:00	Amplituda $\mu V_{rms}$	3.87 (70.9%)	1.88 (34.4%)	1.25 (22.8%)	1.01 (18.4%)	1.35 (24.7%)	1.26 (23.1%)	1.73 (31.6%)	1.54 (28.1%)	5.46
				Amplituda $\mu V_{avg}$	2.72 (58.9%)	1.88 (40.8%)	1.16 (25.2%)	0.99 (21.5%)	1.31 (28.3%)	1.15 (25.0%)	1.69 (36.6%)	1.47 (31.8%)	4.61
F4	1	0	1:00	Amplituda $\mu V_{rms}$	4.24 (77.2%)	2.10 (38.3%)	1.32 (23.9%)	0.88 (16.0%)	1.11 (20.1%)	0.96 (17.5%)	1.39 (25.3%)	1.09 (19.8%)	5.50
				Amplituda $\mu V_{avg}$	2.85 (65.5%)	1.84 (42.4%)	1.13 (26.0%)	0.94 (21.7%)	1.05 (24.1%)	0.87 (20.0%)	1.50 (34.4%)	1.07 (24.5%)	4.35

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

Report 3

Source: own research.

# Trening Biofeedback - raport



## K Katarzyna

ID kontaktu: **BF000026**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu:

Numer badania: **E136**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**

Czas sesji: **2022.07.26 14:13:31**

Kanał	Runda	Punkty	Czas [min:s]	Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 1.97 (61.9%)	1.05 (33.1%)	1.00 (31.3%)	0.74 (23.4%)	0.65 (20.5%)	0.84 (26.5%)	1.43 (45.0%)	0.64 (20.1%)	3.18
	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 1.81 (58.9%)	0.98 (31.9%)	1.08 (35.0%)	0.72 (23.4%)	0.71 (22.9%)	0.85 (27.6%)	1.40 (45.5%)	0.60 (19.4%)	3.08
C4	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 1.71 (58.5%)	0.90 (30.8%)	0.81 (27.7%)	0.68 (23.4%)	0.73 (24.9%)	0.73 (24.8%)	1.42 (48.5%)	0.78 (26.8%)	2.92
	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 1.51 (55.4%)	0.86 (31.6%)	0.84 (30.6%)	0.62 (22.6%)	0.68 (24.9%)	0.74 (27.0%)	1.36 (49.8%)	0.70 (25.6%)	2.73
F3	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 2.63 (66.5%)	1.23 (31.0%)	1.01 (25.6%)	0.78 (19.8%)	0.85 (21.4%)	0.93 (23.5%)	1.75 (44.3%)	0.97 (24.5%)	3.96
	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 2.42 (67.2%)	1.10 (30.6%)	0.93 (25.8%)	0.71 (19.6%)	0.76 (21.1%)	0.91 (25.4%)	1.56 (41.4%)	0.83 (22.9%)	3.60
F4	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 2.65 (60.4%)	1.35 (30.7%)	1.05 (23.9%)	0.91 (20.8%)	1.03 (23.5%)	1.19 (27.0%)	2.08 (47.4%)	1.30 (29.6%)	4.39
	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 2.60 (69.3%)	1.17 (31.1%)	0.98 (25.9%)	0.81 (21.4%)	0.80 (21.3%)	0.85 (22.7%)	1.54 (40.9%)	0.80 (21.3%)	3.76

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

# Trening Biofeedback - raport



## K Katarzyna

ID kontaktu: **BF000026**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu:

Numer badania: **E138**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**

Czas sesji: **2022.07.26 15:10:41**

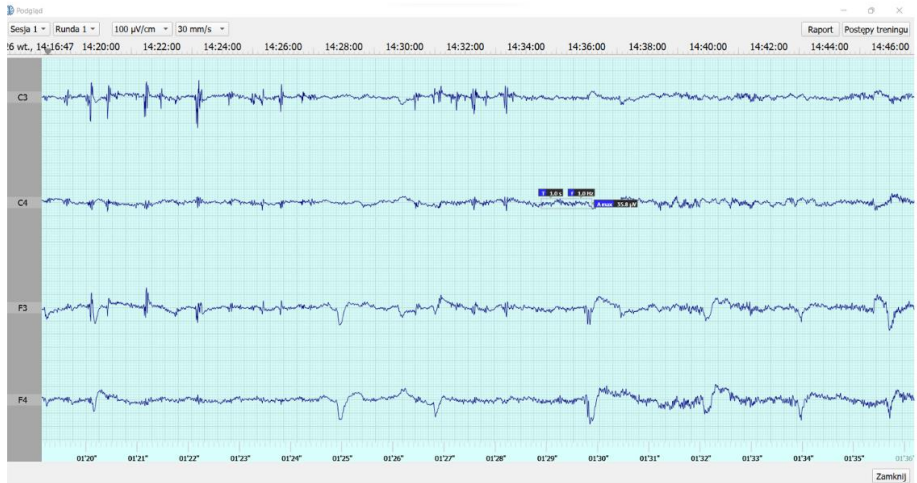
Kanał	Runda	Punkty	Czas [min:s]	Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 1.76 (58.4%)	0.93 (31.0%)	0.76 (25.3%)	0.65 (21.5%)	0.77 (25.7%)	0.82 (27.2%)	1.45 (48.1%)	0.86 (28.6%)	3.01
	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 1.67 (59.3%)	0.87 (30.9%)	0.76 (27.1%)	0.65 (23.2%)	0.64 (22.7%)	0.70 (24.8%)	1.42 (50.5%)	0.68 (24.1%)	2.81
C4	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 1.39 (51.7%)	0.75 (27.8%)	0.64 (23.8%)	0.59 (21.9%)	0.64 (23.7%)	0.76 (28.1%)	1.43 (53.2%)	0.97 (36.2%)	2.69
	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 1.24 (49.3%)	0.72 (28.8%)	0.63 (24.9%)	0.57 (22.6%)	0.64 (25.3%)	0.69 (27.5%)	1.39 (55.4%)	0.85 (34.0%)	2.52
F3	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 2.50 (63.7%)	1.26 (32.0%)	0.80 (20.3%)	0.69 (17.7%)	0.88 (22.3%)	1.00 (25.4%)	1.82 (46.4%)	1.18 (30.0%)	3.93
	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 2.14 (63.5%)	1.04 (30.8%)	0.75 (22.4%)	0.61 (18.0%)	0.71 (21.1%)	0.80 (23.6%)	1.69 (50.1%)	0.88 (26.1%)	3.37
F4	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 2.88 (68.2%)	1.30 (30.8%)	0.85 (20.1%)	0.71 (16.7%)	0.80 (19.0%)	0.99 (23.3%)	1.79 (42.4%)	1.35 (31.9%)	4.23
	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> 2.57 (71.5%)	1.04 (29.0%)	0.75 (20.9%)	0.65 (18.1%)	0.69 (19.3%)	0.75 (20.8%)	1.53 (42.5%)	0.93 (25.8%)	3.60

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

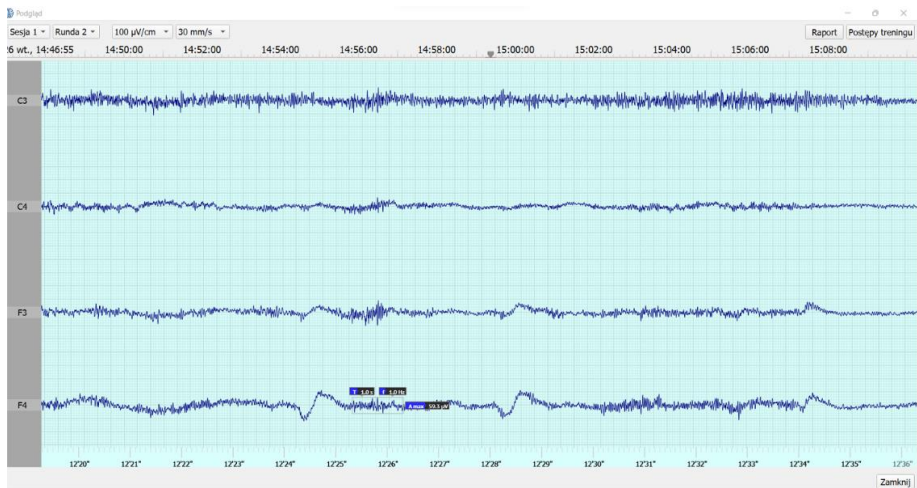
Report 4

Source: own research.

During the interview, Ms Katarzyna talks about defining boundaries



"Click" i.e. awareness, change of perspective and releasing emotions.



Report 4a

# Trening Biofeedback - raport



N. Magda

ID kontaktu: BF000028

Numer badania: E145

Data urodzenia: 1900.01.01

Analizowany kanał: C3

Wiek w dniu treningu:

Protokół: Test

## Wyniki sesji

Numer sesji: 1

Czas sesji: 2022.07.27 09:03:33

Kanał	Runda	Punkty	Czas [min:s]		Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu$ V <sub>avg</sub>	1.97 (39.0%)	1.86 (36.7%)	3.49 (68.9%)	1.17 (23.2%)	0.97 (19.1%)	1.12 (22.1%)	1.31 (25.9%)	0.90 (17.7%)	5.06
				Amplituda $\mu$ V <sub>max</sub>	1.93 (41.3%)	1.87 (40.0%)	2.97 (63.3%)	1.09 (23.2%)	1.02 (21.9%)	1.10 (23.4%)	1.31 (28.0%)	0.86 (18.4%)	4.69
C4	1	0	1:00	Amplituda $\mu$ V <sub>avg</sub>	2.23 (43.2%)	1.82 (35.1%)	3.61 (69.8%)	1.03 (20.0%)	1.00 (19.3%)	1.10 (21.3%)	1.24 (24.0%)	0.79 (15.3%)	5.17
				Amplituda $\mu$ V <sub>max</sub>	2.09 (42.1%)	1.87 (37.8%)	3.31 (66.8%)	1.08 (21.8%)	1.05 (21.1%)	1.10 (22.3%)	1.26 (25.5%)	0.80 (16.2%)	4.96
F3	1	0	1:00	Amplituda $\mu$ V <sub>avg</sub>	4.73 (72.0%)	2.51 (38.1%)	2.36 (35.8%)	1.13 (17.3%)	1.16 (17.6%)	1.25 (19.0%)	1.80 (27.4%)	1.24 (18.9%)	6.57
				Amplituda $\mu$ V <sub>max</sub>	3.14 (54.8%)	2.55 (44.6%)	2.77 (48.3%)	1.18 (20.6%)	1.25 (21.8%)	1.27 (22.1%)	1.66 (28.9%)	1.21 (21.1%)	5.73
F4	1	0	1:00	Amplituda $\mu$ V <sub>avg</sub>	5.01 (77.5%)	2.31 (35.8%)	2.11 (32.6%)	1.04 (16.1%)	1.12 (17.3%)	1.16 (18.0%)	1.51 (23.3%)	0.98 (15.2%)	6.47
				Amplituda $\mu$ V <sub>max</sub>	2.67 (51.7%)	2.30 (44.5%)	2.71 (52.4%)	1.12 (21.7%)	1.19 (23.1%)	1.17 (22.7%)	1.42 (27.5%)	0.93 (18.0%)	5.17

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

# Trening Biofeedback - raport



N. Magda

ID kontaktu: BF000028

Numer badania: E147

Data urodzenia: 1900.01.01

Analizowany kanał: C3

Wiek w dniu treningu:

Protokół: Test

## Wyniki sesji

Numer sesji: 1

Czas sesji: 2022.07.27 09:50:23

Kanał	Runda	Punkty	Czas [min:s]		Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu$ V <sub>avg</sub>	1.88 (40.5%)	1.71 (36.7%)	3.36 (72.4%)	0.97 (20.8%)	0.83 (17.9%)	0.91 (19.7%)	0.99 (21.3%)	0.63 (13.5%)	4.65
				Amplituda $\mu$ V <sub>max</sub>	1.90 (32.1%)	1.95 (33.0%)	4.79 (81.0%)	1.15 (19.4%)	0.85 (14.4%)	1.09 (18.4%)	1.01 (17.1%)	0.59 (10.0%)	5.01
C4	1	0	1:00	Amplituda $\mu$ V <sub>avg</sub>	1.96 (41.0%)	1.85 (38.6%)	3.51 (73.4%)	0.95 (19.9%)	0.82 (17.2%)	0.83 (17.4%)	0.88 (18.5%)	0.50 (10.5%)	4.79
				Amplituda $\mu$ V <sub>max</sub>	2.00 (34.8%)	1.98 (34.3%)	4.57 (79.4%)	1.16 (20.2%)	0.88 (15.3%)	1.02 (17.6%)	0.97 (16.9%)	0.48 (8.3%)	5.76
F3	1	0	1:00	Amplituda $\mu$ V <sub>avg</sub>	4.02 (71.8%)	2.18 (39.0%)	2.21 (39.5%)	0.96 (17.1%)	0.95 (17.0%)	0.96 (17.1%)	1.40 (25.0%)	0.92 (16.5%)	5.60
				Amplituda $\mu$ V <sub>max</sub>	3.13 (53.6%)	2.39 (40.9%)	3.53 (60.3%)	1.22 (20.8%)	1.00 (17.1%)	1.05 (17.9%)	1.35 (23.0%)	0.91 (15.6%)	5.85
F4	1	0	1:00	Amplituda $\mu$ V <sub>avg</sub>	4.33 (76.8%)	2.20 (38.9%)	2.10 (37.2%)	0.89 (15.8%)	0.87 (15.4%)	0.84 (15.0%)	1.07 (18.9%)	0.67 (11.9%)	5.65
				Amplituda $\mu$ V <sub>max</sub>	3.08 (54.8%)	2.29 (40.7%)	3.49 (62.1%)	1.11 (19.8%)	0.94 (16.8%)	0.96 (17.1%)	1.11 (19.8%)	0.61 (10.9%)	5.62

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

Report 5

Source: own research.

# Trening Biofeedback - raport



## S. Katarzyna

ID kontaktu: **BF000029**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu: **1**

Numer badania: **E149**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**

Czas sesji: **2022.07.27 11:00:07**

Kanał	Runda	Punkty	Czas [min:s]	Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu V_{rms}$ 2.55 (61.2%)	1.57 (37.8%)	1.22 (29.4%)	0.93 (22.3%)	1.06 (25.5%)	1.03 (24.9%)	1.58 (38.1%)	1.13 (27.2%)	4.16
C3	2	0	1:00	Amplituda $\mu V_{rms}$ 2.41 (58.4%)	1.50 (36.3%)	1.60 (38.7%)	1.13 (27.3%)	1.02 (24.7%)	0.93 (22.5%)	1.51 (36.6%)	0.99 (23.9%)	4.13
C4	1	0	1:00	Amplituda $\mu V_{rms}$ 2.01 (46.5%)	1.40 (32.5%)	1.34 (31.1%)	1.07 (24.8%)	1.37 (31.9%)	1.47 (34.1%)	1.93 (44.7%)	1.38 (32.1%)	4.31
C4	2	0	1:00	Amplituda $\mu V_{rms}$ 2.35 (52.6%)	1.54 (34.5%)	1.81 (40.6%)	1.15 (25.8%)	1.26 (28.1%)	1.21 (27.0%)	1.77 (39.6%)	1.14 (25.4%)	4.47
F3	1	0	1:00	Amplituda $\mu V_{rms}$ 13.79 (92.8%)	4.25 (28.6%)	1.96 (13.2%)	1.17 (7.9%)	1.22 (8.2%)	1.18 (7.9%)	1.73 (11.6%)	1.26 (8.5%)	14.86
F3	2	0	1:00	Amplituda $\mu V_{rms}$ 3.68 (67.6%)	1.90 (34.8%)	2.14 (39.2%)	1.24 (22.8%)	1.17 (21.5%)	1.10 (20.1%)	1.63 (29.8%)	1.11 (20.3%)	5.45
F4	1	0	1:00	Amplituda $\mu V_{rms}$ 17.24 (92.6%)	5.84 (31.3%)	2.32 (12.4%)	1.27 (6.8%)	1.36 (7.3%)	1.24 (6.6%)	1.86 (10.0%)	1.34 (7.2%)	18.52
F4	2	0	1:00	Amplituda $\mu V_{rms}$ 5.19 (75.3%)	2.31 (33.5%)	2.33 (33.8%)	1.42 (20.6%)	1.40 (20.3%)	1.24 (18.0%)	1.74 (25.2%)	1.12 (16.2%)	6.89

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

# Trening Biofeedback - raport



## S. Katarzyna

ID kontaktu: **BF000029**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu: **1**

Numer badania: **E151**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**

Czas sesji: **2022.07.27 12:19:00**

Kanał	Runda	Punkty	Czas [min:s]	Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu V_{rms}$ 1.83 (56.7%)	1.17 (36.3%)	0.90 (27.8%)	0.72 (22.4%)	0.84 (26.0%)	0.78 (24.1%)	1.37 (42.4%)	1.09 (33.8%)	3.23
C3	2	0	1:00	Amplituda $\mu V_{rms}$ 2.05 (57.6%)	1.13 (31.8%)	1.35 (37.9%)	1.09 (30.7%)	0.84 (23.5%)	0.87 (24.6%)	1.32 (37.1%)	0.98 (27.6%)	3.56
C4	1	0	1:00	Amplituda $\mu V_{rms}$ 3.18 (74.6%)	1.35 (31.8%)	1.08 (25.3%)	0.84 (19.8%)	0.86 (20.1%)	0.96 (22.6%)	1.34 (31.5%)	0.93 (21.9%)	4.26
C4	2	0	1:00	Amplituda $\mu V_{rms}$ 2.50 (59.6%)	1.28 (30.5%)	2.00 (47.8%)	1.10 (26.3%)	0.89 (21.2%)	1.08 (25.7%)	1.31 (31.2%)	0.90 (21.4%)	4.19
F3	1	0	1:00	Amplituda $\mu V_{rms}$ 20.19 (95.7%)	5.40 (25.6%)	1.92 (9.1%)	0.91 (4.3%)	0.80 (3.8%)	0.76 (3.6%)	1.19 (5.6%)	0.86 (4.1%)	21.09
F3	2	0	1:00	Amplituda $\mu V_{rms}$ 3.49 (74.3%)	1.53 (32.6%)	1.68 (35.8%)	1.05 (22.4%)	0.87 (18.6%)	0.89 (18.9%)	1.18 (25.1%)	0.83 (17.6%)	4.70
F4	1	0	1:00	Amplituda $\mu V_{rms}$ 17.29 (94.5%)	5.29 (28.5%)	1.83 (10.0%)	0.89 (4.9%)	0.86 (4.7%)	0.81 (4.4%)	1.17 (6.4%)	0.81 (4.4%)	18.29
F4	2	0	1:00	Amplituda $\mu V_{rms}$ 4.75 (82.3%)	1.69 (29.3%)	1.73 (30.0%)	1.09 (18.9%)	0.88 (15.3%)	0.90 (15.5%)	1.22 (21.2%)	0.80 (13.9%)	5.78

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

Report 6

Source: own research.

# Trening Biofeedback - raport



K [redacted] Izabela

ID kontaktu: **BF000030**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu: [redacted]

Numer badania: **E153**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**

Czas sesji: **2022.07.27 13:09:22**

Kanał	Runda	Punkty	Czas [min:s]	Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu V_{rms}$ 1.87 (61.6%)	1.12 (37.0%)	0.94 (31.0%)	0.75 (24.6%)	0.84 (27.6%)	0.79 (26.1%)	1.11 (36.6%)	0.67 (22.0%)	3.03
C3	2	0	1:00	Amplituda $\mu V_{rms}$ 1.35 (50.1%)	1.03 (38.2%)	0.92 (34.2%)	0.84 (31.3%)	0.82 (30.5%)	0.86 (31.8%)	1.02 (38.0%)	0.60 (22.4%)	2.69
C4	1	0	1:00	Amplituda $\mu V_{rms}$ 2.30 (67.5%)	1.27 (37.2%)	0.94 (27.7%)	0.82 (23.9%)	0.83 (24.4%)	0.81 (23.8%)	1.14 (33.4%)	0.72 (21.2%)	3.41
C4	2	0	1:00	Amplituda $\mu V_{rms}$ 1.51 (51.8%)	1.08 (36.9%)	0.90 (31.0%)	0.82 (28.0%)	0.99 (34.1%)	0.92 (31.6%)	1.13 (38.9%)	0.68 (23.4%)	2.92
F3	1	0	1:00	Amplituda $\mu V_{rms}$ 5.86 (82.8%)	2.55 (36.0%)	1.59 (22.5%)	1.08 (15.3%)	1.16 (16.3%)	1.04 (14.7%)	1.49 (21.0%)	0.99 (13.9%)	7.08
F3	2	0	1:00	Amplituda $\mu V_{rms}$ 2.47 (60.0%)	1.77 (43.0%)	1.34 (32.5%)	1.12 (27.3%)	1.05 (25.3%)	1.07 (26.0%)	1.35 (32.7%)	0.80 (19.3%)	4.13
F4	1	0	1:00	Amplituda $\mu V_{rms}$ 7.44 (87.3%)	2.96 (34.8%)	1.47 (17.3%)	1.02 (12.0%)	1.12 (13.2%)	1.03 (12.1%)	1.40 (16.5%)	0.96 (11.2%)	8.52
F4	2	0	1:00	Amplituda $\mu V_{rms}$ 2.66 (64.8%)	1.72 (41.8%)	1.26 (30.7%)	1.01 (24.6%)	1.03 (25.1%)	1.03 (25.1%)	1.26 (30.6%)	0.72 (17.5%)	4.11

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

# Trening Biofeedback - raport



K [redacted] Izabela

ID kontaktu: **BF000030**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu: [redacted]

Numer badania: **E155**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**

Czas sesji: **2022.07.27 14:16:25**

Kanał	Runda	Punkty	Czas [min:s]	Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu V_{rms}$ 1.52 (57.7%)	0.99 (37.5%)	0.89 (33.7%)	0.74 (28.1%)	0.77 (29.1%)	0.66 (25.2%)	1.00 (38.0%)	0.54 (20.3%)	2.64
C3	2	0	1:00	Amplituda $\mu V_{rms}$ 1.16 (49.0%)	0.95 (40.0%)	0.89 (37.5%)	0.73 (30.7%)	0.70 (29.4%)	0.66 (27.9%)	0.95 (40.0%)	0.48 (20.1%)	2.37
C4	1	0	1:00	Amplituda $\mu V_{rms}$ 2.03 (68.4%)	1.09 (36.8%)	0.84 (28.5%)	0.70 (23.7%)	0.80 (26.9%)	0.67 (22.8%)	0.95 (32.1%)	0.53 (18.0%)	2.96
C4	2	0	1:00	Amplituda $\mu V_{rms}$ 1.33 (53.1%)	1.01 (40.5%)	0.87 (34.7%)	0.77 (30.7%)	0.76 (30.6%)	0.70 (28.2%)	0.90 (36.2%)	0.46 (18.6%)	2.50
F3	1	0	1:00	Amplituda $\mu V_{rms}$ 5.33 (81.1%)	2.26 (34.4%)	1.57 (23.8%)	1.22 (18.6%)	1.16 (17.6%)	1.07 (16.2%)	1.53 (23.3%)	0.96 (14.6%)	6.57
F3	2	0	1:00	Amplituda $\mu V_{rms}$ 2.27 (56.4%)	1.79 (44.6%)	1.48 (36.9%)	1.15 (28.6%)	1.03 (25.6%)	0.98 (24.4%)	1.29 (32.1%)	0.77 (19.1%)	4.02
F4	1	0	1:00	Amplituda $\mu V_{rms}$ 7.02 (88.5%)	2.63 (33.2%)	1.47 (18.5%)	0.92 (11.6%)	0.98 (12.3%)	0.90 (11.4%)	1.16 (14.6%)	0.72 (9.1%)	7.92
F4	2	0	1:00	Amplituda $\mu V_{rms}$ 2.39 (64.2%)	1.61 (43.0%)	1.27 (34.1%)	1.01 (27.1%)	0.88 (23.5%)	0.86 (23.1%)	1.07 (28.6%)	0.57 (15.2%)	3.73

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

Report 7

Source: own research.

# Trening Biofeedback - raport



Sz [redacted] Marek

ID kontaktu: **BF000031**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu: [redacted]

Numer badania: **E157**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**  
Czas sesji: **2022.07.27 14:37:46**

Kanał	Runda	Punkty	Czas [min:s]	Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 2.47 (43.1%)	2.09 (36.4%)	2.01 (35.0%)	1.62 (28.2%)	1.83 (31.9%)	1.67 (29.0%)	2.57 (44.7%)	1.76 (30.6%)	5.74
C3	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 2.19 (39.3%)	1.90 (34.2%)	2.38 (42.7%)	1.68 (30.2%)	1.80 (32.3%)	1.57 (28.2%)	2.34 (42.1%)	1.71 (30.6%)	5.57
C4	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 3.87 (58.7%)	2.35 (35.6%)	2.06 (31.3%)	1.67 (25.4%)	1.87 (28.4%)	1.65 (25.0%)	2.57 (39.0%)	1.77 (26.8%)	6.60
C4	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 2.32 (40.4%)	1.97 (34.3%)	2.53 (44.1%)	1.71 (29.7%)	1.81 (31.5%)	1.56 (27.1%)	2.41 (41.9%)	1.70 (29.6%)	5.75
F3	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 5.75 (70.8%)	2.80 (34.6%)	2.23 (27.4%)	1.71 (21.1%)	1.95 (24.0%)	1.78 (22.0%)	2.63 (32.5%)	1.78 (22.0%)	8.11
F3	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 3.29 (50.0%)	2.17 (32.9%)	3.04 (46.2%)	1.84 (27.9%)	1.89 (28.7%)	1.63 (24.8%)	2.45 (37.2%)	1.74 (26.4%)	6.59
F4	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 9.86 (83.7%)	3.67 (31.1%)	2.45 (20.8%)	1.81 (15.4%)	2.01 (17.1%)	1.83 (15.5%)	2.77 (23.5%)	1.93 (16.4%)	11.78
F4	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 4.45 (60.3%)	2.43 (32.8%)	3.16 (42.7%)	1.86 (25.2%)	1.88 (25.5%)	1.63 (22.0%)	2.49 (33.7%)	1.75 (23.7%)	7.39

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

# Trening Biofeedback - raport



Sz [redacted] Marek

ID kontaktu: **BF000031**  
Data urodzenia: **1900.01.01**  
Wiek w dniu treningu: [redacted]

Numer badania: **E159**  
Analizowany kanał: **C3**  
Protokół: **Test**

## Wyniki sesji

Numer sesji: **1**  
Czas sesji: **2022.07.27 16:04:58**

Kanał	Runda	Punkty	Czas [min:s]	Delta 1-4 Hz	Theta 4-8 Hz	Alpha 8-12 Hz	SMR 12-15 Hz	Beta 1 15-19 Hz	Beta 2 19-23 Hz	HiBeta 23-34 Hz	Gamma 34-42 Hz	Suma
C3	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 1.40 (53.6%)	0.93 (35.6%)	0.89 (34.0%)	0.86 (32.9%)	0.85 (32.7%)	0.64 (24.4%)	0.95 (36.2%)	0.67 (25.5%)	2.61
C3	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 1.28 (44.5%)	0.88 (30.6%)	1.51 (52.5%)	1.03 (35.6%)	0.86 (30.0%)	0.67 (23.2%)	0.94 (32.8%)	0.67 (23.3%)	2.88
C4	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 1.86 (62.4%)	1.08 (36.3%)	0.97 (32.6%)	0.82 (27.6%)	0.87 (29.2%)	0.66 (22.2%)	0.99 (33.2%)	0.67 (22.6%)	2.97
C4	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 1.55 (45.6%)	1.00 (29.2%)	2.05 (60.1%)	1.22 (35.8%)	0.79 (23.0%)	0.70 (20.6%)	0.99 (28.9%)	0.67 (19.6%)	3.41
F3	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 3.16 (71.4%)	1.52 (34.3%)	1.31 (29.6%)	1.13 (25.6%)	1.13 (25.6%)	0.87 (19.8%)	1.26 (28.5%)	0.81 (18.3%)	4.42
F3	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 2.79 (77.9%)	1.41 (30.3%)	2.45 (52.7%)	1.47 (31.7%)	1.03 (22.3%)	0.84 (18.1%)	1.15 (24.7%)	0.76 (16.4%)	4.64
F4	1	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 4.29 (77.9%)	1.82 (33.0%)	1.41 (25.7%)	1.11 (20.1%)	1.11 (20.2%)	0.98 (17.8%)	1.48 (26.8%)	1.00 (18.2%)	5.50
F4	2	0	1:00	Amplituda $\mu$ V <sub>rms</sub> : 3.37 (64.3%)	1.56 (29.8%)	2.78 (53.2%)	1.51 (28.9%)	0.94 (18.0%)	0.84 (16.0%)	1.17 (22.5%)	0.77 (14.7%)	5.23

\*Wartości względne w % odnoszone są do pierwiastka z sumy kwadratów amplitud poszczególnych pasm.

Report 8

Source: own research.

## Conclusions of the study

My study is accompanied with conclusions and opinions written by Michał Karpiński and the HPM Medical Team right after the analysis of the results. The conclusions do not appear here as a professional text in its formal style, because at the time of conducting the research, they did not have a scientific purpose, but rather served to satisfy curiosity about the effectiveness of the method. Therefore, this work is, in a way, a key that opens up space for further, expertly designed research. Therefore, I ask the readers of this article to take a scientific distance from the style, and not the merits of the following answers.

For the last two days, we have had the pleasure of hosting an exceptional person in our HPM training center in Gliwice, Ms. Dagmara Szymańska, the creator of the amazing Embrace Therapy® method. Before the session, we did a standard test, which went as usual. Then Ms. Dagmara started her session. At the beginning there was an interview during which the participant talked about the problem he came with. He was talking, gesticulating and, unfortunately, he was moving his whole body in emotion. As you can probably guess, there were a lot of artifacts. Voltage recording. But what happened next exceeded our wildest expectations. Ms. Dagmara asked the participant to close his eyes, calm his body, take a few breaths and take a comfortable position so as not to move. At this point, the artifacts stopped and a beautiful, clear record of the waves appeared. Then, eyes closed, the client was led by Ms. Dagmara, they performed several calming and breathing exercises. The record was beautiful, without any tension. Then the real "Embrace" session began, with closed eyes during the "meditation" stage. Initially, the participants' Hi Beta began to decrease and Beta 2 slowly and gently began to increase their Alpha. They were calm and serene, relaxation took over their body and mind. Then came strong feelings and emotions, where apparently the so-called "CLICK" was noticeable, at this point Gamma was visible on the recording. Strong emotions in the initial phase of the "CLICK" turned into waves of calm and peace. After the Embrace Therapy® session, we performed the test again. The results surprised everyone. We compared the test done before and right after the Embrace Therapy® session. Hi Beta decreased by two, Alpha increased by 1 mV., SMR on the increase. All the waves have adjusted significantly. This experience shows us a completely new, innovative application of Easy Biofeedback in working with different methods (Facebook Video 2 (n.d.)).

Dagmara, we would like to thank you for this extraordinary experience of Embrace Therapy + Easy Biofeedback, two extraordinary methods that are connected by a common path. Easy Biofeedback is a method of regulating brain waves with the power of one's mind, willpower. During a workout on the head, we have electrodes connected to the right places. It is completely safe and painless. The trainee's task is to control computer games with the power of their own mind, using the recording of brain waves. Thanks to this solution, we are able to reduce stress levels (HiBeta), increase relaxation (Alpha) and strengthen concentration (Beta 1) or mindfulness (SMR). We are able to achieve all this after 15/30 meetings. What has been happening over the last two days has taken the entire HPM team by surprise. We noticed a significant decrease in stress levels (HiBeta and Beta 2), an increase in relaxation levels (Alpha), and what surprised us the most was a very large drop in the Gamma wave (emotions carried inside were letting go). The Gamma was also clearly visible during the proverbial "CLICK". At this point, the important potential of Gamma was evident. After an Embrace Therapy session, our brain definitely



works and functions better. It is calm, serene, relaxed, with a reduced level of stress and subdued emotions. Our brain works properly. HPM is extremely grateful for the opportunity to participate in this project, which demonstrated the workings of our brains before, during and after the Embrace session. We can definitely say that it works. We would like to also thank you for the opportunity to use Easy Biofeedback in a custom way, this experience opens the way for us to other opportunities to train and use Easy Biofeedback in a non-standard way. HPM Team (Szymańska (n.d.). [Facebook Post]).

It's surprising what's in our heads. How easily we can regulate most things with the power of our minds. Over the last few days, we have been conducting sessions with Ms. Dagmara Szymańska, the creator of the innovative Embrace Therapy method. The results are surprising. Check it out for yourself (Facebook Video 1 (n.d.)).

From the summaries of the results, it can be objectively concluded that the Embrace Therapy® method after just ONE session:

- reduces the level of chronic, long-term stress (HiBeta, Beta 2)
- lowers the level of stress associated with outbursts of accumulated emotions (emotional rollercoaster up and down) and reduces the feeling of anxiety (HiBeta, Beta 2)
- strengthens concentration (Beta 1)
- introduces awareness, consolidates and increases self-esteem, as well as heals (Delta)
- boosts self-confidence and a sense of courage (Click, transcendence, “genius” wave) (Gamma)
- puts you in a state of calm, relaxation, natural balance for the work of our body – brain, calms down, but also improves creativity and natural flow (Alpha).

## Summary

The Child, the Adult and the Parent ego state are in each of us, because, as Berne says, everyone was a child, everyone had parents (guardians) and everyone is an adult and can think rationally. Unclosed childhood, i.e. adulthood built on children's desires for love, attention, appreciation, acceptance and a sense of security, the so-called STROKES, makes us PLAY different roles in various configurations. We play and manipulate, most often unconsciously, in order to satisfy those childhood needs who are constantly crying out for the closure. We act like in a theatre and we take on many roles in order to be noticed, to feel important, to finally feel safe and calm. To feel loved. To let our heart rest. People often say, “Go down to your Inner Child, tell it you love it. Hold it close to your heart. The Inner Child is you, so it needs to be taken care of.” Nothing could be further from the truth, because such a perception of OURSELVES keeps us in the ego trap. Because, in fact, Who would hug Whom? After all, we know what we have registered as “love” from our parents, so we treat ourselves in the same

way. When describing the Parent ego state (Berne, 2022, p. 18), Berne says that it manifests itself in two forms: direct and indirect, as an active ego state and as an influencing factor. When it acts directly, a person reacts like their own father (or mother) actually did. When it is an influencing factor, they react the way their parents wished. Loving YOURSELF means full acceptance of the immature mind, understanding its basic childlike needs and standing on the side of our DIVINE ASPECT, i.e. integrating the Child, closing the child's traumas in the ADULT. Acceptance of the child is acceptance of everything that we do not accept in ourselves and in others. If we try to love from the level of the mind, that love will always be based on dependencies and on the parenting pattern that we have experienced, on what off pays for us, on whether something is good or bad for us. And when we redirect our identity to being Love and accept the fact of BEING DIVINE ENERGY, the energy of ALL, of the entire UNIVERSE, we are able to experience and feel the inner CLICK, thanks to which we simply know and feel that LOVING ourselves has nothing to do with speaking tender words to ourselves (Szymańska 2020, p. 169).

In my experience – Luvaas emphasizes – my child does not need healing. What needs it is my relationship with it, my trust and faith in its wisdom, its guidance, and directing me. Many of us have hidden our child, as well as other parts of our personality, without which we cannot express our balance of strength and vulnerability (Luvaas, 1995, p. 13).

ET® is not about healing the IC either, and it is not even about healing your relationship with it, but more about remembering What Kind of Being We Are and stepping fully into that identity. In the identity of God's Child. And this makes all the child's needs disappear, mature, because we do not need to love or be loved in this consciousness. In remembering Who We Are, we become Love, which makes a huge difference.

The new findings that I have tried to present in this article may be an invitation to a new look at subjectivity, in which the ego state expands into the context of God, which goes beyond the universal separation of God and Man, and brings us to a quantum perception of the world as One Energy. Looking at the (Internal) Child as the mind, and at the Adult as the Omni-Consciousness (God), can become an inspiration to work on the sense of perceiving oneself and one's own value, precisely through the prism of the Omni-Being, and contribute to closer contact with the spiritual sphere of man.

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## **Wpływ Embrace Therapy® w ujęciu analizy transakcyjnej na domknięcie potrzeb („głasków”) wewnętrznego dziecka, zmianę perspektywy oceny sytuacji i uwolnienie trudnych emocji**

### **Streszczenie**

Metoda Embrace Therapy® (ET®) wykazuje korelację z konceptem analizy transakcyjnej (AT), która obecnie widziana jest jako jeden z najbardziej holistycznych nurtów postrzegania osobowości. Analiza transakcyjna (AT), jako teoria stanów Ja (Rodzic, Dorosły, Dziecko), dostarcza spójnego i prostego systemu określenia własnych myśli, odczuć i zachowań, zarówno w relacjach z innymi ludźmi, jak i z samym sobą. Jej praktyczne zastosowanie terapeutyczne dotyczy pracy i komunikacji z wewnętrznym dzieckiem (Ja-Dziecko), które jest najbardziej pierwotnym i esencjonalnym składnikiem każdej osobowości. Metoda ET® łączy aspekt mentalny i duchowy i służy do komunikacji z wewnętrznym dzieckiem (WD) z poziomu boskiego rodzica (BR), czyli świadomości duchowej, które w koncepcie AT odpowiada Ja-Dorosłemu. Metoda ET® znajduje swoje zastosowanie w uwalnianiu trudnych emocji takich jak lęk, niepokój, wstyd, poczucie winy, bezsilność, złość, gniew, smutek, żal. Widzimy tutaj uwolnienie emocji ze wspomnień z dalekiej lub bliskiej przeszłości, z teraźniejszości oraz z wyobrażonych lęków na przyszłość, a także w zmianie perspektywy danego wydarzenia. W empirycznej części artykułu przedstawiono wyniki badań na podstawie raportów z zapisów fal mózgowych przed i po sesji ET®, które wskazują na znaczące obniżenie stresu i wzrost wyciszenia i spokoju u badanych. Do badania 8 ochotników użyto metody pomiarowej biofeedback. W badaniu zmierzono parametry wszystkich 8 fal (Delta, Theta, Alpha, SMR, Beta1, Beta2, HiBeta, a także Gamma) a wnioski wyciągnięto na podstawie raportów z tych badań.

**Słowa kluczowe:** analiza transakcyjna, Embrace Therapy, wewnętrzne dziecko, duchowość, biofeedback.

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## Existential attitudes of academic youth in a post-pandemic digital society

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### Abstract

The aim of this article was to determine the existential attitude of academic youth. The research was undertaken to determine the direction of this attitude and to what extent it depends on their sense of satisfaction with life, selected demographic and Internet use variables. The theoretical foundation of the research was based on the assumptions of existential psychology and philosophy. Tools such as Grulkowski's To Be and Have Attitude Scale (SPBiM), Diener's Satisfaction with Life Scale (SWLS) developed by Juczyński and a personal data questionnaire were used. The research group consisted of a total of 198 students. The results of the research showed that academic youth in general are characterised by an average degree of existential attitude ("to be" and "to have" at the same time). Statistical analyses made it possible to identify its main correlates and determinants. The higher the age of the respondents, the education of the father and the better the relationship with him, as well as the greater number of friends they had and the more religious they were, the stronger the attitude "to be" was. On the other hand, a negative correlation occurred in relation to time spent online; the greater the number of hours spent online, the more the students were characterised by "to have" attitude. The results indicate that the variables of age, religiosity, father figure and interpersonal relationships are important in shaping the attitude "to be", while excessive digital activity favours the attitude "to have".

**Keywords:** existential attitudes, life satisfaction, students, the Internet.

### Introduction

The subject matter of the nature of human existence is the focus of interest of many fields of science, constituting an ambiguous category that several de-

scription models and research have been used for. Initially, psychology concentrated on individual aspects of human functioning, these were humanistic and existential concepts of the 60s and 70s of the 20<sup>th</sup> century that undertook the subject matter of the very human existence itself. An individual's self-realisation and motives for their development were placed in the centre of Maslow's humanistic theory (1990). On the other hand, the representatives of existential psychology, among all, Binswanger, Boss, Ellenberger, Minkowski, May and Tillich emphasised the importance of human freedom and responsibility, their "being-in-the-world" (in-der-Welt-Sein), where they have to refer to the world of nature (Umwelt), other people (Mitwelt), own experiences (Eigenwelt), spatial perspective and temporary nature of their own existence (Grulkowski, 1996, p. 5).

The subject matter of the nature of existence also found its reflection in E. Berne's concept of transactional analysis. The founder of TA tries to grasp human destiny by analysing a human life plan, realised according to a scenario developed in early childhood (Berne, 1998). The four main life positions emerging at that time, i.e. I'm OK – You're OK, I'm OK – You're not OK, I'm not OK – You're OK, and I'm not OK – You're not-OK serve to realise this scenario and to play certain games in relations with other people. One of important consequences of a given game, apart from psychological and social benefits, are existential benefits that let people strengthen their own beliefs confirming their adopted life position (Berne, 1987, pp. 52–53). Talking about the relation between TA and moral values and religious experience in human life, Harris (1987, pp. 241–274) emphasizes the importance of the position I'm OK – You're OK ("I AM IMPORTANT – YOU ARE IMPORTANT"), pointing to the fact that only the ADULT ego state can decide to adopt it. As far as Polish research is concerned, Jagieła (2021) studied in detail the relations between TA and existential therapy. The author, among all, refers to Berne's claim that existential optimism occurs when an individual is consciously able to get rid of their scenario and played games and meets a person similar to them. The individual freed from their scenario can look at the world from a different perspective and experience a genuine relationship with that person who is similar to them. It allows for experiencing the highest form of a relationship. Existentialists call it a meeting. A meeting on the basis of TA is a preparation for closeness and intimacy (Berne, 1966, p. 310, citing: Jagieła, 2021, p. 142).

Humanistic, existential and TA concepts shed light on the importance of such categories like value, quality, well-being, satisfaction or sense of life. In the 90s of the 20<sup>th</sup> century, the so-called positive psychology referring to the idea of Aristotle's eudaimonia, i.e. the idea of good life and human strengths, was the continuation of these thoughts (Cieślińska, 2013; Fredrickson, 2001; 2004; Seligman, Csikszentmihalyi, 2000).



The attempt to conceptualise the matter of human existence resulted in establishing a certain attitude one can adopt towards their own life. The first attempts to describe it were developed on the basis of existential philosophy. Marcel (1986) pointed to the fact that an individual can choose one of two attitudes towards the world: "to be" described as participation, engagement, being with, being called and invited, or "to have", i.e. egocentric, concerning the existence of things. Thus, "to be" and "to have" constitute two different approaches to life and are linked with a different hierarchy of values. The first one is based on the truth, justice, love, hope and mercy and exceeding oneself, whereas the other one refers to self-absorption, material values and an ownership zone dominated by "a violent desire to own the world, not leaving anything beyond one's reach" (Marcel, 1986, p. 201).

In psychology, on the other hand, Fromm (1999) was the first one who tried to describe the approaches of "to be" and "to have", similarly to Marcel, pointing to the fact that they are two basic, different forms of life orientation, where the dominance of one imposes a certain way of thinking, feelings and behaviours. The life approach of "to be" is characterized by being geared towards unity with the world and creative realization of one's talents in it, whereas the life approach of "to have" is driven by the desire to own and make the world one's property.

Marcel's and Fromm's theories constituted the basis for the operationalisation of existential attitudes within the framework of Polish psychology; they were presented and researched by Grulkowski (1996; 2007) in the 90s of the 20<sup>th</sup> century. In the view of the aforesaid author, the attitudes of "to be" and "to have" are "two qualitatively opposite approaches to reality as a whole" (Grulkowski, 1996, p. 12). The attitude of "to be" is multidimensional and characterized by engagement towards the world and the sense of unity with it, admiration for it, the feeling of trust and safety. The person presenting that attitude approaches the world creatively, seeks the truth about it and believes in the sense, importance and uniqueness of their own existence. It is the growth attitude. On the other hand, the attitude "to have" is characterised by a utilitarian approach towards the world in its various aspects, egocentrism and possessiveness, which are linked with the feeling of anxiety, threat, jealousy, inhibition, uncertainty of one's own value and seeking sense in material reality as well as fear of death (Grulkowski, 1996, pp. 12–13).

The subject of existential attitudes in psychology is therefore not concretum, the factor of external reality, but life – unique individual existence. These attitudes express a specific, individual way of experiencing, understanding the world and one's own place in it, one's belief in the value of one's own life, purpose of one's actions and responsibility for one's existence – often equated with experiencing sense of life and life satisfaction. As far as the so-called sense of

life is concerned, Reker (1992, after: Klamut, 2010, pp. 38–39) described six basic existential attitudes:

1. Goal (Purpose) – concerns what is most important in an individual's life, their goal in life,
2. Inner coherence (Coherence) – concerns comprehensive understanding of one's existence, a clear sense of identity and awareness of one's place in the world,
3. Death acceptance – concerns understanding of death perspective, distance and lack of fear of death,
4. Existential void – constitutes the indicator of frustrated "sense's will", i.e. lack of any sense, goals and direction in life,
5. Life control – an extent to which an individual perceives the possibility managing one's life freely but responsibly,
6. Goal seeking – concerns one's desire to introduce change in one's life, undertaking challenges in it and seeking new and diverse experiences.

The more positive and intense these attitudes are (except for existential void), the more sense of life one feels and the more generally satisfied they are with it. Therefore, the terms: existential attitude, sense of life and satisfaction with life can be treated as equal and co-occurring constructs linked with each other.

Another category that touches upon the description of an attitude towards one's existence is well-being or life satisfaction referring to experiencing and / or assessing, evaluating one's life, generally or in its particular aspects. Initially, well-being concerned general life satisfaction, i.e. its emotional aspect encompassing the evaluation of pleasure in affective experiences, and later on its cognitive aspect was emphasized too, i.e. the level of satisfaction of one's aspirations (Borys, 2001; Derbis, 2000). The contemporary term of well-being is described from two perspectives: hedonistic and eudaimonic (Chen, Zeng, 2021; Disabato et al., 2016). The hedonistic attitude, represented among all by Diener (1984; 2000; 2017; 2018) regards satisfaction one feels, i.e. subjectively experienced happiness and life satisfaction encompassing both states of pleasure and dissatisfaction, positive or negative aspects of life. On the other hand, the eudaimonic attitude is honest, concerns positive psychological functioning of a given person, their satisfaction with interpersonal relations, feeling of sense and high level of self-realisation (Ryan, Deci, 2001, p. 144). Thus, well-being can be both of an affective and cognitive nature, is characterized by subjectivity and relative stability of evaluating one's life in dimensions regarding a high level of positive feelings (passion), a low level of negative feelings concerning one's life and life satisfaction regarding the cognitive evaluation of life conditions in various aspects (Diener, 1984).

In the 21<sup>st</sup> century, the question of one's existential condition, their well-being and sense of life satisfaction takes on a special meaning. Changes concern-

ing the industrialization, urbanization, economization, and recently – digitalization of society, present an individual with a difficult task – how “to be” in the reality dominated by “to have” and “the civilization of consumption”, “in the world where the dominating feature of existence is the modus of possession and the main motto is “I am what I have”? (Fromm, 1999). Orzyłkowska (2015) pays attention to the fact that Polish society joined the Western-European culture of consumption after its political transformation taking place at the end of the 20<sup>th</sup> century. As a result, a new model of human personality started to emerge, the model aiming at material values that had been discredited so far and whose possession became to define one’s status and social position. *Homo consumens* described by Fromm dominated the purpose of individuals’ actions in Polish society. Appropriating, possessing, purchasing and constant consumption of everything shaped the existence that was superficial, impersonal and passive. An individual entangled in this way of existence becomes empty, alienated and lonely.

A challenge that all the individuals faced was the development of digitalization and modern technologies creating the cyber world which “has no borders, no end, is a space without place, where various spheres and spaces overlap, permeate and cross each other” (Marcinkowski, 2011, pp. 52–53). This world opens multiple possibilities, unknown to people so far, carrying many opportunities and challenges as well as threats and ethical dilemmas. The borders between the real and the virtual world get blurred more and more often. Former *Homo consumens* evolves into *Homo computerus* that should be able to navigate the cyberspace as being absorbed by it results in becoming “no life”, having no more links to ordinary, real life (Marcinkowski, 2019).

The impact of new technologies is particularly strong in case of young people, entering the adult world. The generations born and living in the world undergoing the processes of digitalization perceive the reality surrounding them in a completely new way. For young people being online all the time is not just an emblem of their generation’s identity (Majchrzyk, Terelak, 2011, p. 20), it is also the condition of their existence. Antczak (2014) notices that the Internet allows them – though virtually – to realise their need to be in a peer group, thus bringing important social benefits. However, effective functioning in these two worlds requires, among all, the ability to adapt to a rapidly-changing reality (Sarzyła, 2010, p. 220). The changes in question concern behavioural patterns as well as forming one’s own identity. Social values have changed drastically, the quantity and quality of social and family relations have decreased. It results in the crisis of beliefs and knowledge about what is really important, what one should pursue. As Krajewska (2015) notices, nowadays, the youth lives in the world of uncertain values that are characterised by pluralism, relativity and instability, and consumption is attributed the status of quasi religion. The outbreak of the COVID-19 pandemic in 2019 enlarged the scope of problems expe-

rienced by young people entering adulthood. On the one hand, the presence of modern technologies and the Internet made it possible to continue their education and stay in contact with others, and on the other hand, threats concerning their functioning in the cyberspace multiplied. The phenomenon of growing addiction to the Internet among students was noticed (Anderson et al., 2017; Bhandari et al. 2017; Christakis et al. 2011; Fatehi et al., 2016; Younes et al., 2016; Zhang et al., 2018), followed by phonoholism (Majchrzyk-Mikuła, Matusiak, 2015), being a victim in the virtual space (while shopping online, being trapped into a credit or a loan) (Michalski, Gądek-Hawlena, 2022), the crisis of close relationships (Elphinston and Noller, 2011; Mojaz, Paydar, Ebrahimi, 2015), and growing mental issues (Huang et al., 2023; Hossin, 2022; Li et al. 2015; Mohammed et al., 2019). It was a real challenge to answer the question how to live not only in a non-digital but also virtual reality with the erosion of universal values and with simultaneous promotion of hedonist and temporary values. One can discern lack of an individual's trust in society and lack of society's trust in an individual, moral atrophy, moral, legal and religious relativism, far-reaching permissiveness. There is a dominating cult of individualism, where the contemporary man's own ego aiming at undefined happiness, self-realisation and personal success becomes the only point of reference and evaluation (Krajewska, 2015, p. 118). Therefore, there was an attempt to conduct research aiming to define which existential attitude characterises contemporary young people entering adulthood in such difficult circumstances where caring about "to be" should constitute the foundation of valuable life even more.

## Research methodology

The research was conducted in the group of over 200 students of a public university (Casimir Pulaski Radom University) and a private establishment (Higher School of Commerce) in Radom. The respondents were people in early and middle adulthood, that is special developmental periods linked with the developing hierarchy of values, sense and purpose of one's life and attitudes towards it. In total, the complete data of 198 students was obtained.

The research sample included 165 women and 33 men, aged 19–49 ( $M = 27.9$ ;  $SD = 10.8$ ). Most of them lived in a city (68%), and was studying as part-time students (70%) of first degree studies (B.A.) (53%) in a private establishment (83%). All the charges studied in the area of humanities and social sciences, mainly psychology (62%) and pedagogy (14%). The research was conducted online, and the average research time was 20 minutes. The respondents were given a set of questionnaires to fill in, including the sheet with personal data and two scales. The questionnaire of personal data regarded several socio-

demographic variables such as sex, age, studied subject, parents' education, family status, family financial situation, type of parents' education, relationship status, being religious, etc., as well as the way in which one used the Internet (among all, the number of hours, type of activity, type of portals). Moreover, the research used the following research tools:

1. Grulkowski's To Be and Have Attitude Scale (SPBiM) (2007) consisting of 25 statements, 12 of which directly show the attitude "to be" and the same number of them point to the attitude "to have", whereas one statement is a buffer claim. On the basis of the theoretical scale, the author refers to the concepts by Marcel, Fromm, Stachelin and John Paul II. The attitude "to be" is characterized by a dynamic feeling of unity with everything that exists, and open, multidimensional and trusting attitude to the world and its aspects (other people, nature, time, space, and one's own person). On the other hand, the attitude "to have" is characterized by egocentrism, the feeling of difference and alienation of oneself and the rest of the world, as well as passivity, anxiety and utilitarian attitude towards various aspects of the world. The score on the scale points to one's attitude as scoring the maximum number of points (168) shows the maximum intensity of the attitude "to be", while scoring the minimum number of points (24) shows the maximum intensity of the attitude "to have". Between these values, there is a continuum of attitudes of different "to be" or "to have" intensity. The relevance of the scale was assessed by competent judges as high, similarly to the reliability index (Cronbach's alpha equating .83 in the first test and .85 in the second test).
2. The Satisfaction with Life Scale (SWLS) developed by Diener, Lemmons, Larson and Griffin, in the Polish adaptation by Juczyński (2001) to measure mental well-being. The tool consists of five statements where, with the help of the seven-point scale, the respondent evaluates to which extent a given statement refers to their life so far. The scale renders a general result, which constitutes a global indicator of happiness/ satisfaction with one's own life. The range of the results is between 5 to 35 points, the higher the score, the stronger the feeling of satisfaction. The scale's constancy indicator was established with the "test-retest" method and it equals .86, whereas Cronbach's alpha coefficient is satisfactory and equals 0.81.

The aim of the research was to determine the direction of existential attitudes of academic youth and to study its relation to life satisfaction and selected socio-demographic variables, as well as to single out the main determinants of existential attitudes.

The following research questions were posed:

1. What is the existential attitude of academic youth and is there any relation between its direction and the sense of life satisfaction, selected socio-demographic variables and Internet use?

## 2. What are the main determinants of the existential attitude of academic youth?

The results that let the author verify the aforesaid research questions are presented below.

## Results of own research

### Existential attitude and life satisfaction

The general result obtained in the SPBiM scale in the whole group shows average strengthening of the students' existential attitude ( $M = 101.14$ ,  $SD = 6.62$ ), i.e. the charges' inclination towards both the attitude "to have" and "to be".

Further on, the correlation of the general SPBiM result and the global result of the Satisfaction with Life Scale (SWLS) equaling  $M = 19.15$  ( $SD = 6.06$ ) was analysed. The Pearson correlation coefficient (PCC) at the level of  $r = .471$  at  $p < .000$  showed a strong and statistically valid correlation between the studied variables. The bigger inclination towards the attitude "to be" is, the bigger satisfaction with life is, whereas an inclination towards the attitude "to have" is accompanied by decreasing life satisfaction.

In the next phase of analysing the results obtained in the SPBiM scale, with the help of 0.5 standard deviation, it was possible to determine three groups of students characterized by the attitude to have (PM Group,  $M = 94.5$ ,  $SD = 3.31$ ), an average attitude with the tendency for to have and to be (PM-B Group,  $M = 101.14$ ,  $SD = 6.62$ ) and the attitude to be (PB Group,  $M = 107$ ,  $SD = 9.93$ ). These groups obtained the following results in the Satisfaction with Life Scale (SWLS) respectively: low ( $M = 16.05$ ), average ( $M = 18.80$ ), and high ( $M = 22.66$ ). The differences between all the groups are statistically relevant, which is shown in Table 1.

Table 1

*The analysis of ANOVA variants and Tukey's multiple comparison test for the variable of life satisfaction (SWLS) in the three determined groups of respondents: PM Group (attitude to have), PM-B Group (attitude to have-to be), PB Group (attitude to be)*

	PM Group (N = 59)		PM-B Group (N = 79)		PB Group (N = 62)		Anova	
	M	SD	M	SD	M	SD	F	P
SWLS scale	16.05	6.69	18.80	5.37	22.65	4.29	20.847	<b>0.000</b>
Tukey's test								
SWLS scale	PM Group		PM-B Group		PB Group			
PM Group			<b>0.013</b>		<b>0.000</b>			
PM-B Group	<b>0.013</b>				<b>0.001</b>			
PB Group	<b>0.000</b>		<b>0.001</b>					

Source: own study on the basis of conducted research.

The data included in Table 1 confirms that people of an opposite direction of their existential attitude differ in their life satisfaction. The students with the attitude to have (PM Group) obtained the lowest level of life satisfaction ( $M = 16.05$ ), whereas the respondents with the attitude to be (PB Group) are characterized by a high level of life satisfaction. Tukey's multiple comparison test for the satisfaction variable showed statistically relevant differences ( $p < .05$ ) among all the determined groups of students.

## Existential attitude, socio-demographic variables and Internet use

The next analysis regarded the attempt to determine demographic variables differentiating the respondents' existential attitude. Among the nominal variables such as sex, place of residence, family structure, being in a relationship and being a religious person, only the last one differentiated the research results at a statistically relevant level. Persons declaring religious beliefs are characterized by a statistically relevant ( $p < .003$ ) inclination towards the attitude to be, contrary to non-believers whose life orientation is more of a to have type. The detailed data concerning that aspect is presented in Table 2.

Table 2  
*T-Student test for nominal demographic variables*

Variable	SPBiM Scale		T-Student		
	M	SD	t	p<	
Sex	Woman	101.63	13.23	1.188	n.i.
	Man	98.50			
Place of residence	City	105.07	12.89	0.832	n.i.
	Country	104.48			
Family	Two-parent	100.96	13.34	-0.271	n.i.
	One-parent	101.48			
Being in a relationship	Yes	101.1	12.67	0.815	n.i.
	No	99.37			
Being a religious person	Yes	106.09	13.23	2.721	.003
	No	99.01			

Source: own study on the basis of conducted research.

The analysis of the T-Student test for other demographic nominal variables concerning one's health (occurrence of health issues), regular intake of psychoactive substances (alcohol, cigarettes, etc.) and keeping fit regularly did not show any statistically relevant differences in the attitude "to be" and "to have" among the surveyed students.

The further part of the research focused on verifying whether and what type of relation there is between the result in the SPBiM scale and socio-demographic variables of an ordinal and sectional character (Table 3). The Pearson correlation coefficient for particular variables showed that there is a moderate and statistically relevant relation between such variables as one's age ( $p < .000$ ), father's education ( $p < .003$ ) and relations with him ( $p < .02$ ) as well as the number of one's friends ( $p < .000$ ). It shows that the inclination towards the attitude "to be" is linked with older respondents whose father has higher education and who have good relations with him as well as a bigger number of friends. It is interesting that the variables like one's material status and mother's education and relations with her were statistically irrelevant, showing a very weak correlation.

Table 3  
*Pearson correlation for socio-demographic variables*

Variable	SPBiM Scale	
	Pearson correlation	p<
Age	.391	<b>.000</b>
Financial status	.121	n.i.
Father's education	.312	<b>.003</b>
Mother's education	.096	n.i.
Number of siblings	.061	n.i.
Number of friends	.368	<b>.000</b>
Relationship with one's father	.263	<b>.02</b>
Relationship with one's mother	0.23	n.i.

Source: own study on the basis of conducted research.

Similarly, the correlation between the general result in the SPBiM scale and the variables concerning Internet use was analysed (Table 4).

Table 4 shows a moderate and statistically relevant relation of one's existential attitude with such variables as the number of hours spent on the Internet ( $p < .000$ ), film watching ( $p < .01$ ), using social media portals ( $p < .02$ ) and erotic ones ( $p < .000$ ), playing multi-player games ( $p < .001$ ) and answering mails ( $p < .03$ ). It is worth noticing that the nature of the correlation, except for the last variable, is negative. It means that the stronger inclination certain persons have towards the attitude to have, the more time they devote to the Internet and the more time they devote to film watching, using social portals, especially erotic ones, and playing team games. It is interesting that the activity linked with e-mail communication correlates positively with the attitude "to be".



Table 4  
*Pearson correlation for variables regarding Internet use*

Variable	SPBiM scale	
	Pearson correlation	p<
Number of hours spent on the Internet	-.328	<b>.000</b>
Seeking information	.042	n.i.
Listening to music	-.037	n.i.
Watching films	-.383	<b>.01</b>
Shopping	-.082	n.i.
Having conversations	-.269	n.i.
Using social media portals	-.301	<b>.02</b>
Using dating portals	-.054	n.i.
Using erotic portals	-.355	<b>.000</b>
E-mail activity	.250	<b>.03</b>
Playing multi-player games	-.332	<b>.001</b>
Playing one-player games	-.076	n.i.
Playing gambling and betting games	-.051	n.i.

Source: own study on the basis of conducted research.

## Determinants of the existential attitude

The last analysis regarded an attempt to determine which variables explain to the largest extent the general result in the SPBiM Scale. The procedure of stepwise multiple regression let the author determine a few such variables and demonstrate their relation with the direction of the surveyed students' existential attitude. Table 5 shows the data regarding this analysis.

The equation of regression shown above demonstrates that the variables such as the general feeling of life satisfaction, one's age, father's education, the number of hours spent on the Internet, being a religious person and the number of close friends are statistically significantly linked with the direction of one's existential attitude, while this relation is moderate ( $R = .478$ ) and explains over 30% of variability in this case, which shows the need to look for other variables determining the direction of the students' existential attitudes. It is worth emphasising that the equation parameters show that the attitude to be is positively correlated with the respondents' age, their father's education, number of friends and the extent to which they are a religious person. On the other hand, the more hours are spent on the Internet, the bigger inclination there is towards the existential attitude to have among the surveyed students.

Table 5

*Stepwise multiple regression for the general result in the To Be and Have Attitude Scale in relation to the general feeling of life satisfaction and socio-demographic data, the result for the whole research sample*

WO SPBiM			
Variable	Beta	T	P
WO_SWLS	.894	6.17	<b>.000</b>
Age	.238	2.72	<b>.001</b>
Father's education	2.02	2.63	<b>.001</b>
Number of hours spent on the Internet	-1.15	-2.69	<b>.001</b>
Being a religious person	5.05	2.41	<b>.02</b>
Number of close friends	.779	2.08	<b>.03</b>

Multiple correlation coefficient:  $R = .478$

Multiple determination coefficient:  $R^2 = .328$

Relevance of the equation:  $F(5.184) = 10.922$

$p < .000$

Source: own study on the basis of conducted research.

## Conclusions and discussion

The aim of the conducted research was to determine the existential attitude of academic youth and what its main correlates and determinants are.

The data obtained in the research show that:

- there is no one well-defined direction of the respondents' existential attitudes, the general result obtained by them shows that they adopt both the attitude "to be" and "to have",
- the correlation of one's existential attitude with their life satisfaction grew for the respondents characterised with the attitude to be, and decreased for those with the attitude to have,
- the attitude to be characterised the persons declaring to be religious, being in a positive relation with their father and having good relations with friends,
- the attitude to have significantly correlated with the variables concerning Internet use, especially when it came to the number of hours spent on the Internet, using erotic portals and playing multi-player games,
- the variables determining the respondents' existential attitude turned out to be: their life satisfaction and age, their father's figure – his education and mutual relations, as well as contact with friends and being a religious person.

The conducted analyses showing that the respondents are generally characterized by a moderate existential attitude, i.e. the one oriented both towards to

be and to have, are to some extent optimistic. Łażewska (2015) states that nowadays the axiological disorientation discourages young people from thinking about stable values and makes them look for easier ways to make their dreams come true. The results of the research show that the surveyed students generally do not manifest a well-pronounced axiological crisis, directing them unambiguously towards a hedonistic and materialistic attitude. Thus, what turned out to be important for the respondents' attitude? Taking into account certain variables made it possible to determine that such an attitude inclination is linked with life satisfaction, relation with one's father and friends, and being a religious person. In that way, the observations of other researchers (Argyle, Hills, 2000; Daulay et al., 2022; Fisher, 2010; Sillick, Cathcart, 2014) concerning the importance of religiousness for the feeling of life sense and satisfaction were confirmed. On the other hand, Krajewska (2018) notices that at the time of society of uncertain values, the fundamental role of the parents is to emphasise the religious-ideological and spiritual aspects in their upbringing, to show a clear hierarchy of values and to agree how to realise these goals. The research shows that one's father figure might play a significant role in this aspect. Thus, the relation with another person and the presence of spiritual development are key aspects of being in the world. The variable of sex did not differentiate the students' existential attitudes, however, it should be stressed that a significantly bigger number of women than men took part in the research. While studying life attitudes, sense of life and developing the hierarchy of values in the group of Polish and Italian students, Kozera-Mikuła (2014) proved that both women and men from Poland similarly, with high intensity felt the sense of life, supporting existential values at the same time. Hence lack of differentiation concerning the respondents' sex in this research.

On the other hand, the attitude "to have" was clearly linked with activity in the virtual world and activity connected with using, among all, erotic portals and playing multi-player games. Several studies conducted so far show that problematic use of social media by students can be an important predictor of their low satisfaction with relationships, emotional separation from the loved one (Elphinston and Noller, 2011; Mojaz, Paydar, Ebrahimi, 2015) and even an increased risk of betrayal (Abbasi, 2019). This type of behaviour might have serious implications for the students' interpersonal relations, contributing to objectifying the role of another person, treating them like a possession or in a utilitarian way, i.e. from the perspective of the attitude to have.

The attitude "to have" also significantly correlated with the number of hours spent on the Internet. Michalski and Gądek-Hawlina (2022) point to the fact that the students' increased online activity is on the one hand linked with their participation in online education during the lockdown period accompanying the COVID-19 pandemic, as well as with the growth of online shopping, exposing them to cyber threats linked with cheating on Internet auctions and telecom-

munication scam. This research points to one possible cause of more time spent online and the students' consumerism that favours the attitude "to have". It is worth noticing that the correlates of the attitude "to be" did not include online activity, except for sending e-mails, which refers to interpersonal and social activity, directed towards more real contact with another person.

The results of the conducted research allow for forming a conclusion and guidelines. The analysis of professional literature showed that the life attitude inclined towards "to have" carries many threats and negatively impacts integral development of a human being. Its current growth is linked with an excess of possibilities created by the Internet and making use of them inappropriately. The development of the attitude "to be" based on immaterial values, responsibility and skillful use of freedom should define the direction of the students' activity in the contemporary, digital, post-modern reality. First experiences of adult life confront young adults with a question about the possibility of realizing their own goals and values, the question of their sense of life and staying autonomous (Gurba, 2005). Łażewska (2015) points to the importance of encouraging young people to make effort while working on their development and to define ambitious goals, knowing how to give up apparent benefits. Melosik (2013, p. 456) stresses how important it is for the young generation to develop competencies of critical and reflexive analysis of reality and to keep a distance from cheap entertainment. Thus, one should discuss with academic youth the significance of the attitude "to be" and values that shape it, both in the non-digital and digital reality which is becoming more and more often an important area of their functioning. It is worth showing young people constantly that conscious choice and decision making linked with the attitude "to be" shapes a real, mature, free and valuable PERSON.

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## Postawy egzystencjalne młodzieży akademickiej w postpandemicznym społeczeństwie cyfrowym

### Streszczenie

Celem artykułu było określenie postawy egzystencjalnej młodzieży akademickiej. Podjęto badania mające ustalić, jaki jest kierunek tej postawy oraz w jakim stopniu zależy od poczucia satysfakcji z życia, wybranych zmiennych demograficznych i dotyczących korzystania z Internetu. Podstawę teoretyczną badań oparto na założeniach psychologii i filozofii egzystencjalnej. Zastosowano narzędzia takie jak Skala Postaw Być i Mieć (SPBiM) Grukowskiego, Skalę Satysfakcji z Życia (SWLS) Dienera w oprac. Juczyńskiego i kwestionariusz danych osobowych. Grupę badawczą stanowiło łącznie 198 studentów. Wyniki badań wykazały, iż młodzież akademicką ogółem cechuje przeciętny stopień postawy egzystencjalnej (zarazem być i mieć). Przeprowadzone analizy statystyczne pozwoliły na wyłonienie jej głównych korelatów i uwarunkowań. Kierunek postawy być był tym silniejszy, im wyższy był wiek badanych, wykształcenie ojca i lepsza relacja z nim, a także większa liczba posiadanych przyjaciół i bycie osobą wierzącą. Z kolei negatywna korelacja wystąpiła w związku z czasem spędzonym w sieci – im większa była liczba godzin spędzonych w Internecie, tym bardziej studentów cechowała postawa mieć. Uzyskane wyniki wskazują, iż zmienne dotyczące wieku, religijności, postaci ojca i relacji interpersonalnych mają znaczenie dla kształtowania postawy być, natomiast nadmierna aktywność w środowisku cyfrowym sprzyja postawie mieć.

**Słowa kluczowe:** postawy egzystencjalne, satysfakcja z życia, studenci, Internet.





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## Impact of ICT – chaos and information “confusion” in the view of students and teachers

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### Abstract

The article presents a fragment of the diagnostic-correlation research of a mixed character, defining ICT competencies of students as far as using ICT methods and tools is concerned. It seeks an answer to the question on the consequences of using ICT by children and adolescents (significance level of new media impact) in the area of chaos and information “confusion”. A diagnostic survey (a questionnaire and an interview) and statistical methods (a chi-square test and Pearson correlation coefficient) were used. 2510 students and 1110 teachers were researched. It was found out that: 1) according to the aggregated order of importance regarding ICT impact, the information “confusion” category was given the least importance by the students (the fifth place), and small importance by the teachers (the fourth place); 2) there is a correlation (correlation: weak, positive –  $r \cong 0,29$ ) between the students’ opinions and the teachers’ views concerning the impact of using ICT by children and adolescents leading to growing information chaos and confusion (overload and interference with information handling); 3) the calculations of differentiators showed significant statistical differences between the impact of ICT on children and adolescents leading to chaos and information “confusion” and their educational stage and place of learning; 4) there is a noticeable similarity between the students’ and the teachers’ views – “separating” the world of children and adolescents (“Us”) from the world of teachers (“Them”) is of little significance.

**Keywords:** media pedagogy, diagnostic-correlation research, opinion correlation, ICT competencies, ICT use, chaos and information “confusion”.

## Introduction

Nowadays, no matter what kind of activity we take, it is likely to be based on ICT (Information and Communication Technology) methods and tools, treated as key technologies of modern civilization, which the time of the COVID-19 pandemic let us see clearly (Bailenson, 2020; Doucet et al., 2020; D'Souza, 2020; Murphy, 2020). The reality of the digital era keeps posing higher and higher challenges to students and teachers, who are supposed to improve particular areas of ICT competencies (Van Deursen, Van Dijk, 2014, pp. 43–62), defining the directions of their development and undertaken school tasks and extracurricular activities. That is why the main aim of the research regarded ICT competencies of students and teachers as far as using ICT in the context of new technological trends and accompanying civilisation changes is concerned. The study made an attempt to define the range of knowledge, comprehension, activities and attitudes of children and adolescents displayed in their approach towards new ICT trends. Apart from the students' opinions, the teachers views were also interesting, especially on the areas and consequences of using ICT by the young generation. As for the impact of modern technology (the "fruit" of new media), among all, chaos and information "confusion" were taken into account – how a human being functions in the condition of constant information overload (Tessier, 2020, pp. 18–35). This state, triggered by a constant inability to process all the received information, leads to information chaos manifested by "brain overload" (Bawden, Robinson, 2009, pp. 180–191; Matthews, Campbell, 2009, pp. 417–442;), e.g. growing attention and memory deficits, having a negative impact on handling information and productivity (effectiveness) of learning<sup>1</sup> (see: Attali, 2008; Kurzweil, 2005). The ability to handle information (manifested in action, in the process of searching, ordering, selecting, storing, creating, evaluating, giving access to and removing information), especially as a result of deliberate actions driven by intrinsic motivation, constitutes the foundation of knowledge construction – the process of learning and developing cognitive interests. It is an activity that conditions one's existence in the information society – society of "knowledge creators", where knowledge becomes a process, and learning is an integral part of creation, a new form of social functioning (Furmanek, 2013, pp. 176–177, 297; Okoń, 2007, p. 460; Włodarski, 1996, pp. 25, 34–35; Zimbardo, Gerig, 2012, p. 468).

There arise questions whether and to what extent ICT tools used in practice cause chaos and information "confusion" among children and adolescents. The comparison of data obtained from the students with the teachers' views (ex-

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<sup>1</sup> In general approach, evolutionary discrepancies of developmental mechanisms are explained mainly by the fact that cognitive capabilities of the human mind (brain) do not grow as fast as the amount of information provided by technical devices and technology.

pressed by the degree of dependence, correlation of opinion) let us pay attention to differences and similarities in the area of needs and expectations of education subjects. These findings are significant for understanding the process of teaching-learning, especially in the context of an ever-existing generational conflict (see: Protzko, Schooler, 2019).

## Research assumptions

The theoretical foundation is defined by: 1) concepts of critical pedagogy, assuming “constant opposition to the obvious”, visions and aims open to social dialogue; 2) the postmodernist approach taking into account ambiguous emancipation – “ambiguous modernity” and “liquid modernity”; 3) emphasis on self-education, self-realisation, self-determination and open education (Bauman, 2015; Melosik, Szkudlarek, 2010); 4) the proposal of shaping and developing ICT competencies, discerning the foundations of teaching and learning in the constructivist theory (with special focus on the social-cultural perspective), pointing to one of the ways of thinking about knowledge development – learning about ICT methods and tools via ICT (Henson, 2015); 5) positive visions of the future, where media and technologies can be effectively used to support learning and healthy development (Berdik, 2020); 6) conditions for processing (recognizing, coding, segregating and finding) information in cognitive development (Birch, 2012, pp. 71–123; Meadows, 1997, pp. 37–59). Trying to learn about practice, the authors aimed at showing educational reality confronting temporarily dominating scientific theories drawing an image of “a new student” who exists and realizes their potential in the internet cyberspace, in the world of the latest new media” (Levinson, 2013), providing multisensual communication and multisensual learning – an “online” student who has unlimited possibilities of using new areas of e-education. It was assumed that our developmental path is shaped by a cultural imperative of participating in creating and negotiating symbols, values, meanings, where the student’s main partner is technology, machine, tool (Gabriel, Röhrs, 2017). It was assumed that we can talk about success of teaching when a given student feels accepted and is aware of the fact that their problems are noticed and understood. While their mind “opens up”, there is an opportunity to use their potential which they came to school with to the full (Rasfeld, Breidenbach, 2014, pp. 109–115). At the conceptual stage of the project, it was assumed that its activity would focus on diagnostic-correlation studies (Ferguson, Takane, 2016, pp. 33, 233–254) of a mixed type (quantitative-qualitative) (Urbaniak-Zajac, 2018, p. 122; Dróżka, 2010, p. 125), rooted mainly in media pedagogy. Two techniques were used: a questionnaire (Babbie, 2016, pp. 247, 255–264) and an open interview (Frankfort-Nachmias et al., 2015, pp.

240–265). Apart from quantitative studies, the research also implemented activities and techniques combining the elements of analysis and quantitative explanation with the quantitative one. Triangulation created an opportunity to conduct a more profound study and adopt an approach (on the border of education, technology and ICT) from two different points of view (Furmanek, 2016, pp. 21, 28). Statistical calculations with the use of the chi-square test (Wieczorkowska-Nejtardt, 2003, pp. 270–284) and Pearson correlation coefficient (King, Minium, 2020, pp. 165–181) made it possible to define the relation between the students' ICT competencies as far as using ICT is concerned, the students' opinions and the teachers' views, and define factors differentiating the phenomenon class under research.

The research (questionnaire) covering the teachers realizing curricula for various subjects and the students learning at particular educational stages,<sup>2</sup> was conducted in selected educational institutions in the province of Lubusz and neighbouring provinces. The research sample consisted of 2510 students and 1110 teachers. 40 students attending schools in Zielona Góra and neighbouring places were interviewed (10 students from each educational institution of an appropriate educational stage were chosen).

One of more detailed questions concerned the effects of using ICT, which made it possible to define more precisely a vast area of new media impact. Five main areas of influence were singled out, mentioning the following impact (effects): 1) improved reflexes and manual coordination; 2) developing creativity and cooperation skills; 3) improved pace of searching, selecting and evaluating information; 4) improved powers of concentration and ignoring distracting stimuli; 5) creating chaos and information "confusion". The results presented in the article – concerning the fifth area of influence, directed towards the processes distracting information handling – seek the answer to the question: to what extent (in the students' and the teachers' opinion) does using ICT tools in practice cause chaos and information "confusion"? With regard to the relational issue, the research unveiled the link between the students' and the teachers' opinions and the factors differentiating their views on that matter.

## Research results – interpretation and discussion

2456 (97.8%) students and 1061 (95.6%) teachers answered a closed question on what ICT offers to children and adolescents (as far as effects are concerned). For this group, the frequency distribution of effects of ICT use by chil-

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<sup>2</sup> The stages of education in Poland at the time of the research: 1) integrated education (ages 7–10; one teacher running alone all the subjects); 2) primary school (ages 11–13); 3) junior high school (Pol. gimnazjum, ages 14–16); 4) high school (ages 17–20).

dren and adolescents referring to particular (abovementioned) areas of influence, was calculated and illustrated, presenting in this way how important they are for the research participants. In this area, an attempt was made to determine the students' and the teachers' opinions concerning whether and to what extent used ICT tools are the cause of chaos and information "confusion" among children and adolescents. The results are presented in Table 1.

Table 1

*The frequency distribution of using ICT by children and adolescents – causing chaos and information "confusion" (in the students' and the teachers' opinion) [quantity distribution in numerical and percentage values]*

Using ICT leads to chaos and information "confusion"	Level of importance (hierarchy of importance attributed to influence)						Total	
	0 (lack)	1 (the most im- portant)	2	3	4	5 (the least im- portant)		
<b>The students' opinions</b>								
nominal figures	N	352	196	103	124	194	1487	2456
	%	14.3%	8.0%	4.2%	5.0%	7.9%	60.5%	100.0%
weighted figures	N	0	196	82	74	78	297	728
	%	0.0%	26.9%	11.3%	10.2%	10.7%	40.9%	100.0%
<b>The teachers' opinions</b>								
nominal figures	N	454	198	87	66	33	223	1061
	%	42.8%	18.7%	8.2%	6.2%	3.1%	21.0%	100.0%
weighted figures	N	0	198	70	40	13	45	365
	%	0.0%	54.2%	19.1%	10.8%	3.6%	12.2%	100.0%

(\*) In the calculations and interpretations performed, due to the fact that the scale is linear and five-band (0 – 5), the numbers obtained at a given level were attributed the following weights: level 0 = weight 0, etc.; 5 = 0,2; 4 = 0,4; 3 = 0,6; 2 = 0,8; 1 = 1,0.

Source: own research.

### The students' opinions

The frequency distribution of the effects of using ICT by children and adolescents, regarding the sources of chaos and information "confusion" is quite irregular, with similar and low nominal figures located at particular (except the fifth one) levels of importance. It is this one, the last (fifth) level that stands out in figure distribution as far as the students' self-assessment is concerned. Most of the children and adolescents (as many as 60.5%) put information "confusion" resulting from ICT use at the last place. This choice supported by so many voices

determined the students' general point of view concerning the extent to which ICT tools influence this analysed area. In fact, the students believe that using new media by them is **the least important** factor as far as causing chaos and information "confusion" is concerned. The rest of the research participants (39.5%) pointed to a higher or zero level of importance. Among them, the most numerous group, i.e. 352 (14.3%) students did not attribute any weight to this category (level zero). In their opinion, the common practice of using digital instruments has no impact on emerging chaos and information "confusion". Furthermore, comparable figures can be found at level one and four (8.0% and 7.9% respectively). It means more or less that every twelfth student discerns ICT use as having the most significant (the biggest) impact on growing chaos and information "confusion", or slight (little) influence on creating information "confusion" and chaos. Only 124 (5.0%) students (level three) point to significant effects of new technology's impact and significant (big) growth of information "confusion". And slightly fewer of them, i.e. 102 (4.2%) pointed to the second level of importance thus claiming that using new media leads to very significant changes and contributes, to a large extent, to growing chaos and information "confusion".

In conclusion we can state that the students, putting the aforesaid category at the fifth place, existing in the ICT world, fear chaos and information "confusion" the least. They claim that using new media causes to the smallest extent growing chaos and information "confusion". The students believe that cyberspace providing them with too much information has the smallest significant impact on interference with information handling and, what follows, on the process of understanding and integrating it with already existing knowledge.

Table 2

*Effects of using ICT tools by children and adolescents: chaos and information "confusion" – in the light of differentiating factors (in the students' opinion)*

TEST.CHI. results. Effects of using ICT tools by children and adolescents: chaos and information "confusion"		
Differentiating factors (the students' sociometric data)		
Sex	Type of educational institution (educational stage)	Learning place (environment)
$\chi^2 = 4.03 < \chi^2_{(\alpha=0.01; df=5)} = 15.09$ $p = 0.544584566$ No grounds to reject $H_0$	$\chi^2 = 78.63 > \chi^2_{(\alpha=0.01; df=15)} = 30.58$ $p = 1.24472E-10$ <b><math>H_0</math> rejected</b>	$\chi^2 = 65.35 > \chi^2_{(\alpha=0.01; df=20)} = 37.57$ $p = 1.02561E-06$ <b><math>H_0</math> rejected</b>

Source: own research.

In order to gain a broader perspective on using ICT by children and adolescents, the emphasis was put on factors differentiating the researched phenom-

enon. The following variables were listed: the children's and adolescents' sex, type of educational institution (educational stage) and learning place (environment). The statistical analysis made it possible to answer the question whether the aforesaid variables significantly differentiate the researched class of phenomena. The results are presented in Table 2.

The calculations showed statistically relevant differences in two cases – between effects of ICT impact on children and adolescents as far as creating chaos and information “confusion” was concerned and one's educational stage; their learning place. The detailed number distributions<sup>3</sup> show that:

- (1) The distribution of numbers illustrating the hierarchy of importance regarding ICT impact (effect: chaos and information „confusion” – according to one's educational stage) is irregular, and the results obtained demonstrate a high level of differentiation. Marginal results and evaluation at extreme educational stages can be noticed. The oldest students that operate in cyberspace fear chaos and information “confusion” the most (in comparison to the younger respondents). On the other hand, the youngest children claim that using new media gives them to the smallest extent the growth of chaos and information “confusion”. At the zero level of this category (no ICT impact) the children of preparatory education constitute the largest group (27.4%), almost twice the size of the average value of this level (equaling 14.3%). It may also prove lack of awareness concerning digital threats among the youngest students.
- (2) The frequency distribution of the results of using ICT by children and adolescents (effect: chaos and information „confusion” – according to one's learning place) characterized by an irregular sequence primarily demonstrates the views of students coming from small and medium-sized towns (10–100 thousands of inhabitants). These students, attributing higher weights to this area of digital tool impact, see more threat (than the others) in the shape of chaos and information „confusion”. On the other hand, the research participants from the biggest and the smallest places (from the countryside and places above 100 thousand inhabitants) are less afraid of these consequences. They believe that cyberspace providing them with too much information has the least significant impact on interference with information handling. For example, the percentage distribution of the first (highest) level of importance (whose average is 8.0%) proceeds as follows: 6.1% – the countryside; 7.7% – a small town (up to 10 thousand inhabitants); 10.5% – a small city (10-25 thousand inhabitants); 10.4% – a medium-sized city (25-100 thousand inhabitants); 6.8% – a city of more than 100 thousand inhabitants.

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<sup>3</sup> Due to the limits of the text's length, they are not presented in this article.

## The teachers' views

In the teachers' view, the common practice of children and adolescents operating in cyberspace is of **little significance** as far as creating chaos and information "confusion" is concerned. It derives from the analysis of the distribution of occurrence frequency (in the aforesaid area of causing chaos and information "confusion"), irregular in nature, which is demonstrated by both nominal and weighted figures. The emerging image's most characteristic feature is level zero significantly outnumbering other levels. It represents these respondents who did not mark this category at all, thus attributing zero weight to it. The data shows that as many as 454 (42.8%) respondents behaved in this way. These teachers declare that ICT tools used by children and adolescents do not have much impact on them and are not the source of chaos and information "confusion". It is significant that the distribution in question distinguishes two extreme significance levels: the first (the most important) one and the fifth (the least important) one – showing the biggest and comparable nominal figures (18.7% and 21.0% respectively). Due to their extreme positions occupied in the hierarchy of significance, one can certainly notice significant differences in calculated weighted figures (54.2% and 12.2% respectively). The general result established for this category (weight of little significance for the impact of the activity) results from the specificity of the aforesaid distribution. As for the first and the fifth level of significance, it can be stated that more or less every fifth teacher regards the use of ICT tools by students as either the most significant (the biggest) or the least significant (the smallest) contribution to growing chaos and information "confusion". The remaining, middle levels of significance (the second, third and fourth) recorded lower figures, with a clear downward trend. Thus, 87 (8.2%) teachers, attributing a very big weight, claim that there is profound impact of new media on growing information chaos among students. Next, 66 (6.2%) respondents, pointing to a big weight, talk about significant impact of ICT, creating information chaos among children and adolescents. Only 33 (3.1%) respondents point to little significance of using ICT as far as its impact on growing information chaos is concerned.

The results presented let us state that the teachers attributed little significance to the category of chaos and information "confusion" resulting from using ICT by children and adolescents. The teachers believe that using digital tools offered by the virtual world has little impact on their charges and does not disturb rational information handling (acquiring, selecting, gathering, processing information). They are of an opinion that media and cyberspace impact students' cognitive sphere to a little extent, implying a decline in productivity (effectiveness) of the learning process.



While analysing the teachers' views, the emphasis was put on the factors differentiating the researched phenomenon. The following variables were listed: sex, type of educational institution, teachers' workplace and professional position. The differentiating variables were analysed statistically, like in the case of the students. The test results are presented in Table 3. The calculations did not show significant statistical differences.

Table 3

*Effects of using ICT tools by children and adolescents: chaos and information "confusion" – in the light of differentiating factors (in the teachers' opinion)*

TEST.CHI results. Effects of using ICT tools by children and adolescents: chaos and information "confusion"			
Differentiating factors (the teachers' sociometric data)			
Sex	Type of educational institution (educational stage)	Workplace (environment)	Professional position
$\chi^2 = 4.41 < \chi^2_{(\alpha=0.01; df=5)} = 15.09$ $p = 0.492534594$ No grounds to reject $H_0$	$\chi^2 = 12.10 < \chi^2_{(\alpha=0.01; df=15)} = 30.58$ $p = 0.671309999$ No grounds to reject $H_0$	$\chi^2 = 18.54 < \chi^2_{(\alpha=0.01; df=20)} = 37.57$ $p = 0.552168701$ No grounds to reject $H_0$	$\chi^2 = 12.36 < \chi^2_{(\alpha=0.01; df=15)} = 30.58$ $p = 0.651424271$ No grounds to reject $H_0$

Source: own research.

### Correlation between the students' and the teachers' opinions

In order to better illustrate the hierarchy of significance referring to the impact of new technology, the results from five analysed areas were put together. The data concerning the effects of ICT practical use by children and adolescents was captured globally. Overall, as far as the hierarchy of significance is concerned, the students put the change category of "chaos and information 'confusion'" on the fifth, last place (with a weighed value – 728, and zero weight – 352), classifying it as the least significant effects of using ICT. The teachers attributed the fourth place to it (with a weighed value – 365, and zero weight – 454), stating that pragmatic implementation of the latest technology by children and adolescents has little impact leading to chaos and information "confusion". Therefore, both the students and the teachers do not emphasise this area of media influence and attach little importance to ICT as tools disturbing rational handling of information coming from various sources – not seeing any threat or undesirable influence on the development of ICT competencies demonstrated in the pace of searching, selecting and evaluating information, which consequently has a big impact on understanding, processing and integrating it with already existing knowledge (see: Birch, 2012, pp. 117–123; Meadows, 1997, pp. 42–44).

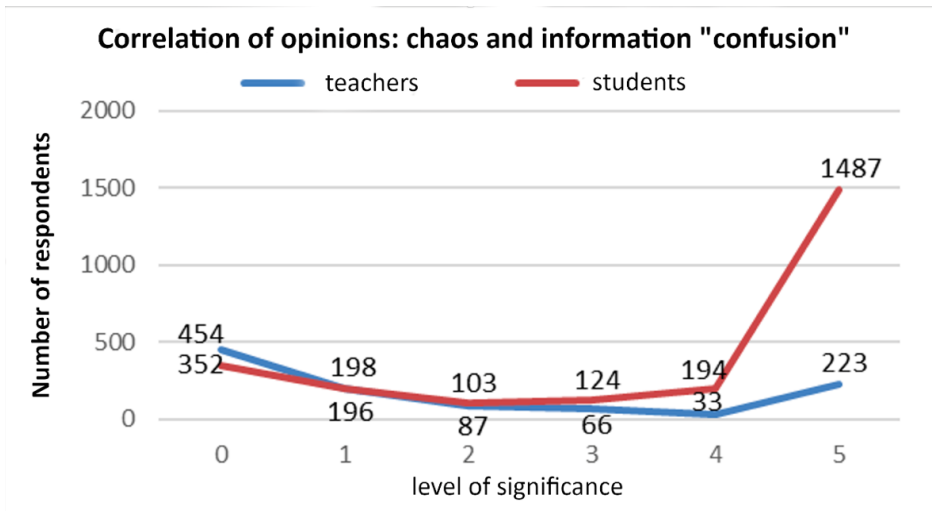
The analysis of gathered empirical material and its results pointed to the possibility of a link between the variables under research, i.e. between the students' and the teachers' opinions regarding the effects of ICT impact on the area of chaos and information "confusion" concerning children and adolescents. In order to find this connection constituting a methodological assumption of a general nature in the light of the formed relational research problems, statistical methods were used as well. To calculate the strength of the relation between the two studied (co-occurring) variables, the coefficient of determination ( $r^2$ ) and Pearson correlation coefficient ( $r$ ) were employed (Ferguson, Takane, 2016, pp. 142–143).

According to the calculated values of these coefficients, the strength of the relation between and students' and the teachers' opinions concerning the effects of using ICT by children and adolescents resulting in chaos and information "confusion" is expressed by:

- 1) the coefficient of determination  $r^2 = 0.082755189$ ;
- 2) Pearson correlation coefficient  $r = 0.287672017$ .

The calculated Pearson correlation coefficient was positive, pointing to a growing regression line, thus the correlation is positive and demonstrates one-directional changes in both variables under study (Pilch, Bauman, 2010, p. 133). It means that the higher the values of the students' self-assessment (higher levels of significance given by children and adolescents), the higher the teachers' evaluation marks (higher levels in the hierarchy of importance given by the teachers). It should be emphasised that in the research (of a review type) the data obtained to calculate the correlation let us only detect the co-occurrence of the variables' values. These values can co-occur despite the fact that one does not derive from another (King, Minium, 2020, pp. 186–188).

Interpreting (determining the strength of the relationship) the obtained value of Pearson correlation coefficient (about  $r = 0.29$ ), it can be stated that the correlation between the students' and the teachers' opinions is "low" (Guilford, 1964, p. 157) or "weak" (Góralski, 1987, p. 38). Therefore, such a name – low/ weak correlation, positive correlation – can be given to the studied correlation calculated for the established levels of significance (the hierarchy of importance) concerning the impact of ICT of the analysed category (illustrated by similar opinions of the students and the teachers). Figure 1 showing chaos and information "confusion" as a result of ICT impact, demonstrated in interference with information handling, makes us see that the course of variables for the students and the teachers is very similar for particular levels of significance. The biggest divergence in the course of variables occurs for extreme values – level 0 (without impact) and level 5 (the smallest impact). As for the remaining levels (1–4) representing the hierarchy of ICT impact resulting in interference with information handling, the courses are almost identical (the lines partially overlap).



*Fig. 1*

The correlation between the students' and the teachers' opinions concerning the effects of using ICT by children and adolescents resulting in chaos and information "confusion"

Source: own research.

Referring to the research problem and its outcomes, it is worth emphasizing that a sudden increase in the amount of data (Ransbotham et al., 2016, p. 6) generated by cyberspace makes contemporary students constantly bombarded with information of various nature and worth. They are the target (explicit or more or less implicit) of applications promoting anti-values, programmes evoking primitive instincts and pandering to common tastes. It results in chaos and information "confusion", impacting, not necessarily in the desirable direction, children and adolescents' cognitive and emotional sphere. It is more and more difficult to build a non-distorted and coherent image of reality (Szymd, 2015, p. 357). That is why it is so crucial to educate about the media and by the media – common media literacy requiring complementary measures in the form of preventive educational, therapeutic and re-educational programmes (Tanaś, Siemieniecki, 2021, pp. 125–140; Tanaś, 2017, p. 47). In this educational area, the following are the most important: 1) the ability of choosing selectively from this immeasurably rich and varied media offer; 2) the ability of critical and active reception of the media; 3) knowledge about basic theories of media impact and played educational roles (Gajda, 2007, pp. 103–104). Rational information processing in the environment of its overload and technological acceleration requires a high level of information culture from all information users (Batorowska, 2017, p. 190). Thus, a high level of ICT and media competence demonstrated by the students constitutes the best protection against numerous threats that using ICT tools brings, including chaos and information "confusion".

It is worth emphasizing that the educational guidelines (*Curriculum basis...*) regarding the development of skills concerning information handling do not particularly stress the process of its evaluation. It must be remembered that evaluating information, i.e. subjecting it to assessment, has a measurable impact on decision making (Dukiewicz, Spustek, 2016, pp 49–60). In chaos and information “confusion” (Baron-Polańczyk, 2018, pp. 72–88, 311–317) contemporary students face multiple difficulties, e.g. distinguishing between truth and falsehood, between important, useful information and irrelevant, detrimental content. Fake news spreads much faster, further and deeper than real stories. Truth is “boring” and inappropriate content (immoral, pathological, propagating socially harmful ideas) is more easily accessible and more willingly acquired (Dizikes, 2018; Vosoughi et al., 2018). That is why evaluating (assessing) acquired data/information constitutes an important element in efficient, rational and safe information handling. It is a desirable ability developed in the process of education, protecting against manipulation and negative impact on taken decisions – creating a conscious and responsible approach towards new technologies.

## Conclusion

The conducted environmental studies on educational applications of ICT might allow for discerning certain tendencies, but it is not possible to make generalizations based on them. The conclusions deriving from the research conducted with the help of chosen methods and techniques refer to the research sample. The analysis of professional literature and collected empirical material (concerning 2456 students and 1061 teachers) let us make the following conclusions:

- (1) Based on the distribution of the occurrence frequency of effects of using ICT by children and adolescents, in five areas of ICT impact, taking into account the students’ and the teachers’ choices, an aggregated hierarchy of importance was created, according to which the category of chaos and information “confusion”:
  - was attributed the lowest weight (the fifth place) by the students. Generally speaking, we can say that the effects of using new media in the form of chaos and information “confusion” are least important for children and adolescents (weighed value – 728). It is clearly shown by the highest score in the distribution of frequency (nominal value of 60.5%), placed at the lowest, fifth level of significance. Students, putting the aforesaid category at the last (fifth) place, operating in the ICT world, are least afraid of generating chaos and information “confusion”, and what follows, referring to the category put at the first place, interference with information handling;

- was attributed a small weight (the fourth place) by the teachers. Information overload and interference with information handling were regarded by the teachers as an insignificant effect of the young generation's activity in the media, and in their general assessment put at the fourth place (weighed value – 365). Such an outcome is also confirmed by the result of zero weight indicated by an even bigger number of people (454) who did not mark this area of ICT influence at all. These teachers claim that ICT tools used by children and adolescents do not have any significant impact on them and do not constitute the source of creating information “confusion” and chaos. Therefore, in a general perspective, the teachers claim that media and cyberspace to a small extent generate interference with information handling (implying a decrease in the ability of information obtaining, selecting, collecting and processing).
- (2) The correlation between the students' and the teachers' opinions concerning the effects of using ICT by children and adolescents, leading to chaos and information “confusion”, is weak ( $r \cong 0.29$ ); the correlation is positive and shows one-directional changes in both researched variables;
- (3) Among many analysed differentiating factors, the calculations showed relevant statistical differences only in two cases – between the effects if ICT impact in children and adolescents as far as creating chaos and information “confusion” was concerned and the students' educational stage as well as their learning place. It was agreed that:
  - the distribution of numbers referring to the type of an educational institution (the students' educational stage) makes it possible to discern an irregularity – the oldest students (adolescents aged 17–20), existing in cyberspace, are (in comparison with the others) most afraid of chaos and information “confusion”. On the other hand, the youngest children believe that using new media contributes to the smallest extent to growing chaos and information “confusion”;
  - the image of results pertaining to particular areas and the distribution of numbers referring to one's learning place (its size) makes it possible to discern an irregularity – the students from small and medium-sized towns (10-100 thousand inhabitants) see more threat (than the others) in the form of chaos and information “confusion”. On the other hand, the research participants from the biggest and the smallest places (from the countryside and cities with more than 100 thousand inhabitants) are less afraid of the impact of ICT use leading to overloading and information “confusion”.

The research (establishing the correlation) points to the overlapping opinions of the students and the teachers concerning the range of ICT impact on creating chaos and information “confusion”. It showed similar views on that

matter (which is demonstrated by the positive, low-degree correlation) and uncovered a slight “separation” of the both worlds, i.e. “Us” – the children and adolescents, and “Them” – the teachers, which is particularly important in the context of identifying one’s students’ needs and understanding the reasons why they undertake actions in favour of using new media in their everyday life (Baron-Polańczyk, 2019). Taking into account the empirical evidence regarding the students’ and teachers’ similar opinions and educational guidelines pertaining to the idea of constructivism, as well as conclusions about teaching practice deriving from it, it can be hoped that the researched teachers are “constructivist” enough for the ICT era. Similar views of the charges of school education took on a special meaning at the times of the coronavirus pandemic (Donoso et al., 2020; Ptaszek et al., 2020) when the educational process depended on the efficacy of implementing online teaching tools, demonstrating ICT competencies determining the process of learning (knowledge construction). At the same time, the very same process was distorted by the designators of chaos and information “confusion”.

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## Skutki oddziaływania ICT – chaos i „zagubienie” informacyjne w opinii uczniów i nauczycieli

### Streszczenie

Artykuł przedstawia fragment badań diagnostyczno-korelacyjnych o charakterze mieszanym, ustalających kompetencje informacyjne uczniów w zakresie wykorzystywania metod i narzędzi ICT. Poszukuje odpowiedzi na pytanie określające skutki stosowania ICT przez dzieci i młodzież (poziom istotności oddziaływań nowych mediów) w sferze chaosu i „zagubienia” informacyjnego. Zastosowano metodę sondażu diagnostycznego (ankietę i wywiad) oraz metody statystyczne (test niezależności chi-kwadrat i współczynnik korelacji Pearsona). Zbadano 2510 uczniów i 1110 nauczycieli. Ustalono, że: 1) według zagregowanej hierarchii ważności oddziaływań ICT, kategorii „zagubienie” informacyjne uczniowie nadal najmniejszą wagę (miejsce piąte), a nauczyciele małą wagę (miejsce czwarte); 2) istnieje związek (korelacja: słaba, dodatnia, pozytywna –  $r \cong 0,29$ ) pomiędzy opinią uczniów a spostrzeżeniami nauczycieli, co do skutków korzystania przez dzieci i młodzież z ICT przejawiających się wzrostem informacyjnego nieładu i zamętu (przeciążeniami i zakłóceniami w operowaniu informacją); 3) obliczenia czynników różnicujących wykazały istotne różnice statystyczne pomiędzy skutkami oddziaływań ICT na dzieci i młodzież w zakresie powodowania chaosu i „zagubienia” informacyjnego a etapem kształcenia i miejscem nauki uczniów; 4) zauważalne jest podobieństwo między opinią uczniów a nauczycieli – mało istotne „odseparowanie” świata dzieci i młodzieży („My”) od świata nauczycieli („Oni”).

**Słowa kluczowe:** pedagogika medialna, badania diagnostyczno-korelacyjne, korelacja opinii, kompetencje informacyjne, wykorzystywanie ICT, chaos i „zagubienie” informacyjne.





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## The experience of online grooming in the perspective of “digital natives”

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### Abstract

Online grooming is the grooming of children using the Internet, aimed for their later sexual exploitation. The present study aimed to reveal the scale of the threat by analyzing the experience of online grooming according to young adults, the first generation of “digital natives” (those raised with widespread access to the Internet). A survey method i.e. a survey questionnaire was used. A total of 136 people aged 19-30 took part in the survey. The results indicate that awareness of online grooming is still low, although almost everyone encounters its manifestations. Children and teenagers did not identify them as a potential threat. In some cases, the effects of online grooming can have a huge impact on the perception of reality in adulthood. The respondents rarely sought help in the face of their experiences, most often from their parents and guardians, least often from their teachers. From a pedagogical perspective, this indicates deficiencies in the implementation of media education tasks by state institutions, schools and families. What is required is raising public awareness of the dangers awaiting the child online, especially in view of such rapidly developing technology and the shifting age limit at which a minor independently (without control) uses Internet resources.

**Keywords:** online grooming, media education, digital natives.

### Introduction

In today’s world, technology is developing at an alarming rate, and with widespread access to the Internet, it enables people to live in a global society.

Undoubtedly, the number of risks concerning the digital age is increasing. A huge group of online users are children and adolescents, who often absorb messages that are inappropriate for their age. Many parents are unaware of their children's online activities, while the dangers are increasing. The use of the web during adolescence has important developmental consequences. First of all, it affects the process of identity formation and intensifies the process of self-education. It has also become part of the emphasis on individual construction of meaning in the postmodern world, sometimes compared to religion (Pyżalski, 2012, p. 65). The Internet has created ideal conditions for potential perpetrators of child abuse by allowing them to interact anonymously with the victim, building trust through emotional manipulation. One threat not often addressed in the public debate is online grooming – first described in 1995 by Anna C. Salter as a process of manipulation of a child by the perpetrator, aiming to make the child more susceptible to sexual harassment while revealing it less frequently (McAlinden, 2006, p. 346). From a criminological perspective, grooming is defined as the seduction of children using the Internet aimed at their subsequent sexual abuse (Dąbrowska, 2018, p. 12).

Anyone can become a victim of online grooming, although there are characteristics that predispose children to exposure to this form of violence. The most common are unmet emotional needs (secretive children, closed in on themselves, seeking relationships and recognition), need for attention (children rejected by their loved ones and peers, seeking friends), low self-esteem (susceptible to compliments, questioning their appearance, abilities), credulity (not perceiving danger), submissiveness (susceptible to manipulation) or being raised in a single-parent family (Andrzejewska, 2014, p. 153). The child's submissiveness, which is extremely important for a potential abuser, is culturally conditioned in certain circles, due to the transmission of narratives to the child about the required respect and obedience towards adults and elders (Kalka, 2007, p. 72). The principle of reciprocity is also cultivated in the family, which involves returning kind gestures even in situations where the child is not comfortable with it (Stein, 2018, p. 335). A child is an autonomous individual, has its own rights, and acquiescing to the violation of its boundaries (especially bodily boundaries) may make it easier for a stranger to do so. Groomers often choose children from single-parent families, neglected children, victims of violence (physical and psychological) as their targets, because they can offer them more than their caregivers can – meet their needs, offer care, attention and interest by responding emotionally to the child's problems (Kalka, 2007, p. 72).

Grooming is not a specific action, but a complex process of a continuous nature; it consists of many stages that bring the perpetrator closer to their goal (Dąbrowska, 2018, p. 12). No single universal model appears in the literature to describe the course and nature of online grooming. Depending on the partici-

pants and the specifics of the relationship, many different variants of grooming are distinguished. It is also difficult to determine at what point the process begins and ends, as there is a high fluidity of behavior during it (Winters, Jeglic, 2017, p. 2). Most often, the perpetrator seeks out the victim among children who are active online, and then attempts to determine the minor's interests and needs. In this way, they gain the child's trust by entering into a deeper relationship with it. Later, they proceed to gradually isolate the victim so that they keep the secret. The perpetrator pushes the boundaries by initiating conversations on intimate topics and then urging sexual behavior. At the same time, they try to shift the blame onto the victim without taking responsibility for the damage that has occurred, using violence, blackmail or threats to do so. Finally, they seek a meeting in the real world (Nowalska-Kapuścik, 2017, p. 17). In the early stages of grooming, the adult asks questions about basic information such as the age of the child who they are making contact with. This is because they have the option of passing themselves off as a peer or a person a few years older at most, although there have also been action strategies in which the perpetrator did not hide their age. Yet, this required them to communicate perfectly with the child, assuming the pose of a "cool dude" (Carr, 2005, pp. 15–16).

Perpetrators of grooming are deviants with pedophilic tendencies, who usually justify their actions by living under permanent stress or describe them as something that happens to them involuntarily. This is contradicted by statements recorded during therapy, which indicate that molestation and abuse of minors is a consequence of meticulous planning, seduction of victims and maintaining control in the relationship. Thus, pedophilia has more in common with the characteristics of addiction than impulsiveness to attack (Salter, 2003, p. 76). Pedophilic tendencies can develop in an individual under the influence of a variety of factors, including aspects such as emotional immaturity, sexual frustration, deviancy, psychopathology, neuroticism, phobias, addictions and disturbed self-esteem. Some of these factors may begin to form as early as in one's childhood stemming from experiences of violence, sexual abuse, being treated objectively, conflict, authoritarianism or loss of social identity. The impact of masculinization is also highlighted, especially in a cultural context, which refers to the dominance of men and their sexuality in family life. Pedophilia can also be the result of disrupted social roles, interpersonal communication difficulties and strong egocentrism (Podgajna-Kuśmierk, 2003, pp. 34–35). The Internet has given pedophiles the opportunity to communicate through the so-called pedophile circles with an organized structure. They connect people with deviant tendencies from any place on earth, because thanks to the use of the network their activities are geographically unlimited, requiring only that special security measures be maintained so that undesirable people do not join the circle structure (Bednarek, Andrzejewska, 2009, p. 312).

Online grooming is a form of sexual violence, whose effects are diverse, widespread and multisymptomatic. For this reason, it is impossible to establish one specific syndrome or pattern of disorders to identify a child harmed by it (Maciarz, 2006, p. 39). In the most general terms, the consequences of sexual abuse experienced during childhood and adolescence can be categorized into psychological (guilt, lowered self-esteem, sleep disorders, concentration disorders, mental disorders and illnesses), behavioral manifestations (addiction tendencies, acts of self-aggression, etc.), psychosexual disorders (risky sexual behavior, promiscuity, problems with building stable bonds) and post-traumatic psychiatric symptoms (e.g. psychotic symptoms, PTSD) (Pospiszyl, 2014, p. 60). A child experiencing forms of violence also loses its sense of security, a fundamental need that affects the development of its identity and personality through a distorted self-image or low self-esteem. Sexual violence experienced in childhood can result in problems with establishing healthy relationships and building bonds, as individuals shy away from contact with others or become too attached. There are also cases of projection, in which the abused person takes on the role of the abuser or victim in a given relationship (Kalka, 2007, p. 46). The occurrence of these consequences and their intensity is determined by a number of factors, among which we can certainly mention the type and form of abuse (initiation of physical contact), the age and developmental stage of the victim, the duration and frequency of experiencing violent situations, the nature of the relationship (occurrence of abuse of trust), the reaction of the closest environment to the disclosure of the fact of experiencing violence (acceptance or rejection) and the type of support received (useful, useless) (Maciarz, 2006, p. 39).

From the point of view of the social sciences, it is important to meet a variety of human needs through the Internet, especially because of different forms of meeting these needs in the virtual world. The role of the Internet in meeting social needs is fundamental when considering whether it can be acknowledged as society (Nowak, Krejtz, 2006, p. 7). The situation of students in today's world has changed dramatically. The pre-existing education system is not up to the current demands, as it was designed with a different audience in mind. The changes, although gradual, now encompass most aspects of life, clearly separating the current generation from its predecessors. Marc Prensky refers to this phenomenon as "singularity," meaning the irreversible arrival and rapid spread of digital technology (Prensky, 2001). Technological advances confront teachers with numerous challenges in education. It is particularly significant that for an ever-growing group of young people, the Internet is becoming an important influence factor, alongside family, school and peers. It is noteworthy that younger and younger people are increasingly involved in the virtual world, which leads to the weakening of traditional social institutions such as school, family, state and church, which previously played a key role in education (Jaszczak, 2008, pp.

95-96). Despite the risks involved, the media can be a beneficial tool in young people's development, however, achieving this goal requires considerable effort. This is a challenge for educational institutions, such as the family and the educational system, because one cannot solely depend on the self-regulation of game producers or instant messaging developers, whose main goal is to make a profit. The promotion of aggression, violence and deviant behavior brings significant income to the media market (Sarzal, 2009, p. 274).

For adult users who entered the world of the Internet with most of their needs already met, the Internet serves mainly as a communication tool for real-world benefits. Through instant messaging, they share experiences, make appointments, obtain the information they need for their careers and seek inspiration. For them, the real world is always a reference point, and the Internet makes it easier for them to function in it (Nowak, Krejtz, 2006, p. 7). For the e-generation, the Internet is the main environment for satisfying social needs. For them, online communication is not just a tool, but a goal in itself. This group includes increasingly younger children, as the age of starting to use the Internet is decreasing with advances in technology. Apps and devices are becoming more user-friendly, allowing even three-year-olds to operate tablets and smartphones. For young people, contacts made online can be just as important as those made in real life, and most instant messaging apps have a feature that lets them know when other users are available. Blogs or online diaries are popular, often created by people under the age of 16, who share their thoughts and experiences publicly, as if they were confiding in friends (Stein, 2018, p. 333). At the end of the 20<sup>th</sup> century, a term was searched for to distinguish the generations growing up in the digital world from their predecessors. Thus, the term "digital native" was born, referring to those who are immersed and proficient in modern technologies and grow up with them. Those who have had to adapt to the presence of the media as it has emerged over the course of their lives are referred to as "digital immigrants." This division is rigid and does not allow one to be in both groups at the same time, nor to move freely from one to the other (Prensky, 2001).

## **Results of the research**

The main objective of the study was to explore the experience of online grooming as perceived by young adults, the first generation raised with widespread access to the Internet. It focuses, therefore, on understanding the extent of online grooming and the risk factors. The study of online grooming is set against the backdrop of media pedagogy and, from this perspective, is important for developing interventions and creating effective prevention strategies. By un-

derstanding the complexity of the problem, tools can be developed that can help protect children and adolescents from potential exploitation.

The survey was conducted from March 27 to April 22, 2023, using an online form shared via social media on a random sample of Polish young adults aged 19-30. A total of 136 people participated in the survey, including 73 women and 63 men. The author's observations show that women were more willing to fill in the questionnaire offered to them. The respondents were informed at the beginning of the survey that their answers were to relate to childhood and adolescence, stages of development during which they were exposed to online grooming.

Lack of adult supervision during a child's use of the Internet can lead to ignoring important signals that require an immediate response. The bond between a child and its parent is not always built on such strong trust that would allow the child to report any disturbing situation to the adult. In the case of grooming, the perpetrator uses a method of establishing a relationship, gaining trust through emotional manipulation, not arousing any suspicion in the minor. It is therefore worth studying at what age the respondents started using the network independently (without supervision).

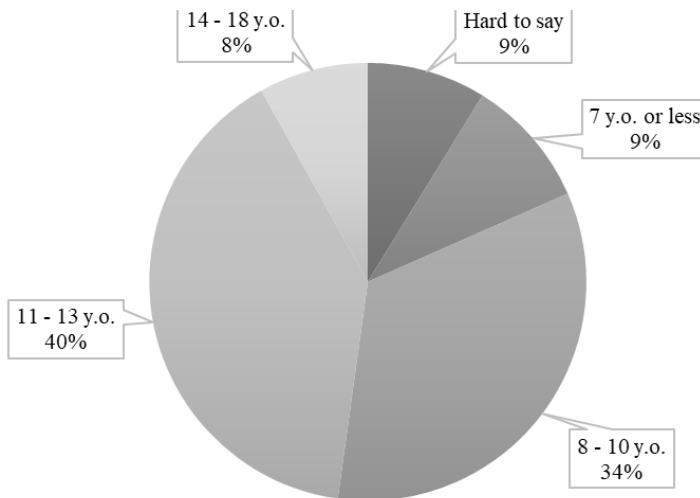


Figure 1

The age of beginning to use the Internet independently. N = 136

Source: own research.

As can be seen in the chart, the respondents most often started using the web independently between the ages of 8 and 13. The results also indicate a significant gender divide – men were more likely to declare autonomy in this regard at the age of 8–10, while women were more likely to declare autonomy at the age of 11–13. 9% of the respondents started using the Internet without



adult supervision as early as preschool age. This group was outnumbered by males. The smallest group encompasses web users achieving autonomy in this regard at the age of 14–18.

Online grooming is not a new phenomenon, although it is rarely discussed in society. In Poland, the threat was discussed in one fairly recognizable campaign under the slogan "You never know who is on the other side," in 2004. The campaign proved to be quite a success introducing online grooming into the social discourse on a large scale. The topic began to be discussed in schools and homes, which may have contributed to the results. The chart below shows whether and where the respondents encountered the concept of online grooming.

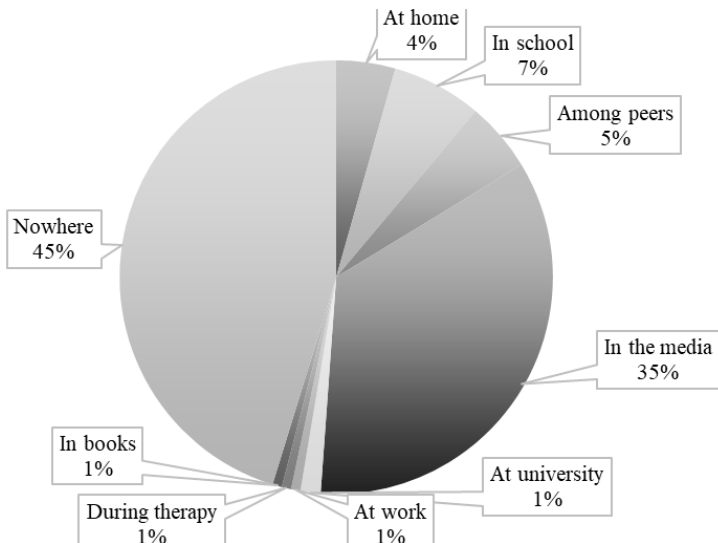


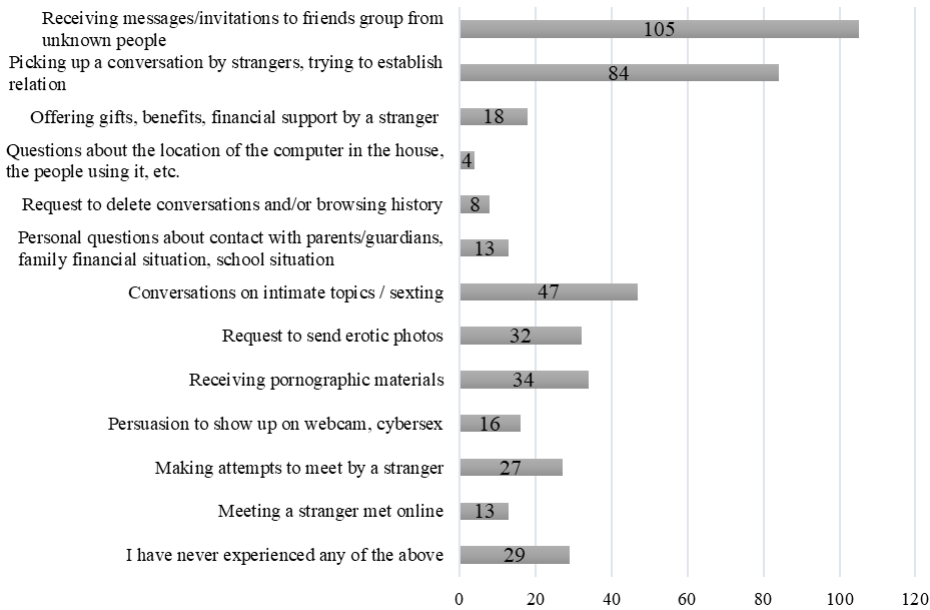
Figure 2

Online grooming knowledge sources. N = 136

Source: own research.

Almost half of the respondents (45.2%) have not encountered the concept of online grooming in their lives, proving that it is still not a widely known threat. The most common source of knowledge about grooming is the media. The institutions most important in a child's life (school and family home) received low scores, indicating lack of dialogue about media education. Higher scores were received, for example, by peers, who, despite their willingness to help, may not be an objective source of information on such complicated topics. It is worth looking into the knowledge of parents and education staff and promoting awareness among them about the dangers a child may encounter online, especially grooming.

Grooming takes place in multiple stages, using a number of sophisticated methods of manipulation, having different intentions. An important aspect of the survey was to determine whether the respondents experienced online grooming while online, what kind of grooming it was, and which of its forms were the most common.



*Figure 3*

Experience of online grooming manifestations. N = 136

Source: own research.

The largest number of the respondents experienced attempts to establish contact from strangers, in the form of invitations to become friends or messages. 84 respondents felt that the conversation established with a stranger was an attempt to build a relationship. 47 respondents had engaged in sexting during childhood and adolescence. Pornographic materials were received by 34 respondents, and requests to send such materials were received by 32 respondents. Relatively rare when contacting a potential perpetrator was the risk assessment factor, i.e. asking questions about the location of devices in their homes or other people using them, and requests to delete conversations or browser history. The most disturbing data is that strangers met online attempted to meet in the real world (the experience of 27 respondents). 13 people decided to go to the proposed meeting. 29 of the 136 respondents had never experienced any of the listed manifestations of online grooming. 103 people

agreed to answer the part of the survey regarding online grooming experiences. Noticing the wide spectrum of online grooming experiences among the respondents, it was appropriate to determine the frequency of their occurrence.

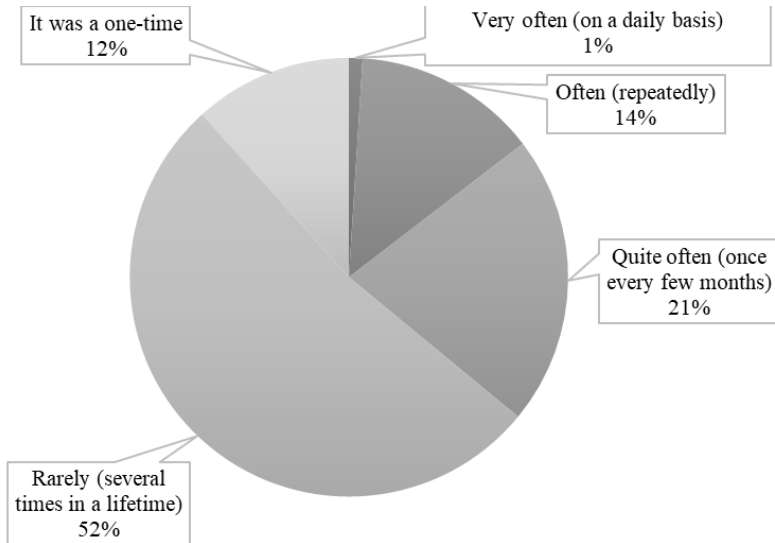


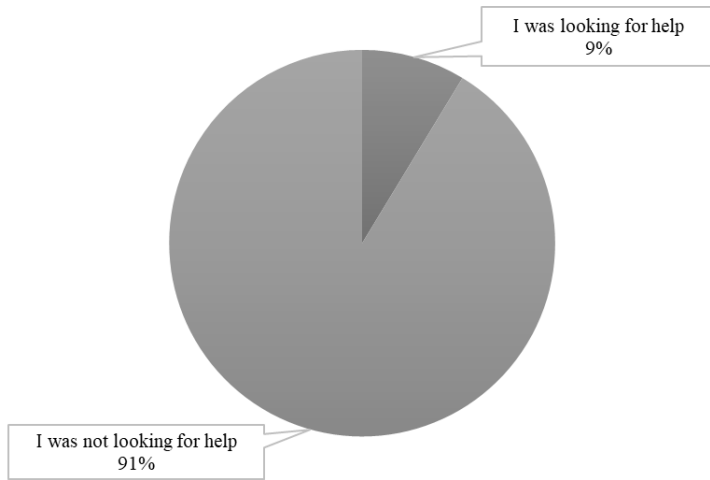
Figure 4

The frequency of experiencing online grooming threat situations. N = 103

Source: own research.

Most often, the respondents experienced online grooming several times during their childhood and adolescence. 21% of the respondents experienced it once every few months, while for 14% of them it was multiple times. Only 12% of the respondents said it was a one-time situation. There was one respondent who experienced online grooming situations on a daily basis.

In the process of grooming, the victim may be intimidated, blackmailed, or persuaded that sharing their anxieties with anyone will not have any effect because no one will believe them. Adults sometimes find it difficult to understand that children can be involved in situations such as grooming, and often downplay these situations, arguing that they are figments of the child's imagination. Nevertheless, there is a need to react before irreversible consequences occur. As the results discussed in the previous sections show, awareness of the dangers of online grooming is insufficient. Therefore, it is important for minors to develop the skills to identify potential online threats and be confident that there is someone they can rely on. Analyzing the experiences reported by the respondents, it becomes crucial to determine whether they chose to seek help at any given time.

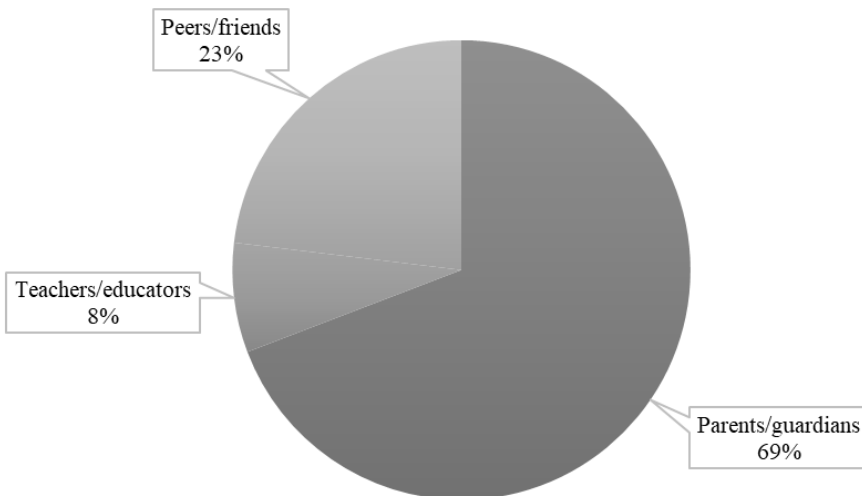


*Figure 5*

Looking for help in the face of experienced threats. N = 103

Source: own research.

As can be seen in the chart above, the vast majority of the respondents did not seek any help in the face of the threat they were experiencing. Only 8.7% of the respondents took the appropriate steps. From among them, an attempt was made to determine to whom they turned for help in the situation of experienced danger.



*Figure 6*

Sources of help received. N = 13

Source: own research.

Despite the fact that adults in the child's environment are responsible for the child's safety, the respondents were more likely to turn to their friends and peers for support than to teachers. The vast majority of the respondents (69.2%) turned to parents and guardians for help. Although this number is small in the context of the whole survey, it indicates that the family, which is the most important care and educational institution in a child's life, is a source of support in emergency situations. At the same time, it indicates trust that children and adolescents have in those in their immediate environment. These results are negative for the group of educational professions, suggesting a possible low level of trust or lack of awareness that teachers and educators can also be approached with a problem. However, there is a predominant group of people who have not approached anyone for help. Of course, this may be due to a variety of factors, which the respondents also commented on, as shown in the chart below.

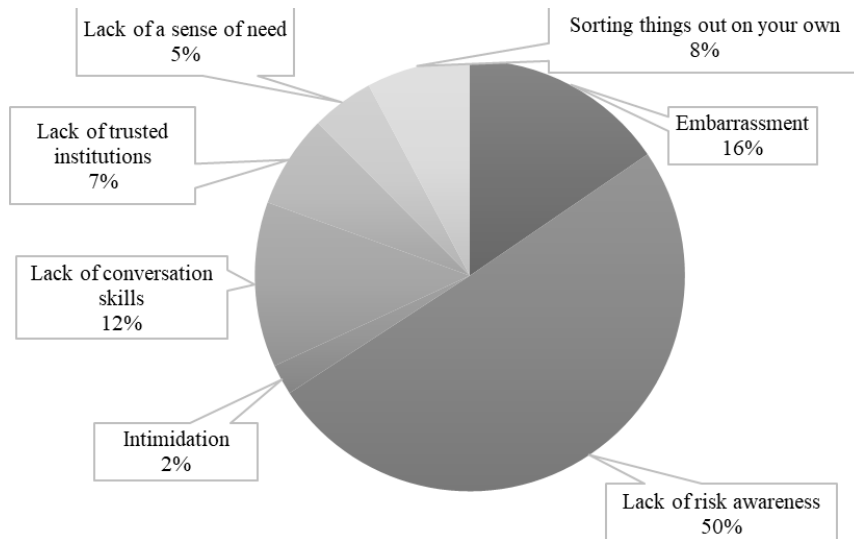


Figure 7

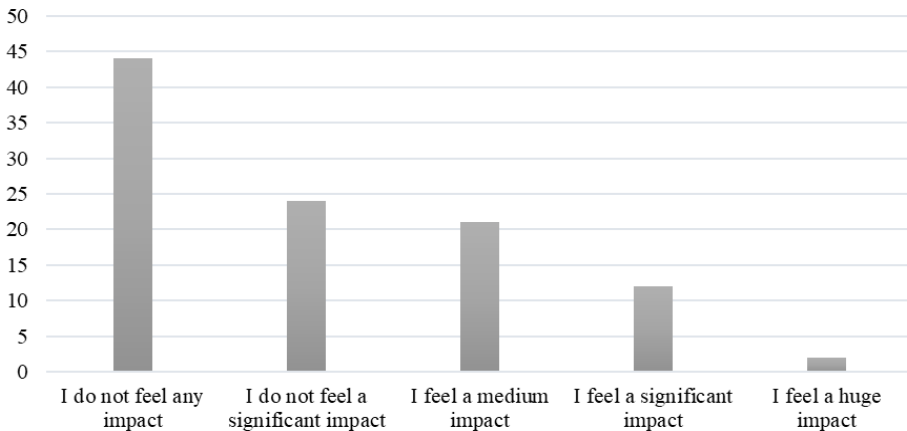
Reasons for not seeking help. N = 129

Source: own research.

The majority of the respondents indicate lack of awareness of the dangers as the main reason why they did not seek help in case of online grooming. This fact reveals that children and adolescents tend to underestimate the manifestations of online grooming, which may be the result of insufficient media education. 15.5% of the respondents experienced feelings of embarrassment about raising topics related to the dangers they encountered, while 12.4% of them pointed to lack of competence in this area as a reason. Some charges did not feel the need to seek help and handled the situation on their own. A small group

of respondents (2.3%) indicated that they had been bullied. This indicates the presence of online perpetrators who use violence to achieve their goals. As is widely known, groomers may use various forms of aggression to keep a child in their control and avoid exposure. Perpetrators try to avoid responsibility by shifting the blame to the victim, and may resort to violence, blackmail or threats later in the relationship.

Online grooming is a form of sexual violence with extremely severe consequences. The consequences of such experiences are observed in a variety of disorders, which, however, depend on a number of factors, including the child's developmental stage at which the violence was manifested, the nature of the contact (coercion involving violence and aggression, acceptance, initiation of part of the interaction), the child's temperamental characteristics (e.g., sensitivity) or the atmosphere in the family. The extent of the impact of experienced online seduction on the adult respondents' current perception of reality can be seen below.



*Figure 8*

The impact of experienced online grooming manifestations on the respondents' current perception of reality. N = 103

Source: own research.

44 respondents do not feel any and 24 of them do not feel a significant impact of online grooming experiences on their current perception of reality. This data can be interpreted positively, as it demonstrates that there is little perceived harm that could have long-term consequences for the victim. However, the other extreme of the graph demonstrates that the experience of online grooming had a huge impact on the current lives of two subjects. In this question, significant differences were observable between the gender of the respondents. Both answers belonged to women. 12 respondents felt a significant

impact of past experiences on their current perception of reality, which included 11 women in opposition to one man. Medium influence was again felt more often by women (15 respondents) than by men (6). In the other two categories, the differences between the gender of the respondents were not so significant.

In conclusion, a significant number of the respondents who experienced online grooming during childhood and adolescence are affected by a distorted perception of reality. The analysis of male and female responses confirms that the effects of online grooming differ between the sexes. The responses to the aforesaid experiences are valuable for assessing how young people deal with online dangers, and highlighting that online grooming is not a rare, but a widespread phenomenon. For this reason, it is necessary to take educational measures against this problem, involving both the people concerned and their parents, so that they are competent to talk honestly about sexuality and online safety. In the spirit of the slogan saying that prevention is better than cure, it is important to implement preventive measures and protect the youngest once they enter the cyber world.

## **Summary**

The literature contains a significant number of publications on online grooming. They are mainly focused on developing the theoretical basis of this phenomenon, including causes, effects, profile of the perpetrator and victim, and present quantitative studies related to risky behavior online. However, it is worth noting that theory does not always translate into practice, as evidenced by the results presented above. The research results show the prevalence of risks in the online environment, which are faced by the vast majority of its users. The dynamic development of technology generates more and more new potential dangers, which in turn forces educators and parents to constantly update their knowledge and maintain extreme vigilance against any changes in children's behavior. As many as 99% of those surveyed have encountered a form of risky behavior online, primarily involving exposure to pornographic content, misinformation, violence and illegal downloading (known as piracy). The analysis of the data on online grooming yields disturbing results, as nearly half of the survey participants have never encountered the term and are unable to define it. Of the remaining respondents, most learned about online grooming through the media.

Children and adolescents in vulnerable situations are generally reluctant to seek support from adults, preferring instead to contact their peers or use Internet resources. To increase the willingness of the youngest to share their experiences, it is important to build trust in the family and at school. This trust would allow them to easily report situations that worry them. One reason for such

avoidance of help from adults may be the lack of sufficient sex education. Often this education is not carried out by competent people, and children seek information from unreliable sources. In Polish schools, according to the syllabus, the subject called upbringing for life in the family is taught and it aims to familiarize students with the subject of human sexuality, but often fails to fulfill its role. Online grooming affects a wide swath of society, and yet the awareness of this threat remains low. Children and adolescents often do not understand that they are exposed to risk and that some behaviors are not appropriate. In addition, the experience of online grooming can strongly influence later life and the way they perceive the reality around them.

There have been several social activities related to online grooming, but only one campaign has achieved significant popularity in Poland – almost 20 years ago. It seems that online grooming has been somewhat forgotten in the face of other online threats, such as hate speech and scams. However, this survey proves that the phenomenon still exists. The respondents have experienced it, but even now when they are starting or will be starting families, many of them still do not know what online grooming is, what are its manifestations or where they can obtain help. Even as children, aware of the danger, they were reluctant to seek help from adults. This may suggest some deficiencies in the role of family and educational institutions, which should be the main source of support for school-aged children. In order for children to be willing to seek help in crisis situations, it is important to have dialogue with them based on trust, from an early age. They should be made aware that the Internet is a place of tremendous opportunities, but one must be vigilant when using it. Children should know they can report any problem to an adult. It is worth preparing them for certain situations they may encounter as Internet users, but doing so in such a way so as not to discourage them from using the media. From a prospective parent's perspective, it is important to take an interest in online dangers, as technological advances will not make the task of raising the next generation any easier. Although it is difficult to keep up to date with all technological innovations, the most important thing is to ensure one's child's safety. It is crucial to conduct outreach activities both at school and in the family. Teachers and educators, as well as parents and guardians, should educate themselves in order to use the acquired knowledge in the process of raising children and satisfying their need for safety. As the research results show, some situations experienced during online use have a lasting impact on a child's psyche in later life. This should prompt widespread pedagogical reflection on providing the youngest media users with comfortable conditions that will enable them to use the Internet properly.

It should be emphasized that combating online grooming effectively is a task that requires special cooperation of various players. Government organizations, child and youth protection institutions, schools, parents, technology companies



and society as a whole must join forces to effectively prevent and eliminate this problem. Education is a key element in achieving this goal. Awareness and the ability to recognize the signs of online grooming are extremely important for parents, teachers and caregivers. It is necessary to provide them with the right tools and knowledge to protect children effectively against this threat. In addition, schools and educational institutions should teach children how to use the Internet safely, equip them with media competence so that they can recognize online threatening situations and know where to seek help. In conclusion, combating online grooming requires concerted efforts and developed public awareness. We cannot leave children and young people unprotected in the online world. Action is needed to raise awareness, improve education, develop technological solutions and support victims of grooming. Only through these joint efforts will we be able to create a safer space for the youngest online.

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## Doświadczenie groomingu w perspektywie „cyfrowych tubylców”

### Streszczenie

Grooming online to nawiązywanie kontaktów z dziećmi za pośrednictwem Internetu, mające na celu ich późniejsze wykorzystanie seksualne. Celem niniejszego badania było ujawnienie skali zagrożenia poprzez analizę doświadczeń z groomingiem online według młodych dorosłych, pierwszego pokolenia „cyfrowych tubylców” (osób wychowanych przy powszechnym dostępie do Internetu). Zastosowano metodę badawczą, tj. kwestionariusz ankiety. W ankiecie wzięło udział łącznie 136 osób w wieku 19–30 lat. Wyniki wskazują, że świadomość groomingu online jest nadal niska, chociaż prawie każdy spotyka się z jego przejawami. Dzieci i nastolatki nie identyfikowały ich jako potencjalne zagrożenie. W niektórych przypadkach skutki groomingu online mogą mieć ogromny wpływ na postrzeganie rzeczywistości w dorosłości. Respondenci rzadko szukali pomocy w obliczu swoich doświadczeń – najczęściej od rodziców i opiekunów, najrzadziej od swoich nauczycieli. Z pedagogicznego punktu widzenia wskazuje to na braki w realizacji zadań edukacji medialnej przez instytucje państwowe, szkoły i rodziny. Konieczne jest podniesienie świadomości społecznej dotyczącej zagrożeń czekających na dziecko online, zwłaszcza w obliczu tak szybko rozwijającej się technologii i przesuwającego się wieku, w którym osoba nieletnia samodzielnie (bez kontroli) korzysta z zasobów internetowych.

**Słowa kluczowe:** grooming online, edukacja medialna, cyfrowi tubylcy.

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## Multicultural school. Students' identity and value system

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### Abstract

The article presents the phenomenon of multiculturalism and multicultural and intercultural education on the basis of publications by J. Nikitorowicz, J.A. Banks, M.A. Gibson and other authors, as well as own research on the system of values and identity identification of students of the Canadian School in Warsaw. The article attempts to diagnose the system of values and identity of students of the Canadian School and compares the results of the research with the results of other researchers. The research shows what students of the multicultural school identify with and which values are most important to them.

Presenting the system of values of young students, the author drew attention to the fact that the respondents highly value health, freedom, social values such as goodness, honesty, respect, safety and love.

Identity self-identifications refer to declarations related to gender, sense of identity of national, European, global, religious and traditional nature.

The value system and self-identifications of the students of the Canadian School prove that young people in a multicultural school are open-minded, modern and feel first and foremost citizens of the world.

**Keywords:** multicultural education, multiculturalism, identity, identity identification, self-identification, values, value system.

### Introduction

In the modern world, in the process of raising a child, apart from the family home, the school plays an important role. It is the school that should prepare

the student for life in a multicultural society, which is why cultural education is a very important aspect that enables the teaching and upbringing of children of Polish origin and children of foreigners who have a legal status regulated with the Polish state.

Teaching and educating children of foreigners is a complex process, requiring an understanding of various conditions, different from those commonly used in Poland, including religious and cultural ones, customs and ways of thinking. Therefore, preparing children and young people for life in a multicultural society is one of the most important tasks of the school.

The presented diagnosis of the system of values and identity of the students of the multicultural school called the Canadian School in Warsaw will be used to analyze the identity and values that guide the young people of this school. These results will be compared with other data on the identity and values of other students from multicultural, intercultural and culturally homogeneous schools.

## 1. Intercultural and multicultural education

Jerzy Nikitorowicz points out that

Every national culture must be open to contact with another culture, because only intercultural interactions allow for a full understanding of one's own culture, one's place and duty towards it, enabling its development and improvement (Nikitorowicz, 2009, p. 57).

The phenomenon of multiculturalism has existed since the beginning of human history, as man learned about the culture of conquered areas. Very often they made use of some foreign elements that enriched their own culture and science.

M. Fredro, K. Kubin and A. Grudzińska emphasize that

the term multiculturalism is regularly used in the press and is often referred to by journalists and publicists. However, it is used in a vague way, and the semantic field that can be attributed to it is wide (Fredro, Grudzińska, Kubin, 2010, p. 15).

In their publication, the authors draw attention to the use of the term multiculturalism in order to show their work against the background of a discussion related to the theory of multicultural education, which dates back to the 1960s, when the debate on combating discrimination built into the education system in the United States developed. Since then, the theory of multicultural education has been shaped on the basis of broad debates on the role of the education system in combating the mechanisms of social exclusion, the role of schools, teachers and social relations between the majority and minorities.

Multiculturalism is a complex concept, but it can be simply defined as the existence of many cultures in a specific area on earth. Unfortunately, the coexistence of cultures can be accompanied by a strong dissonance, consisting in liv-

ing in social isolation and a complete lack of interest in other cultures. That is why problems have arisen and continue to arise in this process. In the case of a static culture, which determines behaviors and actions, we can rarely deal with problems of transformation and different interpretations. Static cultures constituted a separate whole, while multiculturalism is a challenge to the vision of the functioning of the world in terms of cognition, understanding, cooperation and cooperation of different groups on various levels.

Nowadays, a multifaceted understanding of culture is a difficulty while identifying multiculturalism because it requires that each community be defined as multicultural in, among others, its social, cultural, biological, psychological, intellectual, economic, occupational, religious, educational, political, and other aspects. For this reason, in many countries, efforts are being made to recognize the equality of all cultures, in order to shape a cultural model that combines different values and traditions. The principles of multicultural policy are created, which makes it possible to notice these issues in a given country and to pursue a policy that respects the principles of full equality of citizens, regardless of their origin, race, gender, religion, etc. The actions of various social movements, demanding recognition and rights – these are manifestations of unofficial multiculturalism.

When analysing multiculturalism, due to large religious differences and differences in cultural traditions in relation to the European religion and tradition, we can refer to the coexistence of different cultures in a specific territory. Multiculturalism is seen as a serious problem when culturally homogeneous communities are considered the norm. Therefore, it seems correct to believe that immigration is one of the factors that have caused changes in people's attachment to the idea of national identity. One of the factors influencing the sense of national identity is certainly the tendency towards the Europeanisation of the nation-state due to membership of the European Union, which has reduced the ability of individual Member States to maintain and control relations with their citizens.

The departure from the concept of national identity is not due to the fact that old views are maintained and new ones are created. It is certainly an effect of the process of globalisation, which intensifies international contacts in the field of economy, tourism, migration and cultural exchange. Globalisation contributes to minimising disparities between Member States. This is especially true of the European Union, which proposes differences in identities between welfare states, and at the same time makes decisions that make EU countries more similar and contributes to the process of convergence.

At the same time, it should be noted that Poland, with its essentially homogeneous national and religious structure, is a certain phenomenon in integrating Europe. In Poland, before the fall of communism, we did not have to deal with

the concept of multiculturalism, only after 1989 multinational values began to be respected, because people of different nationalities and religions live here.

At the time of the 2021 Census, the most numerous nationality identification recorded among the total population of Polish was Polish – 97.7%, and non-Polish identification accounted for 3.5%. During this census, the census subjects had the opportunity to mention two non-Polish languages in their home contacts, regardless of whether they were used with Polish or not. The use of Polish was declared by 98.4% of the total population, and the majority of them – 94.3% – use it as the only language. English is used at home by 1.9% of the registered persons, and Silesian by 1.2%.

Currently, there are representatives of various nationalities living in Poland: Ukrainians, Germans, Belarusians, Lithuanians, Lemkos, Armenians, Czechs, Slovaks, Roma, Jews, Tatars, the Vietnamese, Russians, Old Believers, Karaites, Greeks, Kashubians, Mazurians and others. Opening Poland that followed its joining the European Union is inevitably connected with the influx of immigrants.

Therefore, children and young people should be educated in the aspect of multiculturalism, so that they can coexist with other cultures while maintaining their national identity. James A. Banks, among others, emphasizes in his publications that the most important aspect of multicultural education is pedagogy for equal treatment. The author distinguishes five most important elements of multicultural education, such as the integration of information on different cultures, education, tolerance, pedagogy for equal treatment and improvement of the organization of school functioning (Banks, 2014).

According to Banks, equality pedagogy is a strategy of teaching and creating an atmosphere that allows students from different, racially, culturally and ethnically diverse social groups to master the knowledge and skills to function efficiently in a democratic society. Therefore, it is not enough to teach children the basics of writing, reading or arithmetic, but it is crucial to help them adopt active attitudes as future citizens in society. By introducing these principles into the school, teachers can develop their competences through teaching methods, analysis of pedagogical experiences, cooperation with students and educators from socially diverse backgrounds.

When analysing multicultural education, it should be emphasized that there are different concepts of its realisation. Margaret Alison Gibson, (1984) firstly singles out the compensatory approach, calling it charitable multiculturalism. It consists in developing curricula for culturally diverse children who are dominated by majority groups at school. The second approach is cultural understanding, which involves developing cultural awareness in all students, taking into account the cultural heritage of ethnic groups. The third approach is cultural pluralism, which is a teaching strategy developed by a minority for students from an ethnic minority to influence the distribution of power over official school cur-

ricula. The fourth approach, called bicultural education, aims to reject cultural assimilation and seeks to produce students who can function effectively in society regardless of group boundaries. Gibson notices inaccuracies and errors in each of the educational approaches indicated. She does not want to deny the value of the realised educational programs, but proposes the fifth approach, related to the combination of education and culture. Such an understanding of multicultural education allows people to acquire competences within many cultures, therefore it is the individual who will decide at a given moment in life which culture they will draw knowledge and skills from. This education will broaden awareness of many cultures and contribute to the understanding of the whole range of cultural competences that all students possess.

## **2. Multicultural School**

A multicultural school serves to shape the process of integration of foreign students into the school environment, thanks to the activation of children and young people of foreign origin and their parents in order to motivate them to join in the co-creation of school life. The most important thing is to convince them that they are an important part of their school. The environment of a multicultural school is conducive to sensitizing Polish students and their parents, as well as teachers, to the essence of multiculturalism, and enables them to oppose prejudices and stereotypes of national, ethnic and religious origins and to develop mutual tolerance. All the experiences, observations, workshops, lessons and time spent together in a multicultural school make it possible to introduce new and proven solutions in other schools where migrant children, especially refugee children, study.

### **2.1. Socio-cultural identity and value system of young people in a multicultural school**

In today's world, which is the result of globalization, considering the aspect of identity is related to the problem of relating one's own identification in relation to other people. A sense of identity is a reaction to social homogenization.

The notions of globality and nationality are closely related to the intertwining tendencies of contemporary societies and personal reflections related to the sense of identity.

The global world offers many opportunities of self-actualization or lifestyle choices, but this multiplicity evokes ambivalent feelings in the individual – a sense of control over their choices on the one hand, and powerlessness in the face of the multitude of these options on the other (Giddens, 1991, p. 274).

Experiencing dilemmas related to defining one's own identity is inscribed in our whole life, and young people are exposed to particular dilemmas in the process of growing up. Identity is an important aspect of life because it gives the individual a sense of stability and meaning in life in the face of the pluralism of the modern world. The difficulties of defining one's identity manifest themselves in every action in the modern world.

J. Nikitorowicz assumes that identity is layered:

This self-awareness, which is a collection of various identifications, in my opinion, is arranged in layers that are related to each other, interdependent, mutually conditioning, but not always in dynamic dependencies. Therefore, they can be in contradiction with each other, in conflict, or they can form a compact, uniform system (Nikitorowicz, 2009, pp. 372–385).

Therefore, we may be dealing with identification related to more than one culture. Charles Taylor, on the other hand, emphasizes the international aspect of community in the construction of identity:

Contemporary nations must create a communal identity. However, they cannot define themselves only in relation to their members. Every nation is aware that it exists in an international space that includes other nations that have essentially the same rank and dignity. The space of appreciation thus expands indefinitely: for states as well as for individuals (Tayler, 1995, p. 20).

In a multicultural school, in addition to the issue of identity identification, it is important to set priorities in the system of values that are important for each individual and society as a whole. J. Puzynina emphasizes the importance of a value as a word, which "has become in our culture the generalization of everything that a person considers good, strives for, and is guided by in life" (Puzynina, 1993, p. 9). Therefore, in multicultural education, special attention should be paid to the upbringing of young people in a culturally diverse world.

## **2.2. History of the Canadian School in Warsaw**

Students attending the Canadian School in Warsaw learn the principles of respecting the values of different cultures. The school introduces new teaching methods thanks to an innovative educational program that combines the assumptions of the Polish core curriculum with the international program of the International Baccalaureate Organization. The talents of each student are supported by qualified teaching staff, which includes 39 teachers, who implement the principles of international pedagogy with the use of the most modern teaching tools. At school, teachers use a range of interdisciplinary, transdisciplinary, multidirectional learning techniques. Students are encouraged to explore different fields of study and develop their own talents through organized extracurricular activities: music, theater, sports. The school offers a type of holistic education that fosters the formation of intelligent, world-aware citizens. Children and



adolescents deal with the cultural traditions of students from other countries on a daily basis. Through everyday life, friendship and cooperation, they learn to respect each other regardless of their skin color, religion, tradition, way of being and others. Taking part in the celebration of traditional and diverse multicultural holidays, students learn about the culture, traditions, customs, cuisine and customs of other countries. Cultivating many traditions together allows us to understand the way of thinking of people from other countries from an early age.

Each child and their family members are well known and recognized in the school community. Teachers work closely with students, their families, and each other to ensure that children have the best possible learning and nurturing experience. There is a volunteer service at the school, which is led by the school counselor, students are taught to be sensitive to people in need of help. The school develops the principles of multiculturalism through various projects, e.g. "School of Tolerance," which concerns the topics of discrimination and tolerance for other people. There are also other projects like "European Code Against Cancer" and "Children's Rights – Patients" – all this gives children the opportunity to see the world from a different perspective. Teachers show children the principles that it is necessary to face what life brings and to have not only knowledge, but also skills to deal with various problems. Students and parents actively cooperate with the school, participate in decision-making processes, present their ideas and initiatives. In this way, they help to develop the establishments. The Canadian School is well known for its warm atmosphere. It creates an integrated, mutually supportive community, which has a positive impact on shaping children's moral and ethical awareness.

### **3. Researching the value and identity system of the Canadian School students**

#### **3.1. Methodological assumptions**

##### *Research aims, methods and tools*

The aim of the study, conducted in the spring of 2023, was to diagnose the value system of the Canadian School students, their identity and identification. The research on the identity and identification of students of the Canadian School was based on a *questionnaire* modified by the author according to the concept of E. Zamojska (E. Zamojska, 1998), taking into account 21 self-identifications: "I am a human being", "I am a Pole", "I am a European", "I am an African", "I am an American", "I am an Asian", "I am a citizen of the world", "I am a woman/man", "I am against violence", "I am a conscious citizen", "I'm against the death penalty", "I'm a pacifist", "I'm free", "I'm lost in the world", "I'm with-

out future”, “I’m a pragmatist”, “I’m a traditionalist”, “I’m a modern man, I like changes”, “I’m religious”.

In the study of the value system of the Canadian School students, a survey method for quantitative analyses was used. The research was carried out with the use of a questionnaire modified by the author used in EVS research (European Values Study, 2017), which included 13 values: truth, freedom, faith, goodness, love, beauty, safety, honesty, health, pleasure, wealth, respect, obedience.

The study involved 47 students aged 11 to 15. As far as the Canadian School is concerned, in the school year 2022/2023, 157 students attended primary school, including 85 teenagers. Among primary school students, 41% were children of foreign nationals and 59% were of Polish origin, and at the kindergarten level, there were 57% of children of foreign origin and 43% of children of Polish origin (<https://canadian-school.pl/o-nas/nasza-szkola>).

During the study, the students received questionnaires with the instruction: "Mark which values indicated in each question are the most important to you and determine their importance on a scale from 0 to 10" (with 10 being the highest value on the scale). The research was conducted anonymously, which may have contributed to giving honest answers. An analysis of students' opinions on the given values and identity self-identification was carried out. The analysis made it possible to describe the value system and identity of the students using numerical and percentage data. In order to analyze the obtained results, statistical techniques such as average proportions and percentage descriptions were used.

### **3.2. Research problems and hypotheses**

1. Do the Canadian School students have a sense of national identity?
2. Are the students traditionalists or modern?
3. Do students identify with religion and faith? Do they not?
4. Are the respondents conscious citizens?
5. What is the hierarchy of values of the students of the Canadian School? Which values are most appreciated?
6. Do the Canadian School students value social and ethical values?

Working hypotheses:

- Ad 1. The students surveyed are likely to attach importance to their nationality but are open to other cultures.
- Ad 2. Probably, the students are more modern than traditional.
- Ad 3. The respondents do not seem to pay much attention to faith.
- Ad 4. It seems that the surveyed students are conscious citizens.
- Ad 5. It seems that the students surveyed value health, freedom and safety the most.
- Ad 6. The students surveyed are likely to highly value moral and social values.

### 3.3. Research results

The results of the Canadian School students' identity survey presented in Chart 1 confirm that the respondents declare self-identification "I am human" (99.3% of the choices), which is the highest rank of their choices. Students clearly defined their social roles referring to gender, namely "I am a woman" (49% of the choices) and "I am a man" (51% of the choices).

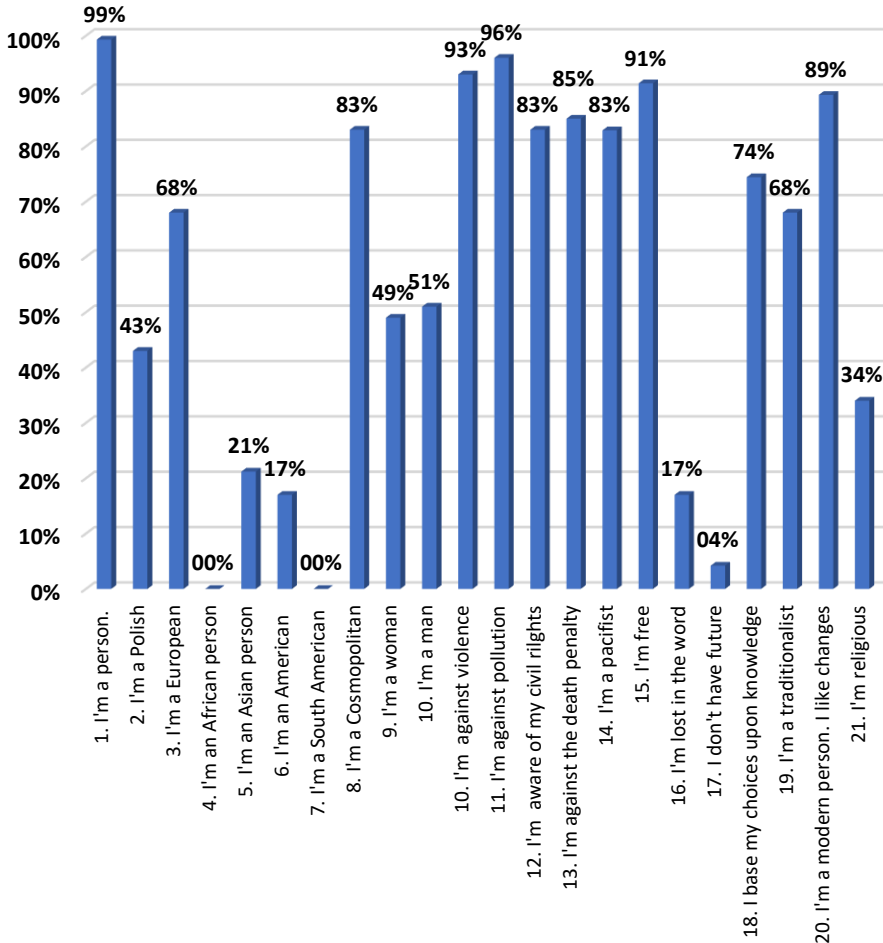


Chart 1

Self-identification of the Canadian School students (n = 47)

Source: Author's own study.

Respondents declare "I am against environmental pollution" (96% of the choices) and "I am against violence" (93% of the choices), "I am against the

death penalty" (85% of the choices), "I am a pacifist" (82.9% of the choices). It is likely that social changes, the increase in violence, and the desire to feel safe contribute to young people's opposition to threatening social dangers.

The surveyed students have a great desire for freedom, which is why they declare "I am free" (91.4% of the choices), which is probably due to their openness to the world, to new cultures. That is why they feel like "citizens of the world" (83% of the choices). Perhaps learning about other cultures contributes to awakening a sense of freedom, tolerance and understanding of other people. They identify with the identification "I am a modern person, I like changes" (89.3% of the choices), which is why they probably show a greater distance towards tradition, because the identification "I am a traditionalist" achieved a lower result (68% of the choices). The Canadian School students feel mostly pragmatic (74.4% of the choices) and are likely to move away from religious values as only 34% declare "I am religious".

Two-thirds of the respondents declare "I am European" (68% of the choices), and only 43% of the respondents say "I am Polish", while 21.2% declare "I am Asian", and 17% "I am American". This may indicate that they attach more importance to European identity than to national identity. Only one-sixth of respondents declare "I am lost in the world" (17% of the choices) and a few say "I am without any future" (4.2% of the choices), which probably indicates that the surveyed students feel safe in their environment and are not afraid of the world around them.

Let us compare our own research on identity conducted among the students of the Canadian School in Warsaw with the research conducted by N.M. Ruman (2014) in secondary schools in Pszczyna, which are also attended by students with a multicultural background. The land of Pszczyna, over the millennium has belonged to Poland, Bohemia and Prussia. The author of the research in schools in Pszczyna drew attention to identity behaviors on the basis of an interview she conducted among 53 respondents. The number of respondents is similar to my group of respondents, so you can compare the results for similar identity-related questions. When asked who they felt they were, the respondents answered, e.g. "Pole" (49 people – 92.45%), "Pszczynian" (41 people – 77.35%), "European" (9 people – 16.98%). Compared to the results of our own research, it can be concluded that despite cultural diversity the respondents from schools in Pszczyna feel Polish whereas the students from the Canadian school show less belonging to Poland and being Polish (only 43%). Similarly, there are differences between the identification "I am European," where the respondents from the Canadian School identify with Europe and being European in as many as 68%, and the youth from Pszczyna who identify with this identification only in 16.98%. This probably proves that the multiculturalism of the respondents from the Pszczyna region does not have as much impact on their sense of identity as at-

tachment to their place of residence does. In their statements, they emphasize the connection with the country in which they live: "I love my homeland, I was born in this country" (43 people – 81.13%), "I am strongly connected with my country and the traditions that Poles maintain" (34 people – 64.15%) (Roman, 2014). The author of the study claims that

from the analysis of the young people's statements, it can be concluded that these wise, sensitive and responsible young people do not feel lost in the modern world. This is confirmed by the fact that in the collection of statements obtained from the respondents one can find common elements – the family and Silesian religiosity play a great role (Roman, 2014, p. 143).

In the case of the identity of the surveyed students from the Canadian School, religiosity does not play such an important role, it is the least important factor and only 34% of the respondents identify with it. The students of the Canadian School are citizens of different countries of the world, which is why they continue to identify with their country of birth and, above all, feel European or "citizens of the world". Multiculturalism teaches them tolerance and respect for other cultures.

An example of another multicultural school is the Primary School in Mrokowo in the municipality of Lesznów, near Warsaw. This school is attended by students of Chinese, Vietnamese, as well as Ukrainian and Armenian origin, among others. Research conducted by A. Mikulska and K. Tu (2017) confirms that the number of foreign students in this school is growing year by year and in the year of the study there were 126 of them, i.e. 19% of all students. Due to the growing number of children of foreigners, the school received support from local authorities and foundations: World at Your Fingertips, Intercultural Education, Foundation for Social Diversity and Association for Education and Progress STEP (Mikulska, Tu, 2017, p. 226). Thanks to the support of the foundation, employed assistants and teacher trainings, many projects were carried out to develop integration, improve the school's multicultural policy, increase teachers' intercultural competences, develop creative workshops and a language and culture classroom. The activities undertaken in this school have made it possible, as in the Canadian School, to improve multicultural education, where students gain knowledge and experience related to the customs and traditions of their peers from other cultures. This fosters the creation of an open and tolerant school where every student feels needed and safe.

The results of the second study of the student value system in the Canadian School (Chart 2) show that they value health (90% of the choices) and freedom (89.5% of the choices) the most. This was followed by security (79.5% of the choices), which could probably mean that they want to live in a good and safe world.

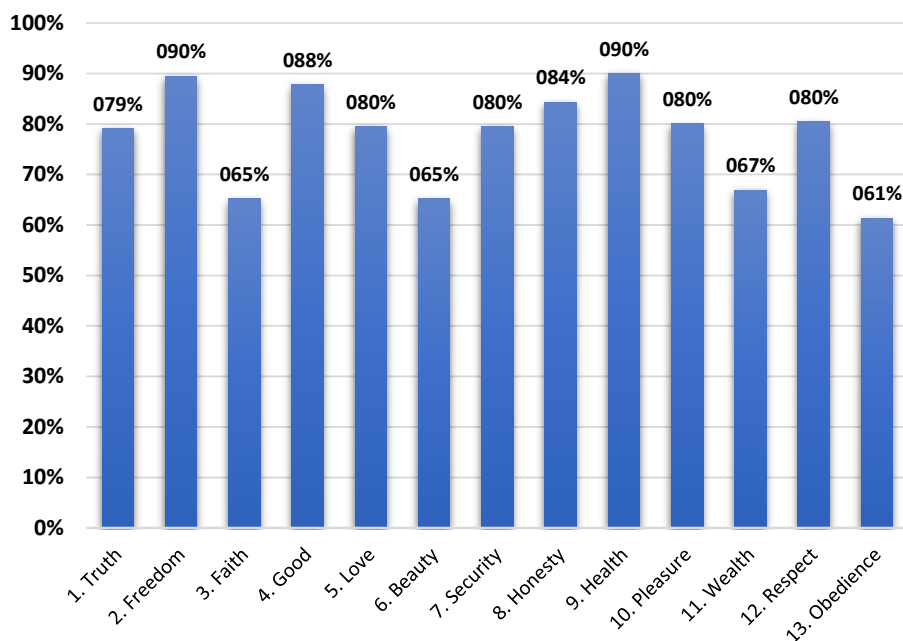


Chart 2

The value system of students from the Canadian School in Warsaw (n = 47)

Source: Author's own research.

Among ethical values, they value goodness very highly (87.8% of the choices), respect (80.4% of the choices), truth (79.1% of choices), honesty (84.3% of choices), which may be due to family upbringing and education.

This was followed by pleasure (80% of the choices) and love (79.5% of the choices). Material values related to wealth and property were ranked lower (66.9% of the choices). Religious values (65.2% of the choices) and aesthetic values, such as beauty (65.2% of the choices), are valued slightly lower, and obedience (61.30% of the choices) is valued the lowest, which is perhaps becoming less important and appreciated by today's teenagers.

Comparing the results of the author's own research with the research on the values of primary school students conducted under the leadership of M.J. Szymański in the years 1994–1995, one can see some similarities and changes in the value system of young people from 2023 and those from almost 30 years ago. M.J. Szymański emphasized that in the 90s, "the youth values allocentric values the most – close and sincere relationships with their friends, common activities, experiences, mutual friendship and trust" (Szymański, 1998, p. 48). In retrospect, modern research shows that nowadays young people value these values less, but they are still quite high in the value system (love 79.5%). Perhaps

the pandemic situation and the isolation of society have contributed to the decline in social relations, nevertheless, it is worth emphasizing that today's young people from the Canadian School highly value important social and ethical values such as health (90%), freedom (89.5%), goodness (87.8%), honesty (84.3%), which proves that upbringing and teaching in the spirit of multicultural education is conducive to maintaining these important universal values.

A study conducted by students at the Canadian School confirmed that they value the pleasures of life quite highly (80%), which in M.J. Szymański's research occupied the third place (on a scale from 1 to 10). On the other hand, material values ranked the lowest on the scale of the respondents (richness, wealth 66.9%), similarly to M.J. Szymański's research, they were in the last place on a scale from 1 to 10.

## Conclusions

1. Identity and identification studies have shown that students at the Canadian School present more similarities than differences, which may be related to the process of globalization, which has a significant impact on a young person's life. It shapes their identity, personality, lifestyle and values. Contemporary culture creates a new man, referred to as a global teenager according to Zbigniew Melosik (Gromkowska-Melosik, Melosik, 2012).
2. The surveyed students from the Canadian School come from different countries of the world, which is why they mostly identify with the culture of the country where they were born, and at the same time feel European and citizens of the world. On the other hand, the majority (92.45%) of students from Pszczyna, despite their cultural diversity, feel Polish, and only 16.98% say that they are "European", which may mean that multiculturalism may affect the identity of the respondents, but it is also very important to be rooted in the culture of the country in which they live.
3. The results of the study indicate that multiculturalism teaches tolerance and respect for other cultures. This may cause them to pay less attention to tradition and declare identification "I am a modern man" (89.3%), more often than "I am a traditionalist" (68%).
4. The Canadian School students feel mostly pragmatic (74.4% of the choices) and the results of the survey indicate that they are probably moving away from religious values, as only 34% declare "I am religious". This low rate of religiosity may be due to the fact that students in this school do not have religion classes. At the same time, it may confirm J. Mariański's research on the religious changes in Polish society (Mariański, 2002) and the changes in

- the religiosity of Polish youth and their departure from the Church (Mariański, 2008).
5. Only one-sixth of the respondents declare “I am lost in the world” (17% of the choices) and a few say “I am without any future” (4.2% of the choices). Which probably indicates that the surveyed students feel safe in their environment and are not afraid of the world around them.
  6. Multicultural education and activities undertaken at the Canadian School and the Primary School in Mrokowo in the municipality of Lesznowola near Warsaw prove that students gain knowledge and experience related to the customs and traditions of their peers from other cultures, and at the same time become very open and tolerant.
  7. The most valued values among the surveyed students are health and moral values such as respect, goodness and honesty. These values are at a similar level and have a universal dimension.
  8. The research shows that the students from the Canadian School attach less importance to consumer and material values, similar to the research conducted under the direction of M.J. Szymanski in 1994–1995. This is probably related to the fact that young people from multicultural schools come from wealthy families and do not feel a sense of material deprivation, so they turn to social and moral values.
  9. In the conditions of a multicultural world, it is important to shape an open identity and values based on cognition, tolerance and understanding of other people.

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## **Szkoła wielokulturowa. Tożsamość i system wartości uczniów**

### **Streszczenie**

Artykuł przedstawia zjawisko wielokulturowości i edukacji wielokulturowej oraz międzykulturowej na podstawie publikacji J. Nikitorowicza, J.A. Banksa, M.A. Gibson i innych autorów oraz własnych badań, dotyczących systemu wartości i identyfikacji tożsamościowej uczniów Kanadyjskiej Szkoły Podstawowej w Warszawie. W artykule podjęto próbę zdiagnozowania systemu wartości i tożsamości uczniów wielokulturowej Kanadyjskiej Szkoły Podstawowej w Warszawie i porównano wyniki badań z wynikami innych badaczy. Badania pokazują, z czym identyfikują się uczniowie szkoły wielokulturowej i które wartości są dla nich najważniejsze.

Przedstawiając system wartości uczniów, młodzieży, autorka zwróciła uwagę na to, że badani bardzo wysoko cenią zdrowie, wolność, wartości społeczne takie jak dobro, uczciwość, szacunek, bezpieczeństwo i miłość.

Autoidentyfikacje tożsamościowe badanych odnoszą się do deklaracji związanych z płcią, poczuciem tożsamości o charakterze narodowym, europejskim, globalnym, religijnym i tradycyjnym.

System wartości i autoidentyfikacje tożsamościowe uczniów Kanadyjskiej Szkoły Podstawowej w Warszawie dowodzą, że młodzi ludzie w szkole wielokulturowej są otwarci, nowocześni i czują się przede wszystkim obywatelami świata.

**Słowa kluczowe:** edukacja wielokulturowa, wielokulturowość, tożsamość, identyfikacja tożsamościowa, autoidentyfikacja, wartości, system wartości.



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## (Non) aggressive, (non) violent computer games – definitional challenges

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### Abstract

The primary goal of this research endeavor is to delineate the challenges associated with classifying computer games as “aggressive or violent”. These terms are frequently invoked in media and public discourse, particularly concerning the influence of computer games on aggressive behaviours, such as those observed in mass shooting incidents. However, both a comprehensive literature review and the findings derived from this study affirm the absence of definitive criteria for characterising what truly constitutes “aggressive or violent” computer games. The data underscore the necessity for deliberation in defining the categories of aggression or violence within gaming spheres, enabling a clear demarcation between so-called aggressive or violent computer games and other types. This delineation is crucial given that most games center around competition or resolving diverse conflict scenarios, wherein various forms of aggression or violence are employed—for instance, the act of fouling a player in FIFA, a simulation of football. The research focused on computer players aged 13-14 and were selected for participation based on their behaviour related to computer games.

**Keywords:** computer players, (non) aggressive, (non) violent computer games.

## Introduction

Media coverage, particularly concerning violent content in computer games, has introduced terms like “aggressive computer games” and “violent computer games” into public discourse. Politicians and the public often associate aggressive behaviours, such as mass shootings, with computer games that feature violence. In the well-known and high-profile “Brown v. Entertainment Merchants Association (EMA)” case, the United States Supreme Court’s ruling in 2011 struck down California law that restricted the sale of certain so-called “violent” video games to minors without supervision. However, the contentious issue regarding the definition of “aggressive or violent video games” remains unresolved (Supreme Court opinions, 2011). This article aims to present research results illustrating the challenges in classifying games as “aggressive” or “violent”, as well as other game categories. While these terms are widely used in daily life due to media emphasis on contentious game aspects and the oversimplification of their complex content, both literature review and the study’s findings reveal a lack of clear criteria for defining aggressive or violent computer games. An important perspective shedding light on the intricacies of defining, categorising, and evaluating games as aggressive or violent comes from the resolution put forth by the American Psychological Association (APA) in 2020. This resolution underscores the necessity to enhance the assessment system concerning the degree and specific traits of aggression within games, considering the evolving global landscape.

BE IT FURTHER RESOLVED that APA strongly encourages the Entertainment Software Rating Board to refine the ESRB rating system specifically to reflect the levels and characteristics of violence in games in addition to the current global ratings (APA, 2020, p. 3).

These identified gaps raise concerns about drawing conclusions regarding the role of aggressive or violent computer games in shaping human behaviour. The diversity of studies and inconclusive findings make an overall assessment of their influence challenging. Some studies suggest a correlation between games and aggressive behaviour (Anderson & Bushman, 2001, 2002; Gentile et al., 2017; Greitemeyer, 2018; Krahé, 2014; Olejarnik & Romano, 2023; Teng et al., 2019; Yao, et al., 2019), while others refute such claims (APA, 2019, 2020; Dupee et al., 2023; DeCamp & Ferguson, 2017; Ferguson, 2015; Ferguson & Kilburn, 2010; McCarthy et al., 2016; Pan et al., 2018; Przybylski, 2022; Przybylski, & Weinstein, 2019; Vuorre et al., 2022). Attributing aggressive behaviours like shootings to computer games provides a simplified explanation compared to analysing the multifaceted factors influencing these behaviours. This article primarily addresses the absence of clear criteria for categorising games as aggressive, containing violence, or falling into other game categories (e.g., strategic,

sports), which remains poorly understood. Despite limitations in the study (a small, non-probabilistic sample), it contributes to filling the gap in understanding this aspect of computer games. Obtained results, such as respondents classifying the FIFA computer game both as containing violence (8%) and as a strategic game (14%) without PEGI markings or descriptors, confirm the difficulties in game classification. This indicates subjectivity in determining what is aggressive or violent in a game and varies among evaluators (public opinion, politicians, the PEGI system, or the players themselves). These results emphasise the need for further exploration of so-called aggressive and violent computer games. Crucially, this exploration should involve the systematization of theoretical foundations regarding the concepts of “aggression” and “violence” in this context.

## **Aggression, Violence – Defining Concepts**

Interdisciplinary concepts regarding the etiology of aggressive and violent behaviours emphasise the multifaceted nature of causes and their mutual interactions. The term “aggression” is broader than “violence” and in a literal translation signifies: *aggressio* (Lat.) – assault, *gressus* – step, movement, activity, *aggr* – attach, *aggredior* – attempt, acquire, strive, attack (Kopaliński, 2003, p. 23). Representatives from various scientific disciplines, formulating different definitions of aggression, emphasise its distinct components and determinants. In the extensive literature, three main trends in classifying aggression can be observed: firstly, psychological factors as a response to frustration of goals and needs – primarily intentions and deliberateness (Berkowitz, 1965, Dollard et al., 1939; Frączek, 2002). Secondly, biological factors – primarily instincts and drives (Freud, 1933, 1994; Lorenz, 2003) and genetic factors (Lombroso, 2006; Sheldon, 1949). The third trend relates to environmental factors – rooted in pedagogical theories (Rousseau, 1995, Locke, 2002), sociological theories (Durkheim, 1951, Merton, 1949, Becker, 1963), and social learning theory (Bandura, Ross, Ross, 1961, 1963). The typology proposed by Pyżalski (2012) points to the hierarchical relationship between the concepts of aggression, violence, and bullying. It suggests that while every form of violence constitutes aggression, not every form of aggression qualifies as violence. Violence, in this context, is a slightly narrower term that emphasizes the intentional nature of behaviors, the dominance of one party (e.g., physical, economic, psychological), and the cyclical pattern of behaviors (Olweus, 2013). However, legal frameworks concerning the definition of domestic violence make an exception by acknowledging that violence can be a one-time occurrence (Journal of Laws No. 180 item 1493, 2005).

## Aggressive vs. Violent Computer Games – Definitional Challenges

Computer games are perhaps the richest cultural genre we have yet seen, and this challenges our search for a suitable methodological approach... (Aarseth, 2001)

Systematising the terminology related to the categorization of so-called “aggressive” and “violent” games is a difficult and complex task. The problematic issues not only stem from the previously mentioned taxonomic difficulties but also from the ambiguous nature of the term “computer game” itself. Defining this concept relies on two main contexts. Firstly, a computer game can be defined from a technological perspective as a computer program, a set of instructions understood and executed by the processor. This broad definition enables the utilization of various types of games available in the market (Skrzypczak, 1998). Secondly, a computer game can be perceived as a form of entertainment and play, where it is identified as a specific type of computer program whose main or one of the main purposes is to provide entertainment (Chwaszcz, 2005). The multidimensional nature of technological determinants related to defining the concept of a “computer game” also arises from the fact that a computer game can be played on a screen, which can be an independent device (e.g., a television) or a component of an output device (e.g., a tablet, mobile phone, or smartphone). Additionally, possibilities stemming from the development of virtual reality (VR) increasing immersion (e.g., through VR headset) (Steuer, 1992). However, respecting the fact that all forms of games have evolved almost in parallel, and the vast majority can be played on a computer, following Juul (2010) and Kuipers (2010) the term “computer game” in this study is used as a hypernym for all the above concepts. These various perspectives allowing different interpretations of what a computer game is, introduce additional challenges in classifying games in terms of their content (including aggressive and violent content). The contention over defining an aggressive or violent computer game arises from the fact that every game contains behaviours that are conventionally defined as aggression or violence (Serpa, 2021, Adams, 2014). The cause of an aggressive act may lie in the competitive nature of games containing violence rather than violence itself (Dowsett et al., 2019). Consequently, attempting to categorise these concepts may lead to the belief that there is a flawed or non-existent shared definition of a violent game, even if the terms aggression and violence are well-defined in this context (Serpa, 2021). Despite the widespread use of these terms in everyday life, the subject literature lacks a dichotomous division into computer games as aggressive or violent, confirming inconsistencies in defining these concepts. Games are most commonly categorised as: (1) action games (encompassing shooters, fighting, adventure, robberies, car thefts), (2) adventure games (containing literary elements where the player experiences various adventures), (3) role-playing games (action RPGs, MMORPGs),

(4) strategy games (tactical in nature, containing military, economic strategies), (5) simulation games (animal or vehicle simulators and their environments), (6) sports games (involving real or imaginary sports disciplines like soccer or hockey), (7) puzzle games (requiring logical thinking or skill), (8) educational games (with a strong educational-cognitive aspect) (Zajączkowski, Urbańska-Galanciak, 2009). Adams (2014) classifies games as: (1) shooter games, (2) action and arcade games, (3) platform games, (4) fighting games, (5) strategy games, (6) role-playing games, (7) sports games, (8) vehicle simulations, (9) construction and simulation games, (10) adventure games, (11) puzzle games. Only the verification of games in terms of their content confirms that acts of aggression and violence belong to the majority of computer games (except educational games) (Markey, 2015, Adams, 2014). According to game designer Ernest Adams (2014), the essence of many games revolves around conflict, often depicted as violence in various forms and intensities, hence most games worldwide contain violence in some more or less abstract form. An example of a computer game illustrating difficulties in this area is Super Mario Sunshine. Following the previously given definitions of aggression and violence, the game Super Mario Sunshine, containing aggressive and brutal mechanics (inflicting damage and killing enemies), should be classified as an aggressive or violent game. On the other hand, Super Mario Sunshine lacks descriptors indicating the presence of violence. Establishing criteria that would determine whether a game is aggressive or violent remains problematic. According to Markey (2015), uncertainties in this matter lead to most games being categorised as containing violence since 90% of the most popular games (from 2010 to 2015) displayed some form of aggressive behaviour. The question of whether the presence of violent or aggressive content alone suffices to define a game as aggressive or violent remains unresolved. This is especially significant as the literature on the influence of games on the formation of aggressive behaviours lacks clarification on how the presence of aggressive or violent content relates to defining a game as aggressive or violent. For instance, whether games like FIFA or Super Mario Sunshine meet the criteria to be classified as violent games.

## **Methodology**

### **Procedure and participants**

The study's findings on how players classify computer games as containing violence or as strategic games are a pivotal part of an extensive inquiry into finding effective coping mechanisms for the challenges faced by computer gamers during gameplay. To ensure a focused sample, a Selective Survey Questionnaire

(SSQ) was devised, targeting a group of 48 computer gamers. The research sample was purposefully homogeneous, aligning in age and time spent on strategic and violent computer games (e.g., shooting games).

The SSQ contained 12 questions, a mix of seven closed-ended and five open-ended inquiries. This survey helped gather socio-demographic data to understand students' engagement with computer games and assess parental roles in monitoring and control of students' engagement with computer games. Thanks to that we were able to explore popular computer game titles among students, encompassing both violent and strategic games, how long and frequent their gaming sessions are, compliance with PEGI rules, and parental oversight in this domain.

### Results from the Selective Survey Questionnaire (SSQ)

In the study sample there were thirty-eight boys ( $M = 38$ ) and ten girls ( $F = 10$ ), aged 13-14. A majority, 54.2%, came from rural areas, while 45.8% lived in urban regions. All participants confirmed owning a computer and playing computer games. Notably, 62.5% acknowledged playing games with violent content, while 72.9% reported playing strategic games.

Table 1

*Comparison of responses regarding computer ownership and playing computer games by surveyed individuals*

Question	Response	Count	Percentage
Do you own a computer?	Yes	48	100,0
	No	0	0,0
Do you play computer games?	Yes	48	100,0
	No	0	0,0
Playing games containing violence	Yes	30	62,5
	No	18	37,5
Playing strategic games	Yes	35	72,9
	No	13	27,1

Source: own research.

The average time spent by respondents playing computer games is 118 minutes per day. Students reported they spend an average of 46 minutes on games containing violence and 59 minutes on strategic games daily.

A comparable distribution of data was observed concerning adherence to PEGI labeling rules. Over half of the respondents declared compliance with these rules (52.1%), while just under half (43.8%) stated non-compliance. Two participants did not provide an answer to this question. Almost all respondents



(91.7%) mentioned that parents know the games their child plays, with two participants not responding to this question. Simultaneously, a significant majority (85.4%) indicated that parents monitor the time spent playing computer games, though again, two participants did not respond to this question.

Table 2

*Comparison of responses regarding time spent playing computer games by the surveyed individuals*

Question	Count	Mean (minutes)	Standard Deviation
Time spent daily playing computer games	47	118	69,03
Time spent daily playing games containing violence	41	46	51,12
Time spent daily playing strategic games	44	59	57,87

Source: own research.

## The most popular types of computer games among the surveyed individuals

The Selective Survey Questionnaire allowed for obtaining information regarding the most popular types of computer games played by students. Participants were asked to list the names of games containing violence (e.g., shooters) that they play most frequently, as well as strategic games (names of strategic computer games played most often). The most popular computer game titles among the respondents include: League of Legends (LOL) (11%), FIFA (11%), Battlefield (8%), Counter Strike (CS) (5%), Might & Magic: Duel of Champions (5%), Farming Simulator/Crane Simulator (5%), Call of Duty (4%), Tibia (4%), Minecraft (3%), Grand Theft Auto (GTA) (3%), Age of Empires (3%), Anno 2070 (2%), Heroes (of Neverth/VI) (2%).

It's noteworthy that when respondents filled out the selective survey in open-ended questions regarding the categories of games they play (those containing violence or strategic games), they mentioned the same game titles: (1) League of Legends, (2) Battlefield, (3) FIFA, (4) Call of Duty, (5) Might & Magic: Duel of Champions, (6) Tibia. The listed computer game examples could be categorised both as strategic (requiring logical thinking) and violent (containing acts of aggression and violence). Therefore, the computer game titles classified by respondents as containing violence include: (1) League of Legends, (2) Battlefield, (3) FIFA, (4) Call of Duty, (5) Might & Magic: Duel of Champions, (6) Farming Simulator/Crane Simulator, (7) Tibia, (8) Counter Strike, (9) Minecraft, (10) Grand Theft Auto. Simultaneously, the majority of these titles were categorised by respondents as strategic games: (1) League of Legends, (2) Battlefield,

(3) FIFA, (4) Call of Duty, (5) Might & Magic: Duel of Champions, (6) Tibia, (7) Age of Empires, (8) Anno 2070. Exceptions were the games CS, GTA, and Minecraft classified solely by respondents as containing violence, and Age of Empires, Anno 2070 classified solely as strategic games.

According to PEGI classifications, League of Legends and Age of Empires are strategic, free online network games designed for ages 12 and up, allowing interaction with other players in an online mode. Moreover, League of Legends is classified as a fantasy game. FIFA and Farming Simulator/Crane Simulator are games for ages 3 and up, allowing interactions with other players. Minecraft, Tibia, Anno 2070, and Might & Magic: Duel of Champions are games for ages 7 and up, containing violence and fear, allowing interactions in online mode. Battlefield, Call of Duty, Grand Theft Auto are games for ages 18 and up, containing violence, vulgar language, and allowing interactions in online mode. Counter Strike is designed for ages 16 and up, containing violence and enabling interactions in online mode. It's intriguing that Counter Strike, labeled as containing "only" violence and not vulgar language, the age category was lowered, raising questions about the applied age category difference – allowing participation in acts containing violence at "only" 16 years old while using vulgar language at "only" 18 years old.

## Limitations of the study

A limitation of this study is the small sample size ( $N = 48$ ) and the nature of its selection, which was not probabilistic. This stems from the fact that the obtained results are part of a broader study (pedagogical experiment) assuming a small sample size and purposeful sample selection. These limitations hinder generalization based on the gathered data. Nevertheless, the empirical data confirming the lack of clear criteria and difficulties in classifying games as aggressive, violent, or strategic may lay the groundwork for proposing new hypotheses and conducting research involving a larger and more representative research sample.

## Results

From the obtained data regarding the classification of computer games both as containing violence and as strategic games, at least two conclusions can be drawn. The first is closely related to theoretical conditions, as the study's results confirm the absence of clear criteria defining the concept of a "violent" computer game in the subject literature (beyond their common usage in everyday

language). The difficulties in defining these categories mentioned at the outset prevented a clear determination of what being an aggressive or violent game means. On one hand, the participants' subjective approach in classifying these games regarding elements of aggression or violence appearing in almost every known category of computer games is unsurprising. However, it's essential to note that the lack of clarity in their classification was also reflected in the empirical results, providing a basis for considering new research directions in this field. The second conclusion derived from the data regarding the time spent on computer games by the respondents is that students declared an average of around two hours (118 minutes) daily playing computer games. From this overall figure, they allocated approximately an hour (59 minutes) to strategic games and just under an hour (46 minutes) to computer games containing elements of violence. Nevertheless, it's crucial to emphasise that most games were simultaneously classified by them as both containing violence and as strategic games. Therefore, the overall result of 118 minutes of average time spent on playing computer games encompasses participation in both strategic and violent games, where both categories refer to games involving acts of aggression and violence. For the purpose of this article, aggressive and violent games will be used interchangeably.

## **Conclusions**

The undertaken explorations align with the field of media pedagogy, focusing on developing media literacy skills, including the ability to critically evaluate media. Identified difficulties in categorising computer games indicate the need for further explorations in this aspect. Particularly intriguing would be to explore how game classifications impact their reception among diverse social groups and examining the perspectives of parents, educators, media, and players. Continuing research focusing on analysing the scale of subjectivity could contribute to understanding these classification differences, considering social, cultural, and age-related differences. The paradigm shift concerning the impact of games containing acts of aggression and violence on human behaviour remains open and multidimensional, consistently eliciting emotions and polarising positions on this issue. Speaking about the role of computer games in shaping aggressive behaviour without organising concepts related to the nature of so-called aggressive, violent computer games carries several potential threats. Focusing on games as a medium shaping aggressive behaviour can lead to oversimplification of the problem and narrowing the perspective on the actual causes of these behaviours. Consequently, it might stigmatise the entire gaming culture and, most dangerously, divert attention from who holds responsibility for education and upbringing.

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## (Nie)agresywne, (nie)brutalne gry komputerowe – wyzwania definicyjne

### Streszczenie

Głównym celem badań jest określenie wyzwań związanych z klasyfikowaniem gier komputerowych jako „agresywnych lub pełnych przemocy”. Terminy te często pojawiają się w mediach i debatach publicznych, szczególnie w kontekście wpływu gier komputerowych na zachowania agresywne, takie jak te obserwowane w masowych strzelaninach. Jednak zarówno obszerny przegląd literatury, jak i wyniki uzyskane w ramach tych badań potwierdzają brak jednoznacznych kryteriów charakteryzujących, które gry komputerowe są „agresywne lub pełne przemocy”. Dane podkreślają konieczność dyskusji nad definicją kategorii agresji lub przemocy w grach, aby umożliwić jasne rozróżnienie pomiędzy tak zwanymi agresywnymi lub brutalnymi grami komputerowymi a innymi typami gier. Rozróżnienie to jest kluczowe, ponieważ większość gier opiera się na rywalizacji lub rozwiązywaniu konfliktów, w których wykorzystywane są różne formy agresji lub przemocy, na przykład faul w symulacji piłki nożnej (jaką jest FIFA). Badania skupiły się na graczach komputerowych w wieku 13–14 lat, którzy zostali wybrani do udziału w badaniu w oparciu o ich zachowania związane z grami komputerowymi.

**Słowa kluczowe:** gracze komputerowi, (nie)agresywne gry komputerowe, (nie)brutalne gry komputerowe.







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## Tutoring: meanings attributed to the term by tutors. An analysis of the semantic field

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### Abstract

The aim of the conducted research was to determine how academic teachers-tutors conducting tutoring activities understand the term tutoring. The research material comprised transcripts of a focus interview conducted in February 2022 with tutors participating in the programme “Masters of Didactics – Implementation of the Tutoring Model” at the Maria Grzegorzewska University. The transcripts were prepared by the researchers who authored this text. The study’s results were analysed using the qualitative approach of semantic field analysis, which was developed by Regine Robin and her colleagues and modified by Barbara Fatyga. The theoretical foundation for this study is based on semantic field theory. The analysis process employed the qualitative data analysis software MAXQDA. The conclusions drawn from the analysis suggest that reconstructing the

network of meanings can lead to a more accurate understanding of the term *tutoring* from the perspective of the university teachers-tutors participating in the programme.

**Keywords:** tutoring, tutor, “Masters of Didactics”, semantic field analysis.

## Introduction

The analysis of Polish professional literature devoted to academic didactics shows that for the last few years the term *tutoring* has been significantly present in the area of Polish higher education. Undoubtedly, the experience of the tutoring relation was strengthened thanks to the project “Masters of Didactics” realised in the years 2018–2023, which over 900 academic teachers and 10 000 students took part in<sup>1</sup>. The publication summarising this unprecedented undertaking in Polish higher education mentions the concept of a tutoring model based on the practice of tutoring implemented at universities at the time of project duration (Brdulak et al., 2022, p. 87). Tutoring is described there as a teaching approach comprising *education focused on a student*, where this focus is defined as “a personalized approach to a given student, taking into account their current knowledge, skills and personal development goals” (Brdulak et al., 2022, p. 86). This approach is realised by: diagnosing dynamically changing students’ needs, expectations and capabilities, monitoring their progress, relating them to the effects of teaching and using individualised teaching methods (Brdulak et al., 2022, p. 86).

Undertaken tutoring practice supported by experiences from a few leading European universities also proved motivating for the research area. Tutoring was analysed here from the perspective of:

- its assumptions and forms also in relation to Anglo-Saxon experiences (Dąbrowska and Dąbrowska, 2022);
- possibilities of its implementation in the academic world (Włodarczyk, 2018), together with experiences deriving from grassroots initiatives concerning its implementation in Polish higher schools (Dziedziczak-Foltyn et al., 2020);
- its importance for improving the quality of academic education (Machowska-Okrój, 2023);
- using it for teaching social skills (Bojanowicz, 2022), academic skills (Kędzierski et al., 2022), or entrepreneurial students (Kwaśny and Żur, 2019);
- the very perspective of tutees in the light of their reflectiveness and educational potential (Perkowska-Klejman, 2023);

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<sup>1</sup> The data comes from written information obtained by e-mail correspondence of 29.09.2023 from the Ministry of Education and Science, which supervised two editions of the “Masters of Didactics” project.

- its use in hybrid education and remote education, in particular at the time of COVID-19 pandemic (Cieszyńska and Dudziak, 2022; Waszczuk et al., 2022; Czyżewska et al., 2022);
- analysing tutoring tools, in this essay (Kowalkowska, 2022) or dialogue (Zawadzka 2022).

The aforesaid publications show tutoring not only as activities undertaken for the benefit of student development. The outcomes of the project “Masters of Didactics” show that regular tutoring practice was accompanied by a significant change at the institutional level, namely permanent of temporary introduction of individual teaching into the educational process. As a result, there were various structural and curricular modifications at universities. A complex role played by tutoring in higher schools in recent years lets us state that to understand what tutoring is today, it is crucial to understand meanings attributed to it by those participating in its creation, i.e. tutors. Their interpretation of the term *tutoring*, their personal “operational” definitions show how this term is understood and used in academic practice. This dimension has become the subject matter of the research presented in this article.

### **Tutoring – participating perspective/ meaning attributed in action**

Reality is created socially and understood socially, hence it is important to follow the way it is comprehended and interpreted by social actors. Each participant of the everyday life world has their supply of handy knowledge and, at the same time, they draw from handy knowledge of others they are in relationship with. That is why, in Schütz’s opinion, translatability of perspectives is possible. Following Schütz, we assume that the world of culture is intersubjective in nature, and knowledge is social in nature (Schütz, 1962; Berger and Luckmann, 1983). Being in a relationship, communication, language are foundations for creating the cultural space of intersubjectivity. The authors assume that the conceptual system is the social-cultural product, where language is one of the most important categories “constructing reality”. The research adopts the interpretative paradigm as well as the theory of relevance by Dan Sperber and Deirdre Wilson (2011) who attribute both the cognitive and communicative function to language.

The intersubjective world of culture generates supplies of handy knowledge available to people in their everyday life, used in typical situations and interpersonal communication. In typical situations we read others’ intentions properly and react in a typical way, hence our ability of communicating on various issues (Schütz, 1962). The notion of a “cognitive environment” introduced by Sperber and Wilson (2011) constitutes a certain supply of handy knowledge. Language is

a means of communication, thus it is necessary to read meanings of words used by speakers in a particular context, to confirm their interpretation and emotional colouring in social interactions.

In everyday interpersonal contacts we convey and obtain hundreds or thousands of pieces of information, we interpret many messages thanks to our knowledge of the context in which they occur. Communication is a process of negotiating meaning between participants, created by both of them, taking place in a certain situation, defined time and space. Our cognitive environment, knowledge, context of acting and communicating make it possible to interpret situations or utterances in a typical way. Making use of typisation, we are able to take interpretation decisions in acceptable time as well as receive messages in majority as intended by the author. Actions of social actors in the everyday world are tightly linked with relevance structures, which leads to mutual understanding. In social interaction, reading communication intentions and mutual attention drawing in the we-relation make it possible to share our perspectives and understand the surrounding world.

## Research methodology

The aim of the research was to determine the ways in which the term *tutoring* is understood by academic teachers – tutors who use this method in their work with students. The aim of the research led to formulating the research problem: which images of tutoring in terms of its contexts and meanings tutors have. As far as qualitative research is concerned, it is rarely possible to establish a research hypothesis and it is similar in the research undertaken by the authors. The study's results were analysed using the method of semantic field analysis (Robin, 1980; Fatyga, 2000), whose theoretical foundation is based on semantic field theory (Trier, 1931; Ullmann, 1972; Zhou, 2001). As for semantic field theory, it is assumed that words are not autonomous lexical units of language but are linked with others, creating semantic categories, defining themselves, and the meaning of each element of the field depends on the whole network, network of semantic relationships. In her article "Semantic Field of the Term Culture in Definitions of Culture," Zina Jarmoszuk (2001, p. 19) points to the fact that "Particular fields, their range and inner relations between expressions reflect the way a certain group of language users comprehends and sees the world."

The method of semantic field analysis used in the research was developed by Regine Robin and her team in 1980, and further on Barbara Fatyga (2000) introduced certain modifications concerning the determination of emotional temperature of selected networks. In the methodology developed by her, Robin suggests choosing a particular key word. Robin claims that

Text is not transparent. Looking for the meaning of a text, sentence, word requires certain work with that text, apparent dismantling the string of words and its sequence in order to put it together again in accordance with significant readability [...].

To find the meaning of a given word is to analyse all its uses or contexts (Robin, 1980, p. 252). The key word chosen by the authors for their analysis is tutoring. As far as the key word is concerned, it is important to find expressions and words with a particular function.

The collected material (expressions and words) was ordered according to categories listed by Robin: definitions of the subject, its associations, opposites, equivalents (synonyms), the subject's actions and actions towards the subject. Using the method of semantic field analysis for the word *tutoring*, we order its aspects in accordance with belonging to a given semantic category, i.e.:

- a) definitions – show the features of tutoring, what tutoring is like;
- b) associations – show what tutoring is associated with, linked with, what accompanies it;
- c) opposites – show what tutoring is not, what opposes tutoring;
- d) equivalents – occur interchangeably with tutoring, inform which words, expressions tutoring can be replaced with;
- e) descriptions of tutoring's actions – show what tutoring “does” and what the outcomes of these actions are/ might be;
- f) descriptions of actions towards tutoring – show actions directed towards tutoring, describe actions undertaken towards tutoring.

The analysis of the semantic field of the key-word *tutoring* also employs the idea of determining more precisely the emotional temperature of each selected relation/ link, network: positive (+), negative (-), ambivalent ( $\pm$ ), neutral ( $\emptyset$ ) and indifferent if making a choice is not possible (Fatyga, 2000).

## Characteristics of the source material

The research material which was subject to analysis is the transcript of a focus interview conducted in February 2022 with academic teachers – tutors using the method of tutoring at the level of academic education. Six tutors took part in the interview, all of them participating in the project “Masters of Didactics – Implementation of the Tutoring Model” at the Maria Grzegorzewska University in Warsaw. The interview was directly focused on obtaining information on the way tutoring is described, hence the collected research material illustrates the way it is understood, deriving from tutors' experience of almost 1.5-year participation in the programme, expressed in everyday language. Such specificity of the material proves its high empirical value, especially in the context of constructing the semantic field for the term *tutoring*. The interview lasted two hours.

The interview transcript comprised a text counting 78 thousand signs. In accordance with the conventions of running an interview, the transcript included the questions asked by the researcher and the answers given by the tutors, according to the order of volunteering to answer or choice made by the interviewer. The text's semantic analysis was conducted with the use of MAXQDA, qualitative data analysis software. The software was used independently by the two researchers. The next step consisted in combining both analyses' results, and in case of divergences in result interpretation, in agreeing on the common outcome resulting from the discussion of both researchers analysing the text.

## Research results

We identified 61 references to tutoring in the transcript of the interview with the tutors. This part of the article presents them in the order defined by the assumptions of semantic field analysis. Additionally, the analysis should be enriched by information concerning their temperature, classifying them as positive, negative or neutral.

The first component of the semantic field of the term *tutoring* are equivalents which were present 6 times in the analysed text, adopting a neutral character. Thus, tutors associated tutoring with relations ( $n = 2$ ) that were closer than traditional contact between the lecturer and their students, which was illustrated by calling each other "by the first name". It should be remarked in this context that this way of addressing each other, although suggested by the tutor to all her tutees was not a constitutive element of their relations as the academic teacher noticed that some students, due to their personality, "could not bring themselves to call her by her first name". A similar, yet not identical equivalent, was associating tutoring with interaction ( $n = 1$ ) based on mutual influence directed towards the realization of objectives defined together. What is more, tutoring was understood as individual work with a student/ students ( $n = 3$ ) of a heterogenic nature. An example of this variety is tutoring taking a dual form – the scientific one associated with work on scientific activities, showing certain possibilities, directions of development offering the students the approach of independently made choices ( $n = 1$ ), or the one conditioned by the occurrence of issues requiring the implementation of activities from the area of coaching ( $n = 1$ ).

The network of references ( $n = 7$ ) as one of components of the semantic field of the term *tutoring* referred to expressions (most often neutral epithets) used by the research subjects to describe tutoring features. Thus, tutoring can be associated with the scientific character of tutorials ( $n = 3$ ): being "typically scientific" or "more scientific than developmental" or even "directed towards individual scientific work with a given student." Tutoring was also described as

“my” (n = 1) – it was the only description of a clearly positive connotation (temperature). There were also references to organizational matters, namely the expression “post-trip” tutoring (practising tutoring at one’s own university after one’s training abroad within the framework of the programme “Masters of Didactics”, n = 1). According to the research participants, tutoring can vary, depending on where it takes place, for instance, tutoring observed at a foreign university was fragmentary (only some tutoring components were used) and took a form of a lecture for a few hundred people (n = 2).

The next component of the semantic field called associations comprises associations with the term constituting the root of the analysis. The collected material included 20 phrases that could be assigned to the area of associations, out of which 17 were neutral in nature, 2 were negative and 1 positive. Most often the researched tutors associated the analysed term with a method (n = 7) or a technique (n = 1) used in didactic work with students, both before the activities pertaining to their participation in the programme “Masters of Didactics” and during their participation. In that context, it is worth emphasizing that in case of people using that method, participation in the ministerial programme motivated them to “dig” deeper and order its assumptions, to define it more precisely, to name activities performed or to broaden possibilities of its implementation. The remarks of the researched participants let us conclude that they were convinced that using that method “turns out best” with some subjects and they like working with it (the only positive association), and that they had doubts whether it is an appropriate way to work with bigger groups during a limited period of time (one semester, half a semester). References to group size are also reflected in the next abstract association where tutoring is associated with individual work or work in small groups (n = 2) and the necessity and possibility to juggle these two strategies in order to adjust tutoring to students’ individual preferences. At the same time, one tutor stressed, based on Dutch experience, the possibility of implementing tutoring for bigger groups (30-people) and perceiving it from their perspective. One tutor remarks that the concept analysed is linked with “group tutoring” classes that she used to run once. Thus, the aforesaid association referred more to the subject matter of tutoring than to the very process that the charge took part in.

A significant group of associations are those referring to people participating in tutoring. Thus, tutoring is associated with a tutee (n = 1) and a tutor (n = 1) who “all that story is based on.” In the context of a tutee, there occurs the next association regarding the fact that tutoring is a student’s independent choice (n = 2), as they could choose their tutor and activities proposed by them within the framework of the programme realised at their university. This term is also associated with meetings and talks between the aforementioned subjects (n = 1), whose dates are arranged individually.

The last three associations refer to the beginnings of the programme “Masters of Didactics” and, what follows, the beginnings of tutoring at the university and its organization. As for the first one of a neutral character, it is associated with something unknown ( $n = 1$ ), whose assumptions regarding its goals, undertaken activities, rules of cooperation are negotiated during tutors’ meetings and tutorials. As for the latter two of a negative character, the term tutoring is associated with something unorganized at the beginning ( $n = 1$ ) and disorganization requiring many hours of work from all the persons engaged in it ( $n = 1$ ).

The research does not contain even one phrase classified as tutoring’s opposite. We qualified 22 extracts of the participants’ utterances as “the subject’s actions” component. The majority of the phrases (except one) were positive in nature. Tutoring can “act” both towards tutees ( $n = 13$ ) and tutors themselves ( $n = 9$ ). Among the phrases used by the tutees, one can single out a category of “offering a student a possibility of choosing independently their course of action” ( $n = 2$ ), where tutoring helps students via the person of a tutor to discover their educational and personal potential. Tutoring can “open” ( $n = 3$ ) students to interpersonal relations, to more personal topics than those discussed during traditional classes, and also to speaking sincerely about worldview issues. Tutoring “teaches communication” ( $n = 1$ ) – while discussing the course of action they would like to follow, during tutorials tutees have many opportunities to practise talking about their needs. Those opportunities are created by a tutor, who somehow models those situations. Tutoring “enters the developmental area” ( $n = 1$ ) which is neither scientific, professional nor private. Tutoring also “provides support” ( $n = 3$ ): students can count on their tutor’s help in the moments of crisis, e.g. while looking for a job. One tutor said she had an impression she was like a “mother” to her tutees when they talk to her about their difficulties. Tutoring “helps to study better” ( $n = 3$ ): the tools used in tutoring facilitate asking questions (“A tutor’s role is to ask appropriate questions.”) and provide students with feedback.

Among the phrases classified as tutoring’s activities towards a tutor, there was one saying that tutoring “lets a tutor develop” ( $n = 1$ ), especially during their trainings abroad that prepared them for running tutorials. Tutoring is an opportunity for teachers to “work with students in an interesting way”, less planned than in case of classes or lectures, offering a possibility to experiment as far as one’s teaching style and used techniques or tools are concerned ( $n = 1$ ). Tutoring can also make one “stressed” (it was the only negative phrase among all the expressions referring to “the subject’s actions”) due to the fact that it is not strictly scientific, happens to touch upon personal issues, and tutors – despite their preparations – might not feel comfortable with it ( $n = 1$ ). Finally, tutoring “builds relationships” ( $n = 6$ ) among academic teachers: this category consists of utterances showing that it offers a tutor an opportunity to get to know their



colleagues better, to cooperate with other teachers/tutors, which translates into receiving support in more difficult situations. Tutoring also “lets one appreciate how worthy students are”.

The last component of the semantic field, i.e. “actions towards the subject” is represented by 6 phrases that are neutral ( $n = 4$ ) or positive ( $n = 2$ ). They referred to the realisation of tutoring assumptions ( $n = 1$ , neutral temperature) by undertaking individual work or work in small groups on a particular topic. The next category of actions regards the beginning of one’s participation in tutoring in two dimensions. The first one regards the tutor and is manifested by undertaking actions, “pressing” to participate in a tutoring programme ( $n = 1$ , positive temperature), giving one’s consent ( $n = 1$ , positive temperature) and filling in documents necessary to realise that goal ( $n = 1$ , positive temperature). The latter one concerns the student, and actions towards tutoring regard having doubts whether “it is worth having a go” ( $n = 1$ , neutral temperature), which was conditioned by the student’s little scientific expertise and her more traditional approach. The last action towards the subject concerns thinking about one’s expectations towards tutoring.

## Conclusion

The last step of the analysis is an attempt to construct the term *tutoring* based on the semantic network. As far as the theoretical part of this article is concerned (Sperber and Wilson, 2011), it should be born in mind that the researched tutors firstly learned about and practised tutoring, but, at the same time, tried to comprehend this special academic function they had undertaken and could give meaning to all this. Therefore:

- tutoring is associated with personalised work with students and relationship with them, realization of common goals;
- tutoring is described by such words as “my” and “varied”;
- tutoring is most often associated with a work method or technique, both individual and in small groups, but is implemented more and more often as a way of working with bigger groups, which raises doubts among some tutors;
- tutoring is influential as it supports and helps, offers an opportunity to choose, teaches communication, and above all, makes students more open;
- there are certain actions taken towards tutoring. First of all, one has to decide to participate in it, voluntarily or under some pressure. Next, its assumptions have to be completed and the documentation filled in.

Tutoring, together with the programme “Masters of Didactics” that propagated it at Polish universities, offered the tutors participating in the programme an opportunity to develop their competencies and in this way offered much more: raising in their eyes the significance of their didactic activity. Tutoring responds to challenges posed to academic teachers as far as teaching methods and forms are concerned. It lets them use the potential of generational differences and capture current and foreseeable future labour market needs. Tutors are aware of their students’ expectations, which evolve in the direction of more personalized teaching and developing closer relationships with lecturers whose mentorship and managing role comes to an end (Karpińska-Musiał, 2019). Nevertheless, a tutor can still be a scientific role model for their tutees, and also a guide helping to take strategic scientific, professional and personal decisions (Lejzerowicz, 2021). In their article, the authors focused on tutors, how they define their own work and tasks, and what significance they attribute to it. As far as the theoretical part of this article is concerned, it should be emphasized that the whole narration on tutoring lacks any threads characteristic of traditional or hierarchical paradigm of education with the dominant role of the teacher and the subordinate role of the student as a recipient of educational activities. On the contrary, the researched tutors were in favour of personalized education, responding to its participants’ needs. In this context, it is worth emphasising that academic teachers, perceiving tutoring as varied, and also describing it as “my”, seemed to create a platform for reconstructing its meanings promoted during trainings realised within the framework of the ministerial programme, as well as designing its shape reflecting the individualised educational situation between them and their tutees. In conclusion, the reconstruction of the semantic network makes it possible to define the term *tutoring* more precisely from the perspective of academic teachers – tutors participating in the programme.

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## Tutoring: znaczenia nadawane pojęciu przez tutorów. Analiza pola semantycznego

### Streszczenie

Celem przeprowadzonych badań było ustalenie, w jaki sposób nauczyciele akademicy – tuterzy prowadzący zajęcia tutorskie rozumieją termin *tutoring*. Materiał badawczy stanowiły przygotowane przez badaczki (autorki tekstu) transkrypcje wywiadu fokusowego przeprowadzonego w lutym 2022 roku z tutorami biorącymi udział w programie „Mistrzowie Dydaktyki – wdrożenie modelu tutoringu” w Akademii Pedagogiki Specjalnej im. Marii Grzegorzewskiej. Do analiz wyników badań zastosowano podejście jakościowe – metodę analizy pola semantycznego opracowaną przez Regine Robin i jej współpracowników, a następnie zmodyfikowaną przez Barbarę Fatygę. Podbudowę teoretyczną stanowiła teoria pól semantycznych. W procesie analiz został wykorzystany program do jakościowej analizy danych MAXQDA. Tutoring przez badanych określany jest jako zindywidualizowana praca ze studentami obejmująca relację i realizację wspólnych celów, a określają go takie sformułowania, jak „mój” i „różny”. Tutoring najczęściej kojarzony jest z metodą bądź techniką pracy zarówno indywidualnej, jak i w małych grupach. Wnioski wynikające z analizy wskazują, że dzięki rekonstrukcji sieci znaczeń możliwe jest trafniejsze ujęcie terminu *tutoring* z perspektywy nauczycieli akademickich – tutorów uczestniczących w programie.

**Słowa kluczowe:** tutoring, tutor, „Mistrzowie Dydaktyki”, analiza semantyczna.





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## Bunker/shelter as a Situated Learning Space: An Example of a Life Protection Experiment in Threatening

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### Abstract

The article describes the assumptions of an experiment and training conducted at the barracks of the Higher School of Justice (currently the Academy of Justice) in Kalisz. Sixty individuals were subjected to 12 hours of bunker deprivation. The studies conducted during the experiment focused on the utilization of bunkers as educational spaces where individuals learn effective life protection strategies in threatening conditions. The analyses encompass practical aspects such as physical preparedness for crisis situations and psychosocial aspects of learning in stressful conditions. The participants of the experiment underwent simulations of crisis situations. The project's aim was to describe the adaptation mechanisms of individuals to threatening situations in the context of life protection. The shelter/bunker can serve as a space supporting situated learning, preparing individuals for effective action in crisis conditions. The text presents those elements of the theory and research from the field of situated learning that should be taken into account in the didactic planning of training sessions for services conducted in bunkers/shelters.

**Keywords:** bunker/shelter conditions, shelter experiment, situational learning, situated learning theory.

### Introduction

Nowadays, there is a complex network of serious threats in the world. There are currently five wars and territorial conflicts, seven civil wars, three interstate

conflicts, four political unrests, international terrorism and sectarianism. This poses a significant challenge to global stability (Krawczyk, 2022). It is worth noting that although many of these conflicts may seem geographically distant from Poland, they have important implications for the economic, political and social situation of our country. The global nature of contemporary conflicts means that events at one end of the world have the ability to affect the other, even if the geographical differences seem significant. In the context of the economic situation, global conflicts can affect global markets, commodity prices, access to resources, and overall economic stability. In the social dimension, the impact of conflicts on the situation of people in areas affected by wars or humanitarian crises may generate waves of migration, which in turn may have consequences for Poland as a country hosting refugees or participating in international aid efforts. Behind our eastern border, the Russian-Ukrainian war is taking place. Current CBOS research shows that 76% of Poles believe that the war in Ukraine threatens the security of Poles, 28% of respondents believe that the war will escalate and involve other countries (CBOS, 2023). As Krzysztof Kowalczyk points out,

Russia does not want to give up the tool of territorial annexation (as in the times of the Russian Empire or the former *Pax Sovietica*) in favor of economic annexation (i.e. a possible *Pax Russiae*). It must therefore face the consequences of losing direct influence in Spykman's Rimland to stronger China and Germany, as well as a newly emerging Islamic power that will emerge from one of the three largest Muslim countries: Turkey, Iran or Saudi Arabia,

and he continues,

[...] in the event of a possible aggression against the Russian Federation, buffer zones will become a training ground for military operations, and the war, which is devastating to the economy and society, will plunge them into a multifaceted crisis for decades. This will make it easier to subordinate these countries as dependent or incorporated areas. The impossibility of becoming a strong regional hegemon will prevent Russian rule from extending beyond the territory of the former Soviet Union... (Kowalczyk, 2019, pp. 78–92).

Unfortunately, the possibility of a conflict between NATO countries and Russia is confirmed by Frank Hofmann's statements, "NATO countries in Europe have only «five to nine years» to prepare militarily for a possible Russian attack on Alliance territory" ("NATO vs. Russia", 2023). Unfortunately, in the DGAP document entitled *Preventing the Next War (#EDINA III) Germany and NATO Are in a Race Against Time (#EDINA III)* by Christian Mölling and Torben Schütz, we read that the reconstruction of the Russian army may take 6–10 years (Mölling, Schütz, 2023). The authors suggest possible actions that, in the light of their analysis, should be aimed at supporting Ukraine, integrating it into the European defence sector, strengthening Europe's war capability (through a more balanced relationship with the US), introducing sanctions and trade restrictions against Russia (Mölling, Schütz, 2023). According to the authors, it is important to re-



build the armed forces and create a strong army. Society-oriented measures are also an important aspect (Mölling, Schütz, 2023).

This situation calls for action to be taken in relation to civil protection and public education. In April 2023, the Ministry of the Interior and Administration presented a draft regulation on technical conditions and use of protective structures (*Projekt Rozporządzenia...*, n.d.). It concerns activities aimed at strengthening the security of citizens through the development of protective infrastructure, including shelters and places of hiding. At the same time, the project assumes the creation of optimal conditions for the effective operation of the authorities responsible for ensuring the safety of citizens. As part of these activities, it is planned to intensify training for uniformed services, including special educational programs for civil society. This project assumes that the effectiveness of defence operations is based not only on the training of services, but also on the involvement of citizens (*Projekt Rozporządzenia...*, n.d.).

## Bunkers & Shelters

On the basis of Decision No. 57 of September 30, 2022, from 10.2022-02.2023, the Fire Brigade carried out an inventory of protective buildings and places of emergency shelter. In Poland, there are 10,600 protective buildings, of which 1,903 are shelters and 8,719 are hideouts. In the event of an emergency, 1.43 million people will find shelter in these structures ("National Fire Brigade (PSP) Report on Protective Structures 2023," 2023). A shelter

is a protective structure with a structurally closed, hermetic enclosure that provides protection for persons, equipment, material supplies or other material goods against assumed factors of destruction acting from all sides ("PSP Report on Protective Structures 2023," 2023).

Recent research studies focus on the analysis of shelter needs in the context of hazards and natural disasters in urban areas, population movement is studied and needs are determined on the basis of data (Chen et al., 2020), dynamic evacuation simulation methods are also used to improve population allocations (Yu et al., 2018, pp. 1884-1910), other studies deal with spatial accessibility and optimization of emergency shelter locations (Zhang et al., 2023). People's behaviour in an emergency situation and their preferences regarding the choice of shelter and the impact of these decisions on the time of evacuation and the filling of possible places to save lives were also studied (Nagarajan, Shaw, 2021), other studies focused on the safe placement of people. The studies were conducted on the basis of the analysis of people's behaviour during evacuation, geographic information systems have been used in the developed model (Chang, Liao, 2015, pp. 1551-1571).

Bunkers/shelters are not only spaces of refuge, but can also be used as places where military and civil services can check their level of preparedness for crisis management, communications and security procedures in the event of threats of conflict or natural disasters. Simulating an emergency situation allows you to learn how to react quickly in emergency situations and improves your decision-making skills.

## Description and assumptions of the bunker deprivation experiment<sup>1</sup>

The use of bunkers/shelters as places of situated learning requires the use of special procedures to control the education process and ensure the safety of participants of such training. In his famous experiment from 1971, Philip Zimbardo (“Stanford Prison Experiment”) drew attention to the impact of situational factors on the decisions and behaviors of individuals, which is why

simulations of crisis situations are of fundamental importance in the process of improving crisis management procedures and in preparing individuals to adequately and safely respond to threatening situations. In the course of training combined with experimental research, the aim is to acquire knowledge that contributes to the optimization of crisis management procedures, as well as to a better understanding of the social aspects of human behavior.<sup>2</sup>

An interesting experiment combined with the training of uniformed services was carried out on December 9, 2022, and was led by Piotr Kośmider, Maciej Tanaś, Marcin Strzelec and Michał Sopiński (the current Rector Commandant of the Academy of Justice in Warsaw). The experiment and its objectives concerned the protection of life in the conditions of placement in shelters in the event of disasters and catastrophes<sup>3</sup>. The aim of the project was also to

[...] not only to check the psychological aspects of the volunteers, but also to realistically assess the possibilities of the shelter itself in order to motivate local authorities to be more active in the modernization of other facilities (Łużyński, 2022).

The place where it took place was a bunker from 1905 located in the barracks of the SWWS (Higher School of Justice) in Kalisz. 60 people (students, SWWS lecturers and volunteers) took part in the experiment (Bąkowska, 2022). It is worth noting that the people were selected “regardless of rank, military rank or position...” due to the fact that

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<sup>1</sup> A more detailed description of the experiment was published in Siemieniecka, Majewska (2023, in print). Elements of the project description were taken from the invitation to take part in it, containing the assumptions of the experiment.

<sup>2</sup> Ibidem.

<sup>3</sup> Information attached to the invitation to participate in the project. Cf. Siemieniecka, Majewska (2023, in print).

[...] Everyone in the shelter is supposed to be equal, and the volunteers have been “mixed” in a random way. None of the people will also have predetermined tasks to complete. Such an approach is to check the mechanism of natural emergence of leaders from a wider group of study participants. Test participants are also people who do not know directly the facility they are going to. All these factors are to reflect as closely as possible the real crisis situation that volunteers have to deal with – in terms of logistics, sanitation, medicine or, for example, evacuation (Łużyński, 2022).

The subjects were observed by cameras during the entire duration of the experiment (12 hours) by observers invited to participate in the study.

These people experienced simulated situations (they had the impression of being attacked, they went out through the dungeons). The subjects also experienced physical difficulties (one of the participants simulated pregnancy). Crisis management was studied, and personal behaviours and reactions were analysed. Difficulties, barriers and the process of emergence of natural leaders and how they cope with situations of deep stress were also observed. The situation in which the participants of the experiment found themselves was deliberately difficult, e.g. there was no drain in the toilets, the number of lying and sitting places was limited, after simulated attacks, the wounded appeared in the group.<sup>4</sup>

The aim was to assess the functionality of the shelter and observe how humans cope with extreme situations (Samulak-Andrzejczak, 2022). Marcin Strzelec reports on RMF24 (Polish radio station) as follows:

The classes were unpredictable and assumed difficult conditions. These difficult conditions include, among others, the failure of the power supply system, turning off the emergency systems. The last 3 hours were spent absolute darkness. The students were well organized, for example, with the redistribution of provisions, supplies accumulated in the shelter, as well as in the exercise of duties. It played well (Piłat, 2022).

Safety procedures, resistance to stress, emotional reactions of the participants of the experiment, coping with difficult situations (isolation, bunker deprivation) and group processes were studied. Attention was paid to the individual needs of different age groups regarding crisis management planning. Maciej Tanaś emphasizes that,

the idea for the research appeared when the fire brigade started reviewing shelters in Poland, which created a situation in which it was possible to conduct scientific research, in which several teams participated. There is a need for research on the behaviour of people staying in shelters in situations when there is a shortage of air and a manual generator needs to be started, or when there is a lack of lighting and the air is smoky. These situations are real in conditions of war or armed attack. The research concerned the effectiveness of the functioning of systems ensuring the protection of life in the conditions of placement in shelters in the event of disasters or catastrophes.<sup>5</sup>

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<sup>4</sup> Siemieniecka, Majewska (2023, in print), after: interview with Prof. Maciej Tanaś, who is in charge of the scientific project.

<sup>5</sup> Siemieniecka, Majewska (2023, in print), after: interview with Prof. Maciej Tanaś, who is in charge of the scientific project.

Unfortunately, the description of the training and the experiment presented here does not contain detailed data due to the confidentiality of some of the results of the experiment. During the press conference, Professor Tomasz Kośmider pointed to the importance of

creating the right dimension of personal and structural security in the military and non-military dimension, which are to counteract threats and create a protective umbrella. This experiment aims to check the structural security dimension at the level of shelter functionality and personal level in the context of building citizens' protective competences (Innovative scientific experiment at the University of Justice, December 12, 2022).

## **Bunker/shelter as a place of situated learning**

Situational learning is based on taking context and environment into account in the process of acquiring knowledge. According to this concept, learning is not isolated from the situation in which it occurs, and is closely linked to the actual experiences and social context of the individual. The literature (Goel, Johnson, Junglas, Ives, 2010) lists the building blocks of situated learning, which allows the learner to concentrate on a task and learn in a specific context that covers the full spectrum of knowledge in a given area. This learning requires a cognitive engagement that enables the acquisition of lasting knowledge. An important aspect here is learning through social interaction and informal learning in relationships with others. The social learning process takes into account the impact of the understanding of the roles performed and the knowledge and competences of the participants of the learning process during situated learning.

This learning is related to constructivism, whose representatives attach particular importance to the role of the learner in the construction of knowledge, which takes place in situations that require active interaction with the environment and experience (Dewey, Vygotsky, Piaget), and contextualism, which emphasizes the importance of social and physical context. Knowledge results from human participation in certain situations and environment. The acquisition of knowledge, therefore, requires active participation. These assumptions can be found in *The Theory of Localized Learning* by Jean Lave, Etienne Wenger, John Seely Brown, Allan Collins, and Paul Duguid. These authors emphasize the relationship between learning and social situation (Siemieniecka, Siemieniecki, 2019, after Hanks, 1991, p. 14). This theory assumes that "learning should not be seen as a simple transmission of abstract and de-contextualized knowledge from one person to another, but as a social process" (Siemieniecka, Siemieniecki, 2019, p. 172 after Lave, Wenger, 1991). The relationship between social engagement and the context of learning (Siemieniecka, Siemieniecki, 2019, after Lave, Wenger, 1991) and culture (Siemieniecka, Siemieniecki, 2019, after

Kruszewski, 1987, p. 45) and language is sought. The process of learning requires experiencing everyday situations, creating situations in which a person can learn from others and use the acquired knowledge in practice (Siemieniecka, Siemieniecki, 2019, after Collins, Brown, Holum, 1991, pp. 6–13). It can be said that

the theory of localized learning assumes that cognitive practice is focused on four dimensions that constitute any educational environment: the content (type of knowledge), the method (the way of learning), sequencing (the keys to ordering educational activities) and the social characteristics of the educational environment. The content dimension includes: domain knowledge, i.e. declarative knowledge, e.g. concepts, facts and procedures; heuristic strategies, i.e. general techniques for performing tasks; control strategies, i.e. general steps to guide the process of solving a task (problem); learning strategies, i.e. knowledge of how to acquire new information (Siemieniecka, Siemieniecki, 2019, cited in Collins, 2006, in Sawyer, 2006, pp. 47–60).

In the conditions of bunker isolation, where learners acquire knowledge and skills in specific conditions, it is possible to use various cognitive methods. In this context, those proposed by Allan Collins in his cognitive practice are particularly valuable (Siemieniecka, Siemieniecki, 2019, after Collins, Brown, Newman, 1988). Here's how some of these methods can be adapted to a bunker deprivation training situation: **modelling – learners can benefit from modelling by tracking the decision-making processes and actions of others**. Before conducting a training simulation in a bunker/shelter, it is worth discussing examples of properly selected training material or recorded experiences of people who were characterized by safe behaviors (exemplarism). This allows participants to see what effective actions look like and how the decision-making process and procedures work in similar situations. Participants can describe or *imitate* the behaviour of people who have coped with similar situations in an exemplary way. Before the training begins, participants can use examples and materials to create their own model responses. *Coaching* is a very useful form of individual support, preparing participants for training in bunker conditions, for example through individual preparation for possible difficult situations or support from superiors. Proper psychological preparation of the training participants is also an important element. The next stage of the learning process is *scaffolding*, which involves challenging the learner and assigning roles according to their abilities. *Articulation*, i.e. reflection on the experience and knowledge gained in the context of the experiences of others, is an important part of training to prepare for services. After the simulation of a difficult situation and the completed bunker deprivation, it is worth discussing any problems that occurred during the training, as well as distinguishing good examples of reactions, behaviors and actions. *Reflection and comparison of the acquired knowledge* with other participants are conducive to this process. **Exploration, which is a component of Collins' cognitive methods, is based on the fact that the acquired knowledge is**

**expanded as a result of** involvement in the process. An important aspect of the use of bunker/shelter in training is sequencing. Collins (cf. Siemieniecka, Siemieniecki, 2019, after Collins, Brown, Newman, 1988, pp. 2–10) points to the importance of skills development so that it is based on increasing complexity. Therefore, running simulations in a bunker/shelter requires mastering basic knowledge, while broadening this knowledge and developing reactions to more complex situations is based on it. The level of difficulty and complexity of the situations to which the participants in the simulation are subjected should vary. In this way, learners are allowed to apply what they have learned in practice. It is also important for the participants of such training to have a global view of the problem situation, which allows them to plan partial actions and is important for the strategies of complex actions in multi-tasking situations.

Situated learning involves taking into account the social environment. According to Collins, we are dealing here with situated learning based on real problems, learning through group action and mutual contacts, cooperation in the performance of tasks. Participation in emergency situations in the situation of bunker deprivation allows the services to acquire new skills in the situation of an observer and participant of events. Knowledge is combined with direct practical action. William J. Clancey (Clancey, 1995, in Self (ed.), 1995, pp. 49–70) in his text *A tutorial on situated learning* points out that situated learning is based on the situational notion of knowledge, he emphasizes that scheme behaviors or procedures are limited in comparison with the complexity of conceptualization. A person does not use the same previously learned procedures, but changes them. The text discusses the relationship between situated learning and situated action theory, and points out that there are two types of situational and plan-based activity. The paper contains a critique of learning and the so-called "transfer". The author points to the lack of usefulness of theoretical generalizations in various contexts, the transfer takes place between activities and actions. It emphasizes the crucial role of the context of knowledge in its application. The author analyses the literature from which emerges a critique of the symbolic concept based on the fact that knowledge cannot be reduced to descriptions, schemes or symbols, because it does not take into account aspects related to perception and interaction with the environment. The context of the impact of individual differences in the learning process is also important here. Another aspect that is addressed is that knowledge is not located in people's minds, but develops in the course of interaction. Effective teaching in this context means individuals creating their own solutions with the help of teaching aids or tools. Therefore, this process can take place in two variants: the participants of the training find themselves in unexpected situations or they can be prepared for them in the course of the training.

## **Practical proposal for the implementation of training for uniformed services, taking into account elements of situated learning**

When planning a training in a bunker/shelter, the first thing to do is to conduct a needs analysis, which consists in determining the main purpose of the training and identifying the training needs (Serafin, 2011) of uniformed services. At this stage, it is necessary to analyse the critical moments of the training and the risks for the participants that may arise from the conditions in the shelter/bunker. It is necessary to determine the current state of knowledge of the training participants (their skills, experience), as well as to discern individual training needs. Next, the objectives of the training should be determined: general and specific. This requires defining the basic skills that will be achieved as a result of simulation training in the bunker. The third stage is the selection of the training location and its proper preparation. This requires an assessment of the equipment, accessibility and safety of the training site. The space should be adapted to the conditions allowing for training in the form of a simulation of a real situation, but also take into account the needs and possible threats. It is important to plan individual events (tasks) in the form of a scenario, subordinated to specific objectives and the subsequent possibility of verifying knowledge. The next stage is to plan the training. In this phase, the training program, its implementation stages and a detailed schedule are determined. As part of this phase, the roles of persons performing functions and tasks in the context of the training are also planned. Crisis situations which will be simulated during the training are also planned. The next step is to develop training materials. It is necessary to develop instructions and materials for each stage of the training. The materials should contain safety instructions (based on which practical exercises can be carried out). Action procedures should also be developed. Trainees can be familiarized with this material and properly trained during exercises preceding operations in the bunker. Subsequently, people are selected for training in the bunker according to the objectives of the training and the skills they possess. The selection of people can be directed towards the possibility of the trainees observing different roles and tasks. The training should be conducted with all safety rules in place. It is good for the action to be monitored or recorded, which allows you to discuss the results of the simulated action later. Contact with people in bunker deprivation is also important. Then, after the training is completed, it is necessary to evaluate the training. It is crucial to evaluate the degree of achieved goals, the knowledge of its participants. Apart from the traditional forms of testing the knowledge of the training participants, it is also possible to discuss the tasks performed and their correct solutions in the

group. It is important to discuss the problems and difficulties encountered by the participants. Reflexivity and re-analysis of problematic situations are conducive to the consolidation of action patterns.

Among the components of situated learning, the influence of four factors has been distinguished (Goel, Johnson, Junglas, Ives, 2010, pp. 215–240). They are crucial for changes in the mental models of individuals. These are: thematic focus – it is important for the group to discuss the topic in detail, for participants to share information and externalize their own mental models. Cognitive absorption is associated with the stimulation of intrinsic motivation, and people who are involved are more likely to take part in activities aimed at situational learning. Participation: participation in social interactions is an important aspect. The externalization of mental models, as the authors write, makes it possible to show differences and internally take over the revised mental models. Perception of social structure: social structure is a pattern of relationships that develops between individuals during educational activities. Therefore, it is important to perceive the roles of individuals in the social structure, which has a positive effect on changes in mental models (Goel, Johnson, Junglas, Ives, 2010, pp. 215–240).

The use of these steps in the bunker/shelter training planning process should contribute to the effective and safe delivery of the coursework, allowing participants to have realistic experience in crisis management in extreme conditions. Table 1 shows the steps involved in the implementation of the training in the bunker/shelter, the description of the activities and the elements of situational learning that should be taken into account while planning the training delivery.

Table 1

*Description of activities and elements of situational learning that should be taken into account while planning the implementation of training carried out in bunkers/shelters*

Stages of the implementation of the training plan in the bunker/shelter [1]	Description of activities [2]	Elements of situated learning in the context of bunker/shelter training [3]
<b>1. Analysis of training needs</b>	Defining the objectives of the training	Thematic focus – involves the participation of officers in determining training needs, identifying their individual training needs, which allows the content to be adapted to the specific requirements of the group, it is important to share experiences.
	Identification of training needs	Absorption – stimulation of motivation to act in accordance with the needs of the group



Table 1  
*Description of activities... (cont.)*

[1]	[2]	[3]
<b>1. Analysis of training needs</b>	Analysis of critical moments and threats in the bunker.	
	Establishing the knowledge of the participants. This requires an assessment of domain knowledge, declarative knowledge, e.g. concepts, facts and procedures	
<b>2. Setting bunker training objectives</b>	Definition of general and specific objectives	Participation – participation in the process of setting general and specific objectives of the training, participation of representatives of various uniformed services and experts. Focus on activity and collaboration
	Identification of the skills that participants will acquire as a result of the training in the bunker/shelter	Social structure – when planning, it is important to take into account the diversity of the group, the functions performed, roles, the level of skills and experience.
	Selection of specific training areas and delivery methods Developing a learning strategy, i.e. knowing how to acquire new information.	
<b>3. Site selection and preparation</b>	Assessment of the availability and safety of the training site	Participation – inclusion (of all or only part) of the training participants in the process of recognizing possible places of simulation and adaptation of space, active participation in the training environment. Familiarizing the participants with various types of bunkers/shelters/safe places and their specifics, as well as the principles of planning activities in closed places (logistics).
	Adapting the space to the simulation conditions.	
	Anticipating possible threats, the needs of training participants and critical moments.	
<b>4. Creating a training program</b>	Determination of the types of difficult situations that require practice in the conditions of simulation in the bunker.	Sequencing – building skills on the principle of increasing complexity of simulated situations.
	Planning the stages of implementation and the schedule of activities.	Thematic focus – focusing the training program on the types of crisis situations requiring the acquisition of knowledge and ways of responding by officers.

Table 1

Description of activities... (cont.)

	[1]	[2]	[3]
<b>4. Creating a training program</b>	Preparation of detailed scenarios of crisis situations and their different variants.		Social structure – taking into account the role of social structure in the training program, as well as factors important for effective communication and exchange of experiences among training participants.
<b>5. Development of training materials</b>	Development of lesson plans, situations requiring simulation Using heuristic strategies, i.e. general techniques for performing tasks		Participation – active participation of trainees in the preparation of: instructions (e.g. before/or after the training), participation in the content creation process.
<b>5. Development of training materials</b>	Development of safety instructions and operating procedures.		Thematic focus – focusing on realistic risks and integrating them into crisis situation scenarios
<b>6. Selection of participants</b>	Familiarizing participants with the materials before the training or conducting classes after the training in a bunker situation.		<b>Building scaffolding – taking into account the adaptation of roles and tasks to the individual characteristics of the training participant.</b>
<b>6. Selection of participants</b>	Selection of training participants according to objectives, taking into account individual characteristics, roles, experience		Social structure – taking into account the role of social structure in the selection of participants. Indications for the organization of teams in emergency situations.
<b>7. Conducting training</b>	Coaching – individual preparation of training participants before participating in a bunker deprivation situation. Paying attention to psychological preparation aimed at the actions of the participants in a situation of high level of stress and reactivity of others. Using a control strategy, i.e. developing general steps to guide the task (problem) resolution process.		<b>Building scaffolding – adapting the roles and tasks performed to the individual characteristics of the participant.</b>
<b>7. Conducting training</b>	<b>Building scaffolding – adapting the roles and tasks performed to the individual characteristics of the participant</b>		Exploration – the acquisition or expansion of knowledge occurs through the involvement of individuals in the process.

Table 1  
*Description of activities... (cont.)*

	[1]	[2]	[3]
7. Conducting training		Exploration – the acquisition or expansion of knowledge occurs through involvement in the process.	Sequencing – building skills so that they are based on increasing complexity, e.g. by participating in increasingly demanding and complicated (multitasking) situations.
		Sequencing – building skills based on increasing complexity, e.g. by participating in increasingly demanding and complicated situations	Participation: ensuring the active participation of participants during the training.
		Participation – providing an environment and tasks that enable the active participation of officers in training.	Absorption – monitoring the situation (e.g. by introducing the trainer to the team, observing the actions of people in the bunker deprivation situation) and adapting the training process to the current situation.
8. Evaluation		Social structure – qualitative evaluation allowing to understand the different perspectives of the training participants.	Modelling – discussing examples of situations and the effectiveness of the solutions used, presentation or creation of a model situation by the participants.
		<b>Articulation – the participants’ reflection on the experience and knowledge gained in the context of the experiences of other people (observers, participants and people playing different roles).</b>	<b>Reflection and comparison of knowledge acquired among training participants, which can take place through</b> dialogue and exchange of observations <b>among</b> training participants (different roles), but also between its observers. This allows for a more complete assessment of the course of action and response during the simulation.
		<b>Reflection and comparison of knowledge acquired by other participants. Developing action plans.</b>	Absorption – taking into account the evaluation of training outcomes and identifying areas for correction. What is important is the feedback and the real impact of the trainees on the improvement of the elements that need to be corrected. People involved in the training process are more likely to participate in situational learning activities. It is important to collect feedback in the form of surveys and interviews and inform participants about the incorporation of suggestions and changes made.

Source: author’s own elaboration based on the cited literature (Goel, Johnson, Junglas, Ives, 2010, pp. 215–240; Collins, 2006, pp. 47–60; Collins, Brown, Newman, 1988; Collins, Brown, Holum, 1991 Lave & Wenger, 1991; Clancey, 1995).

The assumptions of situated learning are a useful theoretical basis for practical indications of training creation (especially in relation to didactic aspects), as they assume not only active participation and learning in a team, but also take into account the transfer of knowledge acquired in direct experience in a bunker deprivation training situation to real situations in which these experiences can be used in dynamically changing situations. This learning takes into account individual and group factors, as well as the context and holistic approach of knowledge. In addition to didactic principles, training design should take into account the achievement of the following objectives: training participants should learn about the specifics of the situation in the bunker, including physical, psychological and emotional conditions. This is particularly important in the context of the trainees' ability to adapt their actions to the situation (situational context). During the training, it is necessary to develop the participants' skills in the field of quick reaction and adaptation to dynamic training conditions, acquire the ability to act efficiently and to stay calm in the face of unforeseen situations and behaviors. It is also necessary to develop the ability to react quickly and adapt to changing situational conditions. The aim of these activities is to acquire the ability to better adapt to changing conditions in the situation of bunker deprivation. In the course of the training, effective communication skills should be developed, both interpersonal and those focused on maintaining and connecting. Particular attention should be paid to panic control, understanding messages and conveying information. It is important for the trainees to acquire the ability to solve problems in real time under time pressure and under stress. It is also important to gear the objectives of the training in the bunker towards management and team cooperation in crisis situations. Participants of the training in the bunker should develop organizational skills, division of activities and concentration on the tasks performed, efficient execution of orders (or issuing them), adaptation to the changing situation caused by specific threats. Under stress, these people should be able to quickly incorporate safety procedures and adapt them to the prevailing situation, which requires creative thinking and ongoing problem-solving. It is also necessary to develop individual and group responsibility for the tasks undertaken.

## **Applications**

The use of bunkers as places for situated learning opens up new opportunities for crisis management training and teaching the correct responses to extreme situations. The first one is the simulation of crisis situations whose conditions can recreate real situations in which the participants have to cope with spatial limitations, lack of contact with the outside world, or a situation of bun-

ker deprivation. Conducting training classes in bunkers/shelters allows you to learn how to act in crisis situations. Services (rescuers, doctors, police, firefighters, etc.) can perform various functions (e.g. action managers, participants, people securing resources, rescuers, people responsible for communication). A bunker/shelter is a place with a limited area, so it allows you to carry out exercises in a simulated threat situation. In the conditions of bunker deprivation, services can be trained in providing first aid to the wounded in situations where access to medical aid, means and resources is limited, and in responding to the panic of the population. This is where you can simulate attacks and system failures that require immediate response. People in bunker deprivation situations may have limited access to resources, which requires the ability to manage them well. Participation in bunker simulations allows you to check the knowledge of the services on the principles of evacuation, procedures, management, communication and providing assistance to victims. During the trainings, it is possible to study emotional reactions to group situations and behaviors through observation, measurement of stress reactions, relationships between people, identification of natural leaders. Another area is the development of interpersonal skills, especially communication. Activities in the bunker may be aimed at adapting to difficult conditions (e.g. in the situation of limited access to light, water, sanitary conditions or sleeping places). Training participants have the opportunity to learn or develop strategies for reacting and adapting to extreme situations during the training. The use of bunkers/shelters in service training allows their participants to gain knowledge about the systems that are available in shelters, their operation and resources. The ability to organize an evacuation action, organize communities, and the use of survival techniques are also important. Isolation can affect the behaviour of individuals (e.g. aspects of cultural differences, mastery of stress reactions, panic of other people should be taken into account in training). These trainings require both prior preparation of detailed procedures and knowledge needed to later apply it in the event of a simulated threat. It is also important to discuss the results of the activity in detail with people taking part in such training. The use of bunkers/shelters as places of situated learning allows for the development of skills related to crisis management, as well as learning about human reactions in extreme conditions and ways of coping with difficult situations. Bunkers/shelters are places that allow for the creation of a realistic context of a threat situation, which can contribute to better practical preparation of uniformed services and other groups to take action to protect the lives of the population.

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## **Bunkier/schron jako miejsce uczenia się sytuacyjnego na przykładzie eksperymentu ochrony życia w warunkach zagrożenia**

### **Streszczenie**

Artykuł opisuje założenia eksperymentu i szkolenia przeprowadzonego na terenie koszar Szkoły Wyższej Wymiaru Sprawiedliwości (obecnie Akademii Wymiaru Sprawiedliwości) w Kaliszu. Sześćdziesiąt osób zostało poddanych sytuacji deprywacji bunkrowej przez 12 godzin. Przeprowadzone podczas eksperymentu badania skupiały się na wykorzystaniu bunkrów jako przestrzeni edukacyjnej, w której jednostki uczą się skutecznych strategii ochrony życia w warunkach zagrożenia. Analizy badawcze obejmowały aspekty praktyczne, takie jak fizyczne przygotowanie do sytuacji kryzysowej, oraz psychospołeczne aspekty uczenia się w warunkach stresu. Uczestnicy eksperymentu zostali poddani symulacjom sytuacji kryzysowych. Celem projektu było określenie mechanizmów adaptacji jednostek do sytuacji zagrożenia w kontekście ochrony życia. Schron/bunkier może stanowić przestrzeń wspomagającą sytuacyjne uczenie się, przygotowując jednostki do skutecznego działania w warunkach kryzysowych. W tekście ukazano te elementy teorii i badań z obszaru uczenia się sytuacyjnego, które powinny być uwzględniane w planowaniu dydaktycznym realizacji szkoleń służb prowadzonych w bunkrach/schronach.

**Słowa kluczowe:** warunki bunkrowe, eksperyment w schronie, sytuacyjne uczenie się, teoria umiejscowionego uczenia się.



**ON THE BORDER**  
NA POGRANICZU DZIEDZIN





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## Adjusting the conditions and the form of the eighth-grader Polish language exam to students with the spectrum of autism

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### Abstract

According to the idea of inclusive education, students with the spectrum of autism attend mainstream primary schools more and more often. That requires teaching such students in the way adjusted to their educational needs and conducting the eighth-grader exam taking into consideration the adjusted conditions and exam form, which is regulated by the provisions of the education law. The analysis of the material concerning the adjustments of exam conditions shows that they reflect individual needs of students with the spectrum of autism and are a great convenience for them. On the other hand, the comparison of the standard Polish language exam sheets and the adjusted ones leads to the conclusion that the sheet itself and the tasks are to a great extent adjusted to the needs of students with autism, including Asperger syndrome. However, there are areas calling for change so that the content of the exam is even better adjusted to students with the spectrum of autism.

**Keywords:** students with the spectrum of autism, eighth-grader exam.

### Introduction

Students with the spectrum of autism attend mainstream primary schools more and more often. It complies with the idea of inclusive education (Zacharuk,

2008, pp. 167–168), but it requires teaching such students in the way adjusted to their educational needs, keeping a very individual approach to each case as the spectrum of autism is characterized with large diversity. One of the most important areas that might cause difficulties in teaching these children and lead to issues during the eighth-grader exam are communication disorders (see: Dłużniewska, 2018, pp. 17–19). These children learn to talk later, which translates into “the ability of speech developed differently than in their peers” (Plichta et al., 2018, p. 62), i.e. using vocabulary untypical for one’s age, talking willingly only about one’s interests, lack of the ability to understand jokes, irony, idiomatic expressions, metaphors and sarcasm. Due to that but also due to the presence of stylistic devices, students might find it difficult to analyse and interpret poems and narrative works.

A rigid path of reasoning and literal understanding of statements make it impossible to discern subtext, linguistic manipulation and finally to differentiate realism from literary fiction (Holajda, 2012, p. 316).

The students in question might also have difficulties in reading and writing, especially when it comes to longer texts. It derives among all from their difficulties in mastering grammatical structures, word declination and conjugation. Problems with writing overlap with those concerning fine motor skills, an inappropriate pen grip or hand tiredness, which results in disjointed, illegible handwriting. They might also find it challenging to do tasks concerning social relations and understand abstract terms. During the exam, the students in question might face organizational issues, for instance, not being able to pass on to the next task without completing the previous one. They might also have problems with taking decisions and making choices. They might lose their focus quite fast, especially when it comes to the subject matter that is not of their interest. They might also concentrate on irrelevant details from the point of view of the whole task, such as, for example, a too decorative font type. Motivation and memory are similarly impaired. The students might find it difficult to retrieve information required in a given task. Finally, the distorted concept of time that people with autism suffer from might negatively impact the management of time needed for the exam.

Scientists and teachers draw attention to the fact that there is a need to adjust didactic solutions to the needs of students with autism, including Asperger syndrome (Dłużniewska, 2018; Skrzypczyk-Gałkowska, 2018; Banasiak, Skrzypczyk-Gałkowska, 2021). It is a particularly important demand concerning the fact that the exam is a new, unique, unknown and unrepeatable event for the student, which, regarding the model of functioning of students with autism, qualifies as “a difficult situation” (Marcinkowska, Konieczna, Smolińska, 2017, pp. 153–155), which is particularly stressful and might have a negative impact on the outcome of undertaken effort.

## Adjusting the eighth-grader Polish language exam in the light of selected legal provisions

The eighth-grader exam is regulated by several legal acts.<sup>1</sup> From the perspective of a student with autism preparing for the exam, their parents (legal guardians) and teachers working with them, the most important provisions can be found in:

- the Regulation of the Minister of Education and Science of 15 July 2022 on exam requirements for the eighth-grader exam conducted in the school year 2022/2023 and 2023/2024 ([Dz. U.] The Journal of Polish Law, item 1591),
- the guidelines to the eighth-grader exam from the school year 2018/2019, including annexes to these guidelines binding in the school year 2023/2024,
- the announcement of the Head of the Central Examination Board of 17 August 2023 on the timetable of the eighth-grader exam and the matriculation exam (the final secondary school exam),
- the announcement of the Head of the Central Examination Board of 17 August 2023 on materials and auxiliary instruments that the eighth-graders passing the exam can use,
- the announcement of the Head of the Central Examination Board of 17 August 2023 on detailed adjustments of exam conditions and forms for the eighth-grader exam in the school year 2023/ 2024.

The announcement of the Head of the Central Examination Board of 17 August 2023 on detailed adjustments of exam conditions and forms for the eighth-grader exam<sup>2</sup> on the basis of art. 9a sec. 2 point 10(a) third indent of the act of 7 September 1991 on the system of education gives detailed information on the adjustment of exam conditions and forms of the eighth-grader exam to the needs of, among all, those with special educational needs, including the disabled among whom are students with autism and Asperger syndrome.<sup>3</sup> Adjusting the exam forms for the eighth-grader exam consists in preparing separate exam sheets adjusted to the needs and capabilities of the examinees, and adjusting the conditions of the exam for the eighth-grader exam, among all, consists in the following:

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<sup>1</sup> Information on the way of organising and conducting the eighth-grader exam for the school year 2023/2024. The eighth-grader exam. <https://cke.gov.pl/egzamin-osmoklasisty/o-egzaminie/>. Accessed on 14 November 2023.

<sup>2</sup> The announcement of the Head of the Central Examination Board of 17 August 2023 on detailed adjustments of exam conditions and forms for the eighth-grader exam for the school year 2023/ 2024. <https://cke.gov.pl/egzamin-osmoklasisty/harmonogram-komunikaty-i-informacje/>. Accessed on 14 November 2023.

<sup>3</sup> The terminology used in educational documents and exam sheets referring to students with the spectrum of autism.

- minimizing the limitations deriving from the student's disability;
- ensuring an appropriate working space reflecting the student's educational needs and their psycho-physical capabilities;
- using appropriate specialist equipment and didactic means;
- appropriately prolonging the exam time for the eighth-grader exam;
- establishing assessment rules for the tasks used for the eighth-grader exam, described in 9a sec. 2 point 2 of the act on the system of education, taking into account the student's educational needs and their psycho-physical capabilities;
- ensuring during the exam the presence and support of an assistant teacher helping the student in reading or writing, or a specialist appropriate for a given disability, if it is necessary for appropriate contact with a given student or support in operating specialist equipment and didactic means.

The student with the spectrum of autism is entitled to the adjustment of exam conditions and forms for the eighth-grader exam on the basis of a special educational needs certificate issued by a psycho-pedagogical counselling centre, yet the way or ways of adjusting the conditions or forms of this exam for a given student are defined by the teaching staff council. It does so on the basis of the announcement of the Head of the Central Examination Board on detailed adjustments of exam conditions and forms for the eighth-grader exam, following the list of possible ways in which the eighth-grader exam conditions and forms can be adjusted. In case of a student with the spectrum of autism, the list includes the following information:

- the exam sheet for students with autism, including Asperger syndrome, shall be adjusted to the aforesaid dysfunctions and take into account:
  - prolonged time of the exam;
  - the right not to fill in the answer sheet (i.e. marking the answers for closed tasks on the exam sheet);
- using the support of an assistant teacher for reading instructions and texts and for writing down the student's answers (allowed only if during their whole education the student was accustomed to such cooperation with their teacher);
- writing down the answers to the tasks on the computer if during their whole education the student was accustomed to such a way of working (allowed when the student's graphia disorder makes it impossible to read their handwriting and appropriately mark their answers to the exam tasks OR when the examinee used alternative and auxiliary communication methods);
- the presence of a person necessary to maintain proper contact with the examinee and/ or to help to operate specialist equipment and didactic means;
- adjusting the work space to the student's dysfunction.

The student can also benefit from exam conditions and forms not defined in the announcement, but each case like that needs separate arrangements between the school principal and the head of an appropriate regional examination board.

In case of a student with a special educational needs certificate issued due to their multiply disabilities, there is a possibility to use adjustments foreseen for particular disability types. Such adjustments require a written arrangement of the school principal and the head of an appropriate regional examination board, usually signed till mid-November of a given school year (in the school year 2023/2024 – till 16 November 2023). The application of the school principal should be justified and confirmed by required documents.

The school principal or a teacher authorised by them is obliged to make students and their parents familiar with the ways of adjusting the conditions and forms of the eighth-grader exam and to inform the students' parents of they way such adjustments are established, the dates, usually till the end of September (in the school year 2023/2024 – not later than 28 September 2023). The school principal or a teacher authorised by them informs the student's parents or the adult student in writing about the recommended ways of adjusting the eighth-grader exam's conditions or forms to the educational needs and psycho-physical capabilities of a given student (in the school year 2023/2024 – till 21 November 2023), and the student's parents or the adult student declare whether they shall or shall not use the aforesaid adjustment forms (in the school year 2023/2024 – not later than 24 November 2023).

## **Adjusting the eighth-grader Polish language exam sheet**

For students with autism including Asperger syndrome, there are special exam sheets marked with the symbol OPO<sup>4</sup>-200. The adjustment concerns the content and such changes in comparison to the standard exam sheet (for student without any dysfunctions) that could be called editing ones. Adjusting the content of the exam sheet can be seen at the stage of choosing texts constituting the basis of exam tasks and the form of the very tasks. The first text is an extract of a literary text, the second one is non-literary (scientific, popular-science or journalistic). Both texts should count no more than 1000 words. Under each text, students can find open-ended and close-ended questions accompanying it.

The differences in text selection for the eighth-grader standard exam and the one adjusted to the needs of students with autism, including Asperger syndrome, are illustrated by Table 1. The review encompasses exam sheets from the years 2021–2023 as exam sheets from previous years did not differ in the aspect of text selection.

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<sup>4</sup> OPO is a symbol for the Polish language exam sheet.

Table 1

*Differences in text selection in the eighth-grader Polish language standard exam and the one adjusted to the needs of students with autism, including Asperger syndrome in the years 2021–2023*

Exam year	Text type	Exam sheet for students without disabilities and specific learning difficulties	Exam sheet for students with autism, including Asperger syndrome
2023	Literary text	Juliusz Słowacki <i>Balladyna</i>	Antoine de Saint-Exupéry <i>Little Prince</i>
	Non-literary text	Jolanta Maria Berent <i>Odblokuj swój talent</i>	Marcin Waincetel <i>Ludzie listy piszą...</i>
2022	Literary text	Aleksander Fredro <i>Zemsta</i>	Aleksander Kamiński <i>Kamienie na szaniec</i>
	Non-literary text	Andrzej Kojder <i>Pochwała przyjaźni</i>	<i>Czy ciekawość pomaga w nauce?</i> Based on: <a href="http://www.akademia-umyslu.pl">www.akademia-umyslu.pl</a>
2021	Literary text	Adam Mickiewicz <i>Pan Tadeusz</i>	Henryk Sienkiewicz <i>Latarnik</i>
	Non-literary text	Tadeusz Płużański <i>Przyjacieli mądrości</i>	<i>Im więcej czytamy, tym stajemy się lepsi!</i> Based on: <a href="http://www.ciekawe.org">www.ciekawe.org</a>

Source: own study based on the data included in the eighth-grader Polish language exam sheets in the years 2021–2023 made available on the website of the Central Examination Board. Table 2. shows examples of differences in forming instructions between the exam sheet without and with adjustments and the essence of these adjustments.




Table 2

*Examples of differences in instructions and the essence of the adjustments in the eighth-grader Polish language exam sheets with and without adjustments to the needs of students with autism, including Asperger syndrome*

Exam sheet without any adjustment	Adjustment	Exam sheet adjusted to the needs of students with autism, including Asperger syndrome
<p><b>Choose</b> the correct answer among the given ones.</p> <p>A. B. C. D.</p>	<p>More precise instruction and changed layout of answer options – one in a line instead of putting two answers in the same line</p>	<p><b>Circle</b> the right answer.</p> <p>A. B. C. D.</p>
<p><b>Choose</b> P if the statement is true, or F – if the statement is false.</p>	<p>More precise instruction.</p>	<p><b>Circle</b> P if the statement is true, or F – if the statement is false.</p>
<p>Complete the sentences below so that they create a <b>cohesive</b> summary of the text...</p>	<p>More precise instruction and removing the words that might distract the student from focusing on crucial elements.</p>	<p>Complete the sentences below so that they create a summary of the text...</p>
<p>Study the poster below for a theatre show <i>Balladyna</i>. The author of the poster showed their interpretation of Juliusz Slowacki’s work with the help of various graphic elements. Choose two graphic elements and explain their meaning in the context of <i>Balladyna</i>.</p>	<p>The right selection of content and graphic material acceptable for students with autism – avoiding metaphorical images. Giving the instructions with the help of bullet points in order to signal to the student particular tasks to be completed – “compartmentalizing” the instruction into stages.</p>	<p>One editing house wants to encourage students to read books. In order to achieve the goal, it throws in bookmarks inspired by selected set school books. There are examples of such bookmarks below. Choose one bookmark and:</p> <ul style="list-style-type: none"> <li>• give the title of the set book that the graphic elements of the bookmark refer to,</li> <li>• explain the relation of two chosen graphic elements placed on the bookmark with the content of the set book that you have chosen.</li> </ul>

Table 2  
 Examples of differences in instructions... (cont.)

Exam sheet without any adjustment	Adjustment	Exam sheet adjusted to the needs of students with autism, including Asperger syndrome
 <p><b>BALLADYNA</b></p> <p>A. Córka Wdowy była próżną i leniwą dziewczyną, która niechętnie pomagała w domu.</p> <p>B. Siostra Aliny działała impulsywnie i nie zastanawiała się nad konsekwencjami swoich czynów.</p> <p>C. Tytułowa bohaterka była bardzo ambitna, dlatego dążyła do realizacji celu za wszelką cenę.</p> <p>D. Żona Kirkora zapewniała męża o swoim uczuciu ale tak naprawdę wcale go nie kochała.</p>	<p>Removing extra graphics from the task as it can be distracting and plays a solely decorative role in the task.</p>	<p>One of the sentences below referring to origins of <i>The Little Prince</i> does not follow punctuation rules. Circle the sentence with the wrong punctuation.</p> <p>A. The author of <i>The Little Prince</i> was fascinated with planes from his childhood, that is why he became pilot at an early age.</p> <p>B. Antoine de Saint-Exupéry served in the military and civil air forces and he flew over Europe, Africa, North and South America.</p> <p>C. When the author of <i>The Little Prince</i> had a machine failure during a flight he was forced to land on the desert.</p> <p>D. When Antoine de Saint-Exupéry was waiting for help, he got an idea of writing <i>The Little Prince</i>.</p> <hr/> <p>Among the words given, show the one in which the spelling of "ó" <u>is not justified</u> by the presence of "o" of this word's other grammatical form. Circle the right answer.</p>

Source: own study based on the data included in the eighth-grader Polish language exam sheets in the years 2021-2023 made available on the website of the Central Examination Board.

Table 3

*Differences in paper topic forms in the eighth-grader Polish language exam sheets with and without adjustments to the needs of students with autism, including Asperger syndrome in the years 2021–2023*

Exam year	Topic	Exam sheet for students without disabilities and specific learning difficulties	Exam sheet for students with autism, including Asperger syndrome
2023	Topic 1.	Do you agree with the statement that it depends on us what kind of people we are? Write an essay in which you present your opinion. In your justification refer to one set book and another literary piece.	Do you agree with the statement that it depends on us what kind of people we are? Write an essay in which you present your opinion. In your justification refer to one set book and another literary piece.
	Topic 2.	Write a story about your meeting with a hero of a selected set book. Your adventure should convince you that the one who is patient will achieve their goal. The paper should show that you know the selected set book well.	Write a story about your meeting with a hero of a selected set book. Your adventure should convince you that the one who is patient will achieve their goal. The paper should show that you know the selected set book well.
2022	Topic 1.	It is easier to overcome difficulties when you have a friend. Write a paper in which you determine whether this statement is true or not. In your paper refer to a chosen set book and another literary piece.	Write a paper in which you determine whether it is worth protecting what is most important for a person. In your argumentation refer to a chosen set book and another literary piece.
	Topic 2.	Write a story about meeting a hero of a chosen set book. Your adventure convinced you that it was worth travelling to the world described by this set book. Your paper should prove that you know the selected set book well.	Imagine that you have got an opportunity to travel in a time machine to the world described by one set book. Write a story about your adventure in this world. Your paper should prove that you know the selected set book well.
2021	Topic 1.	Write a paper in which you discuss the accuracy of the statement that in a difficult situation a man learns about oneself. In your paper refer to a chosen set book and another literary piece.	Books help us experience fantastic adventures. Write a paper in which you prove the accuracy of this statement. Refer to a chosen set book and another literary piece.
	Topic 2.	Imagine that one hero from a set book lands in your world. Write a story about your adventure during which the hero was awarded the title of The Friend of Wisdom. Your paper should prove that you know the selected set book well.	It was an extraordinary journey... Write a story about your journey with a hero of a chosen set book. During that journey you managed to help someone in need. Your paper should prove that you know the selected set book well.*

\* The whole topics are written in bold print. Selected topic elements are underlined, e.g. Write an essay. The aim is to draw the students' attention to the written form they are supposed to use.

Source: own study based on the data included in the eighth-grader Polish language exam sheets in the years 2021–2023 made available on the website of the Central Examination Board.

The last task in the exam sheet consists in writing a paper on one of two given topics. The student should show that they are familiar with the written form shown in the topic: argumentative or creative in character (a creative story). In the paper they should refer to a chosen set book (the list of set books is placed in the exam sheet). The work should count at least 200 words.<sup>5</sup> Table 3 illustrates the differences in paper topics for the years 2021–2023.

The examples mentioned above show that in the current school year the paper topics in exam sheets for students without any dysfunctions and students with autism, including Asperger syndrome, did not differ (!). In 2022, topic 1 for students with the spectrum of autism started with the operational verb form, which should clearly point to the activity expected from those students. However, it is difficult to admit that the use of the word “determine” was justified as it is an ambiguous word. Using more straightforward lexis is suggested. Topic 2 begins with the reference to imagination of students with autism, probably used to make the situation to describe more familiar. However, scientist point to imagination disorders as one of autism symptoms occurring at a very early age (Winczura, 2017, pp. 69–94). The paper topics of 2021 for students with autism seem acceptable.

Adjusting the exam sheet for students with the spectrum of autism also concerns the following:

- the way of conveying information about marking the right answers and mistakes,
- bigger space between text lines, the so-called spacing – interline 1.5;
- the way of showing points for particular tasks. Students not using the adjustment are informed about the number of points in the following way: 0-1, 0-2, 0-3, and students with the spectrum of autism can see: 1 pt, 2 pt, 3 pt.;
- the message “You can continue on the following page” placed at the bottom of the exam sheet devoted to a writing task.

Students with autism, including Asperger syndrome, do not mark their answers on the answer sheet – teachers do it for them. It is a convenience for such students as due to their difficulties, especially in the area of concentration and fine motor skills, they might make mistakes while performing that activity.

## The eighth-grader exam in a separate classroom

Students with the spectrum of autism can write their eighth-grader exam in a separate classroom if they benefit from at least one of the following adjustments:

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<sup>5</sup> In the assessment of papers written by students with autism, including Asperger syndrome, teachers use the assessment rules taking into account specific learning difficulties. This rule also applies to the answers given to open-ended questions from the Polish language exam. See: The guidelines to the eighth-grader exam from the school year 2018/ 2019, p. 11. <https://cke.gov.pl/egzamin-osmoklasisty/informatory/>. Accessed on 14 November 2023.

- using technical devices,
- using a CD with the adjusted recording in case of the exam from a contemporary foreign language,
- participation of an assistant teacher (member of the examination board) helping in reading and/ or writing,
- exam time with additional pauses,
- using the help/ participation of a specialist in the exam, i.e. a psychologist, pedagogue (member of the examination board).

Organising the exam in a separate classroom is beneficial from the point of view of students with the spectrum of autism and the way they function. Usually they are distracted by outside stimuli, mainly noises and visual stimuli, which can be avoided by putting them in an exam room where they can be alone and accompanied only by examination board members.

### **Extending time set for working with the exam sheet**

The working time with the exam sheet adjusted to the needs of students with the spectrum of autism that figures on the cover page of the exam sheet takes into account the time extension. Therefore, if the standard Polish language exam sheet predicts maximum 120 minutes of exam time, students with the spectrum of autism are entitled to 180 minutes of exam time, i.e. 60 more minutes.

Such an adjustment makes students with the spectrum of autism write their exam in the exam room with other students that also benefit from extra exam time. It facilitates to create favourable exam conditions of silence and maximum concentration as all the examinees should finish their exam at the same time.

It seems that the question of exam time control by students with the spectrum of autism needs considering. Although the time span devoted to the exam should be written in a visible place and the exam room should be equipped with the clock, students may still have problems with defining how much time is left till the end of the exam or whether they will manage to complete all the tasks, which undoubtedly makes them more stressed. Students may not inform the examiners about their concerns, which derives from the typical features of their functioning (they cannot ask for help, they do not initiate contact). The examiners should be attentive and react to such a situation, but the exam procedure does not predict any particular behaviour in such a case.

It seems unacceptable to let students with the spectrum of autism who benefit from extra exam time write their exam in an exam room with other students who would start leaving and making noise an hour before the end of their exam time limit.

## The eighth-grader exam with the use of a computer

Due to their graphia disorder, students with the spectrum of autism often use a computer during their eighth-grader exam in order to write down the answers.<sup>6</sup> In order to be entitled to use the computer, the extent to which the student's graphia is distorted should make it impossible to decipher and appropriately assess their answers in the exam paper. There are several requirements the students should meet to be entitled to the aforesaid adjustment: a special education certificate or individual teaching certificate, being familiarised with working with the computer during regular lessons, or such a recommendation listed in the opinion issued by the psychological-educational counselling centre. The computer should be autonomous, linked to the printer (with loaded paper) in order to print out the student's work, and cut off from the Internet. The student records exam tasks' solutions on the computer and each of their answers is numbered in accordance with the number of a particular exam task in the exam booklet. In case of close-ended questions, it is enough to give the marking of a given answer, e.g. 1. A, 2. B, and in case of a paper from Polish, it should include information on the chosen topic, e.g. "Paper on topic number...".

Each student with the spectrum of autism that uses a computer during their exam receives an exam sheet that should be coded according to the requirements. Having finished their work with the exam sheet, they have to hand in their exam sheet and their answers in form of a printout to the examination board, which should literally mean they should print their answers on their own. On the first page of the exam sheet, a member of the examination board notes down as follows: "The examinee's answers can be found on a computer printout – the number of pages is..." or "The examinee's answers can be found in the exam sheet and on a computer printout – the number of pages is...".

Giving an opportunity to a student with autism, including Asperger syndrome, to use a computer during their exam is a very good adjustment. However, it is important that teachers preparing such students to such an exam commence their preparations early enough, implementing computer work during their lessons. This recommendation derives, among all, from the fact that although students very often can operate a computer very well, they do not know Word or they cannot type fast enough, are unable to do automatic paragraph indentation or print their work once it is finished. What is more, the opportunity of writing the exam on a computer requires, pursuant to legal regulations, making a student accustomed to such a working mode during their learning process,

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<sup>6</sup> Information on the course of the exam describes in detail all the requirements concerning the file in which a student saves their answers. These are the requirements defining, among all, margin size, font size and line spacing.

which is crucial in case of students with the spectrum of autism, for whom routine and schematic behaviour or following the instructions contributes to the feeling of their safety and comfort.

As far as the requirements addressed to the examination board concerning detailed remarks and annotations on the examinee's printout are concerned, they should be revisited. They should be reduced to an absolute minimum or simpler solutions should be suggested.

## **The eighth-grader exam with an assistant teacher**

During their eighth-grader exam, students with the spectrum of autism can benefit from the support of an assistant teacher in reading and/ or writing if the teachers' council selected such an adjustment on the basis of appropriate documentation provided by a given student. The examinee and their assistant teacher should be familiarised with such a form of collaboration and communicate efficiently. Together, they agree on communication and working rules. If the examinee's dysfunction is coupled with a speech defect, it is necessary that the assistant teacher in writing should understand the examinee's utterances well. In case of students with autism, including Asperger syndrome, the assistant teacher may make the examinee focus on the exam sheet if they notice that the student is not concentrated.

The eighth-grader exam conducted with an assistant teacher in reading/ writing must be organized in a separate exam room.

Both the examinee and their assistant teacher receive exam sheets. Before the work with the exam sheet is commenced, the assistant teacher performs all the coding activities and marking of the exam sheets for the examinee (on the first page they write "the examinee's exam sheet" and "the exam sheet of the assistant teacher in writing/ in reading/ in reading and writing"). Next, the assistant teacher makes the examinee familiar with the instruction placed on the first pages of the exam sheet.

Once the exam sheet is open, the assistant teacher in writing and/ or in reading reads the entire exam sheet or reads it in extracts and waits for the examinee's signal that they are ready to dictate the answers. The content of particular answer options is read by the teacher, skipping the letter or number markings (e.g. A., B., C., 1., 2.). The teacher cannot give any explanations to the examinee concerning the tasks, including texts. Reading the text of the exam sheet is included in the time devoted to working with the exam sheet, which is printed on the title page of the exam. Within the framework of the time given, the examinee may ask to have their written answers read in full or in extracts in order to make corrections.

The student with the spectrum of autism points to the content of the answer, and the assistant teacher writes it down or writes down the answer's marking. The examinee gives orally the content of the answer that they have chosen in closed-ended tasks and the assistant teacher marks it in an appropriate place on the answer sheet (attached to their exam sheet). The student can write down their answers to some tasks on their own, but in such a case these tasks have to be additionally marked.<sup>7</sup> The examinee decides on their own on the order of completed tasks.

In case of assistance in writing, the basis for the assessment of the examinee is the assistant teacher's exam sheet sent to the regional examination board. If the examinee wants to write down their answers to selected tasks on their own, the assistant teacher gives them their exam sheet. The exam sheet of the assistant teacher in writing, partially completed by the examinee, constitutes the student's work subject to assessment. The examinee's exam sheet will not be assessed; notes in their exam sheet are treated like a rough draft.

If the student makes use of the teacher assistant's help in reading and/ or writing, the progress of the eighth-grader exam must be registered with the help of a device recording sound. Sound recording constitutes an integral part of the exam sheet.

The help of an assistant teacher during the exam seems to be a very important convenience for a student with autism, including Asperger syndrome. Pursuant to the legal regulations, the student must be familiarized with such cooperation, thus, collaboration with their assistant teacher should be the result of at least a few-month-long training, which can render very good results. Such a teacher should watch over the student's concentration, read their texts and tasks, write down the answers, which might positively influence the exam result.

## Conclusions

The eighth-grader exam adjusted to the needs and capabilities of students with autism, including Asperger syndrome, is well-organised as far as adjusting its conditions is concerned. It is prepared in such a way so as to minimize unfavourable external factors for such students (for example, noise, excess of movement in the student's surroundings), as well as the internal ones (for example, poor and unstable attention span, decreasing motivation, tiredness, difficulties in reading and writing).

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<sup>7</sup> On top of the first page of the exam sheet, the numbers of these tasks have to be additionally mentioned and in the text of the exam sheet, next to each such task, there should be an annotation e.g. "the student completed the task on their own."



It should be noticed that students with autism, including Asperger syndrome receive the exam sheet, which should respond to their individual needs and capabilities with its choice of content, sentence construction or editing adjustments. However, this exam sheet, like the standard exam sheet, tests knowledge and skills acquired by the student during their learning process in primary school and complies with the school curriculum and/ or exam requirements.<sup>8</sup> No content is removed due to this disorder. It is a very important remark that should be emphasized to make teachers, parents and students aware that this adjustment is executed by selecting appropriate working methods and forms, and not by eliminating any content.

I suggest introducing changes in the eighth-grader Polish language exam sheet adjusted to the needs of students with autism, including Asperger syndrome so that it is constructed in accordance with real needs of these students and so as to make it more accessible to these students (Cf. Krakowiak, 2016). Examples of changes include:

- removing bold print in exam tasks' content in favour of putting only the most important, key words in bold print;
- giving up double marking: bold print and underlining at the same time;
- no italics for titles;
- writing subsequent sentences of a complex instruction in a new line;
- beginning and ending one sentence on the same page of the exam sheet;
- selection of accurate vocabulary in instructions, including the way topics for papers are written.

It should be born in mind that the term “students with autism, including Asperger syndrome” can refer to people of various levels of functioning. That is why introducing additional changes in the exam sheet is necessary in order to satisfy the needs of students functioning in a comparatively weaker way but attending mainstream primary schools and wanting to finish this stage of education with the exam. These changes should not impact the standard of the exam sheet, but should make it more accessible to people with disabilities.

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<sup>8</sup> In 2023 and 2024, the eighth-grader Polish language exam is conducted on the basis of examination requirements defined in the annex to the regulation of the Minister of Education and Science of 15 July 2022, henceforth called “exam requirements”. *Aneks do Informatora o egzaminie ósmoklasisty z języka polskiego obowiązujący w latach szkolnych 2022/2023 i 2023/2024. Egzamin ósmoklasisty. Język polski, p. 2.*, <https://cke.gov.pl/egzamin-osmoklasisty/informatory/>. Accessed on 14 November 2023.

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## **Dostosowanie warunków i form egzaminu ósmoklasisty z języka polskiego dla ucznia w spektrum autyzmu**

### **Streszczenie**

Zgodnie z ideą edukacji włączającej uczniowie w spektrum autyzmu coraz częściej uczą się w szkołach podstawowych ogólnodostępnych. Powoduje to konieczność nauczania takich uczniów w sposób dostosowany do ich specjalnych potrzeb edukacyjnych oraz przeprowadzania egzaminu ósmoklasisty z uwzględnieniem dostosowań warunków i formy egzaminu, co regulują przepisy prawa oświatowego. Jak wynika z materiału na temat dostosowania warunków egzaminu, odpowiadają one indywidualnym potrzebom uczniów w spektrum autyzmu i są dla nich dużym udogodnieniem. Natomiast z przedstawionego porównania arkuszy standardowych z języka polskiego z arkuszami dostosowanymi można wnioskować, że sam arkusz oraz zadania w dużej mierze są dostosowane do potrzeb uczniów z autyzmem, w tym z zespołem Aspergera. Istnieją jednak obszary, w których należy dokonać zmian tak, by jeszcze lepiej uprzystępnąć treści egzaminu uczniom w spektrum autyzmu.

**Słowa kluczowe:** uczniowie w spektrum autyzmu, egzamin ósmoklasisty.



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## The idea of universal design in the educational process at University.

### “Universal design as a space of equal opportunities and accessibility for people with disabilities”

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### Abstract

The article presents the concept of universal design in the educational process at University in the context of the author’s participation in the project called “Universal design as a space of equal opportunities and accessibility for people with disabilities.” To achieve the aforesaid aim, professional literature was studied, project tasks were discussed and the idea of universal design was referred to taking into account contemporary educational space. The author writes about the inclusion of universal design in the teaching-learning process at University, about the inclusion of teaching and accessibility which is a key-word for the idea of universal design. The aim of the project was achieved. Both the lecturers and the students gained more awareness of accessibility. Within the framework of realizing the project tasks, the author studied, among all, the rules of universal design and their practical use. The participants obtained knowledge, competencies and skills, which should allow for using them in the social sphere, in their professional practice.

**Keywords:** universal design, accessibility, inclusion, competencies, skills.

### Introduction

The inspiration for writing the article was the author’s cooperation with the team realizing various tasks within the framework of the project called “Univer-

sal design as a space of equal opportunities and accessibility for people with disabilities” at Jan Długosz University in Częstochowa, organized within the framework of the contest of the National Centre of Research and Development “Universal design” (POWR.03.05.00-IP.08-00-PUN/19). The main aim of the project for the project participants was to obtain knowledge, competencies and social skills concerning universal design (UD). The article describes selected aspects of implementing project components into the educational process. These were the following tasks: developing guidelines for a new subject “Universal design” and implementing them into studies curricula, developing course description cards and lesson plans. Moreover, the subject matter of universal design was to be discussed during certified trainings for the teaching staff.

The lesson topics for the subject offered the project participants an opportunity to learn about the needs of the community with disabilities and other people with special needs, from the point of view of universal design, taking into account digital, ICT, architectural and social accessibility.

The practical aim of realizing the aforementioned lesson plans with students was obtaining new social competencies and skills of using the rules of universal design of goods and services in practice. This aim reflects current needs of our society, job market and economy.

The main aim of the article derives from the aims of realizing the project tasks. It attempts to demonstrate how the lecturers’ and students’ awareness can be raised as far as universal design is concerned, how this concept can be used in practice in the process of constructing the reality surrounding us.

## **Universal design in literature**

The idea of universal design assumes the creation of a product or service design useful for all the people to the greatest possible extent, without the need of adaptation or specialist design (Mace, 1985, p. 149).

To comprehend the subject matter of UD, one has to start from the very beginning, when in 1945 Jack Fischer, a person with a motor disability, filed a petition to the authorities of Kalamazoo, a town in the south-western part of Michigan, to make the pavements more accessible (Wróblewska, 2022, pp. 44, citing Brown, 1999). Thanks to Fisher’s initiative, the kerbs were cut. This event constituted a springboard for universal space design. Only three decades later, in 1972, also in America, the first gradually slanting pavement in the form of a kerb was constructed. This fact was made widely-known by the Disabled People Rights Movement. A year later, Ronald Mace developed the first building code. Being a person with a disability, the author also coined the term “universal design,” as he understood people with similar needs. He became a pioneer in

designing accessible buildings so that the biggest possible number of people could use them, without distinguishing anyone due to their disability (Wróblewska, 2022, pp. 46, 47).

In 1984, the concept of universal design was introduced in education, in its material and immaterial dimension. Its authors were Anne Meyer and David Rose. They made sure classrooms were accessible to all the students, taking into account their various needs. They developed school curricula that made learning with the use of new technologies easier (Wróblewska, 2022).

The idea of universal design is particularly propagated in Norway and Ireland, where exclusivity and holism are emphasized as the foundation of universal design. Norway is a pioneering country which introduced the idea of social inclusion based on seven rules of universal design: 1. Equal opportunities for use. 2. Flexibility of use. 3. Simple and intuitive use. 4. Noticeable and understandable information. 5. Tolerance for error. 6. Low physical effort. 7. Appropriate size and space for approach and use. These rules are widely used to ensure equality for all citizens and their full participation in social life. From the beginning of the seventies of the 20<sup>th</sup> century, the ideas of UD were being gradually introduced into schools. Schools for children with special needs were liquidated and, in 1976, replaced with adapted education. Its aim is to respect students' developmental differences by individual approach and taking into account local circumstances of ethnic and social minorities (Jagiełło-Kowalczyk, Tokarski, 2022, p. 95 citing: Nilsen, 2010, p. 489). It was assumed that social competencies are more important than acquiring knowledge, that is why designing appropriate spaces enhancing the idea of social inclusion is so important (Jagiełło-Kowalczyk, Tokarski, 2022, p. 95 citing: Hansen, 2005, p. 135).

Konrad Kaletsch created the eighth rule, i.e. perception of equality (Konieczna-Woźniak, 2020). Its main assumption is perceiving people with special needs as equal in all areas of social life.

Moreover, according to Anna Jurkowska (2002, p. 157), apart from the rules of UD, the following factors that are also important for accessibility should be added: social, economic, aesthetic and cultural context.

The subject matter of UD can be discussed from a theoretical and empirical perspective. Grzegorz Gawron (2015, p. 135) notices that universal design can be part of the functionalist paradigm due to suggesting appropriate tools for the realization of universal design, but it can also be of a pragmatic nature due to its suggested set of instruments. Using the concept of universal design leads to the establishment of universal rules, thus it can be said it has got positivist orientation, but it is also based on seven rules, which can make it normative in nature. The aim of the authors of the realised project was to equip students with new competencies in the field of UD, but also, as future designers of social life, to make them more sensitive to groups at risk of exclusion, to the aspect of acces-

sibility for people with disabilities. Following this path, it can be noticed that UD is also part of the critical paradigm.

The idea of UD touches upon realistic philosophy, which assumes that every person possesses the unchangeable existential structure that consists of three layers:

physical, linked with motor activities, mental, linked with drive and mental functions, and spiritual that concerns intellect and will. Disturbance within any of these layers impacts only its function, having no influence on the existential structure. A person with a given disability is not existentially disabled (Stankiewicz, 2022, p. 93).

I agree with Stankiewicz that a perfect human being does not exist. A person with a disability is physically or mentally imperfect, maybe more than a person not diagnosed with any. However,

this disability neither deprives nor impairs the very existence, i.e. this dimension of human being that decides on a person's dignity (Stankiewicz, 2022, citing: Chudy, 2002, pp. 113–126).

The author agrees with the view that universal design functions on the border of paradigms (Gawron, 2015, p. 135). It can provoke many controversies as it is not yet well-established in theoretical and empirical research. However, it can be easily noticed that the main tool and aim of the universal design concept is modeling citizens' living conditions, their environment, products and services in the way that respects human rights to freedom and a dignified life.

An example of activities broadening knowledge and developing universal design concepts and skills is a project "Universal design as a space of equal opportunities and accessibility for people with disabilities" realized since 1 June 2020 and financed by the National Centre of Research and Development.

## Universal design at University

The Resolution no 102/2018 of the Council of Ministers of 17.07.2018, concerning the government's programme "Accessibility Plus" ("Dostępność Plus") for the years 2018–2025, makes it obligatory to introduce the subject matter of social accessibility into public policy. For instance, the webpage of the Prime Minister's Office (Uchwała..., 2018), informs that it is to constitute the extension of the strategic project "Space for everyone" ("Przestrzeń dla wszystkich"), deriving from the regulations of the international Convention on the Rights of Persons with Disabilities. As the legislator states, about 30% of society members might experience limitations in mobility or perception. This tendency might be growing due to ageing society and low birth rates. That is why adapted solutions should be universal to enhance life quality and independence for all citizens. The



topic of universal design was introduced into the area of Jan Długosz University in Czestochowa in response to the results of the questionnaire conducted among students giving their opinions on the needs, barriers and expectations of people with special needs. The respondents took into account professional functions fulfilled in the future as well as social actions that should reflect current needs of economy, job market and society.

The project was to provide 522 students with support, within the framework of general-academic and practical studying programmes adapted to the needs of contemporary graduates entering the job market. What is more, the support was also given to 10 employees from the teaching staff. After completing their training and learning about the technicalities of the project, developing model solutions and course description cards for selected studying curricula as well as developing lesson plans, the lecturers could share their knowledge and skills with their students, during lectures and workshops devoted to the subject of universal design.

The completed tasks within the framework of the project helped to reach the goals of the Knowledge Education Development Operational Programme (PO WER – Polish acronym) defined for the activities of 3.5 Complex programmes for tertiary education institutions, Axis III (Oś III) Higher education for economy and development, Knowledge Education Development Operational Programme 2014–2020.

The project tasks resulted in broadened knowledge, competencies and social skills among students as far as using the rules of universal design was concerned, especially its practical aspect, taking into account the specificity of particular fields of study, and in enriching teaching skills of the lecturers supported by the European Social Fund within the scope of the educational process. The obtained effects were verified with the help of a survey questionnaire, and obtained certificates were to confirm the results achieved.

The project tasks were realised in several stages. The first stage consisted in teaching staff training and establishing the Universal Design Model Development Team. The Team's task was to develop model solutions for teaching UD and to develop course description cards. They constituted the basis for lesson plans realising the topics of lectures and workshops. What is more, while implementing the project tasks, the participants of the project were equipped with specialist equipment to simulate selected disabilities and tools to organize everyday activities for people with visual impairment. These aids played a significant role, supporting the realization of lesson plans and introduction of UD during workshops.

The next task was to recruit students selected from several faculties, maintaining the equality of chances regardless of one's sex, age and disability. The project activities were organized in such a way so that the project participants

could combine their professional and family life, and so that women were not discriminated, and in case of students coming back to university there was a remedy programme helping them complete the knowledge they lacked.

The subject matter of universal design was introduced into studying curricula as an obligatory subject in second-degree (M.A.) studies, and as a facultative subject in first-degree (B.A.) studies. That is why students were recruited by direct contact with them. Potential participants were informed about the idea of universal design, its role for professional training and their certified participation, important for their future professional practice.

The students showed interest in this new approach (Jówko, 2022, p. 68) and the fact that learning about it lets them obtain competencies in the area concerning social diversity. The students from the following nine faculties participated in the project: Pedagogy, Administration, Economics, Accountancy and Taxes, Law, Dietetics, Human Nutrition and Dietetics, Criminology and Security Systems, English Philology. The studying curricula for universal design were realized according to the established timetable and organized in modules. For B.A. students there were two modules of UD classes. For M.A. students there were three modules.

The first module encompassed the realisation of lecture topics, introducing the subject matter of UD, discussing groups with special needs, among others, people with disabilities, the elderly, pregnant women and children. The students were familiarized with legal acts concerning the topic. They also learned about the institutions and organizations supporting the functioning of people with special needs. They were presented with literature describing the idea of social inclusion referring to selected fields of study.

The second module for first-degree studies and the third module for second-degree studies approached the subject matter of UD from the practical point of view. Lessons were run with the use of simulators of an elderly person and a person with visual impairment. Some classes were realized by experts in care for people with special needs and by experts with disabilities who could discuss lesson topics from the point of view of a person with a certain disability. The topics, among others, touched upon the following subject matters: disability, architectural, digital, ITC and social accessibility, employment conditions and support for people with disabilities, adapting working environment to the needs of people with disabilities, situation of people with disabilities in European Union countries, e-learning and accessibility of academic education. The workshops made use of teaching aids enhancing the process of education. These were, for instance, simulators of an elderly person and a person with visual impairment. They helped to demonstrate everyday activities of people with special needs and their mobility in existing architectural and spatial circumstances.

The level of knowledge and competencies concerning UD was monitored before the classes commenced and after their completion with the help of the research tool, i.e. a survey questionnaire. The analysis of completed survey questionnaires and certificates obtained by the participants of the project confirmed broadened knowledge, competencies and skills concerning architectural, digital, ITC and social accessibility.

## **Conclusion**

Universal design is the philosophy of designing products, services and environment. I agree with the approach of Grzegorz Gawron and Paulina Rojek-Adamek (2022, p. 5) saying that designed reality is not bespoke as such reality does not exist. Yet, the aim of modern design is creating that takes into account cultural, ethnic and physical diversity, and the one that fairly easily adapts projects to surrounding conditions. Design should be socially responsible and consider the necessity of an emphatic approach towards the recipient in order to avoid social exclusion (Gawron, Rojek-Adamek, 2017, p. 6). Thus, design should be treated like a tool for seeking innovative solutions for the users' needs, in each and every dimension: public and private, and both in the social and spatial context. That is why in order to implement the rules of UD, we have to educate our community. As the author remarks, the issue of accessibility is not known among students. The realized projects are good examples of attempts at using universal design practically so that it constitutes the source of many worthy solutions or at least a change in approaching the needs of another person. The project participants see the need of permanent education in the field of universal design. The concept should be discussed and implemented in the educational process at all its levels, especially in higher education. This conviction derives from the diversity of needs of people who start their university education and still a small number of those who acknowledge their disability or dysfunction.

What is more, university graduates are future constructors of our life and the future together with the accessibility of space where we function depends on them. It should be accessible to everyone, regardless of their limitations. Universal design is understanding and identifying one's and someone else's needs. It is striving to intuitively identify our potential. In order to achieve these aims, it is crucial to teach empathy and interpersonal sensitivity. And universal design should be treated like over-disciplinary mental architecture (Perkowska & Bajkowski 2022, p. 11).

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*ludzkich doświadczeń – twórcy, luminarze i propagatorzy idei* (pp. 57–77). Białystok: Wydawnictwo Uniwersytetu w Białymstoku.

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## **Idea projektowania uniwersalnego w procesie edukacyjnym na uniwersytecie. „Projektowanie uniwersalne przestrzenią równych szans i dostępności dla osób z niepełnosprawnościami”**

### **Streszczenie**

Artykuł traktuje o koncepcji projektowania uniwersalnego w procesie edukacyjnym na uniwersytecie, w kontekście udziału autorki w projekcie pt. „Projektowanie uniwersalne przestrzenią równych szans i dostępności dla osób z niepełnosprawnościami”. W tym celu dokonano przeglądu literatury, omówiono zadania projektowe i odniesiono się do roli idei projektowania uniwersalnego we współczesnej przestrzeni edukacyjnej. Napisano o włączeniu projektowania uniwersalnego do procesu nauczania-uczenia się na uniwersytecie, o inkluzji nauczania oraz dostępności, która jest słowem kluczem dla idei projektowania uniwersalnego. Zakładany cel projektu został osiągnięty. Wykładowcy i studenci nabyli większą świadomość w zakresie dostępności. W ramach realizacji zadań projektowych zapoznano się m.in. z zasadami projektowania uniwersalnego i ich praktycznym wykorzystaniem. Uczestnicy nabyli wiedzę, kompetencje i umiejętności, które pozwolą im na wykorzystanie ich w sferze społecznej, w praktyce zawodowej.

**Słowa kluczowe:** projektowanie uniwersalne, dostępność, inkluzja, kompetencje, umiejętności.



**REVIEWS**

RECENZJE







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**[rec.] Iveta Kovalčíková, Joanna Miecznik-Warda  
(2022). *Szybkość motoryczna i szybkość umysłowa  
jako wyznaczniki szkolnych osiągnięć ucznia*. Kraków:  
Wydawnictwo Petrus, ss. 220**

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W 2022 roku na polskim rynku księgarskim ukazała się książka autorstwa Ivetty Kovalčíkovéj i Joanny Miecznik-Wardy *Szybkość motoryczna i szybkość umysłowa jako wyznaczniki szkolnych osiągnięć ucznia* (Wydawnictwo Petrus).

Iveta Kovalčíková jest profesorem Uniwersytetu Pedagogicznego w Krakowie i dyrektorem Centrum Badawczego Edukacji Kognitywnej Uniwersytetu w Preszowie (Słowacja). Od wielu lat zajmuje się problematyką diagnozy i stymulacji zdolności poznawczych i metapoznawczych uczniów oraz wdrażaniem terapii edukacyjnej do praktyki oświatowej. Druga Autorka – Joanna Miecznik-Warda – zajmuje się terapią pedagogiczną; jej zainteresowania naukowe koncentrują się na zgłębianiu tajników dziecięcego umysłu i ich wpływu na efektywność nauczania.



Treść książki poświęcono diagnozie wybranych procesów poznawczych i wykonawczych uczniów oraz określeniu ich znaczenia w osiągnięciu sukcesów szkolnych (s. 76). Warto wskazać, że w toczącej się obecnie dyskusji dotyczącej aktywności ludzkiego mózgu, zwłaszcza w sytuacji uczenia się, zaprezentowane w książce analizy stanowią przykład udanego studium badawczego. Już na samym początku recenzji pragnę podkreślić wagę podjętego tematu, jego aktualność oraz potrzebę naukową, podzielać opinię Autorek, że

w kontekście światowym nie ma badań dotyczących związku między szybkością umysłową a szybkością motoryczną i ich wpływu na sukces szkolny uczniów, natomiast większość badań nad funkcjami poznawczymi koncentrowało się głównie na problemach z dziedziny psychiatrii (s. 75).

*Szybkość motoryczna i szybkość umysłowa jako wyznaczniki szkolnych osiągnięć ucznia* – to rozprawa naukowa o charakterze interdyscyplinarnym, którą formalnie można ulokować na styku pedagogiki rozwoju, kognitywistyki, psychologii pozytywnej oraz pedagogiki szkolnej.

Monografia stanowi interesujące studium teoretyczno-empiryczne. Jest to klasyczne dzieło naukowe, które nawiązuje się do teorii psychopedagogicznych, empirycznych badań procesów umysłowych i motorycznych u uczniów oraz związków zachodzących między nimi. Książka składa się ze wstępu, czterech rozdziałów – gdzie część teoretyczna i empiryczna uzupełniają się nawzajem, tworząc spójną całość – a także bibliografii i aneksów. Całość pracy liczy 220 stron.

W pierwszym rozdziale, teoretycznym, pt. *Poznawcze uwarunkowania procesu edukacyjnego*, wyjaśniono podstawowe pojęcia z zakresu kognitywistyki w edukacji oraz przedstawiono implikacje nowych teorii dla praktyki pedagogicznej. Badania nad aktywnością poznawczą rozwijały się wraz z próbami modelowania ludzkiego zachowania w procesie rozwiązywania problemów. Najnowsze wyniki badań nad mózgiem człowieka i przebiegiem myślenia wskazują na niezwykłą wagność procesów poznawczych, które w wąskim rozumieniu są procesami przetwarzania, nabywania, strukturalizowania i przechowywania informacji o świecie; w szerokim – to sposób odbioru i rozumienia/interpretacji świata, który reguluje zachowanie człowieka. Koncentrując się na zachowaniu człowieka, Autorki skupiają swoją uwagę na kognitywistyce, która zajmuje się

wszystkimi zjawiskami dotyczącymi umysłu, szczególnie zagadnieniami dotyczącymi sposobu postrzegania bodźców i oddziaływania umysłu ze światem i innymi umysłami, a jej głównym zadaniem jest próba syntezy wiadomości z różnych dziedzin (Duch, 1998).

I. Kovalčíkova (2021) wprowadza termin *kognitywny paradygmat edukacyjny*, definiując go jako nowoczesny przykład praktyki edukacyjnej z pozytywnymi rezultatami, gdzie głównym pojęciem jest myślenie i poznawanie.

Pierwszy podrozdział omawianego rozdziału obejmuje teoretyczne ramy rozumienia procesów metapoznania, wyjaśniono znaczenie funkcji wykonawczych

oraz opisano ich wpływ na wysiłek i odporność uczniów. Szczególną uwagę poświęcono rozwojowi funkcji wykonawczych w postaci zdolności do kontroli uwagi, a także kontroli własnego działania, co jest silnym predykatorem osiągnięć szkolnych. Jako przykład ważności zastosowania funkcji wykonawczych Autorki podają program nauczania SMARTS. Aktywność funkcji wykonawczych jest zaprezentowana w pięciu obszarach programu: 1) ustalanie/tworzenie celów, 2) elastyczność poznawcza, 3) organizowanie i ustalanie priorytetów, 4) dostęp do pamięci roboczej i 5) samokontrola (Meltzer, 2018). Na podstawie wyników realizacji programu stwierdzono, że rozwój funkcji wykonawczych przebiega w sposób powolny i nieharmonijny.

Drugi podrozdział poświęcony jest kompleksowej diagnozie psychologicznej. Autorki używają argumentów podkreślających niezbędność kompleksowej diagnozy psychologicznej każdego dziecka z naciskiem na jego mocne strony. Dziecięce odkrywanie świata zaczyna się od ruchów i czynności motorycznych. Pojęcie *motoryka* jest definiowane jako całościowy kształt czynności ruchowych człowieka; dotyczy poruszania się człowieka w przestrzeni na skutek zmian położenia całego ciała lub poszczególnych jego części.

W trzecim podrozdziale przedstawiono i opisano wybrane narzędzia do pomiaru szybkości motorycznej i umysłowej. Z całego szeregu narzędzi do pomiaru szybkości motorycznej i umysłowej Autorki wymieniają, ich zdaniem, najbardziej efektywne. Wśród testów do mierzenia sprawności motorycznej wyszczególniają: Test Kreskowania Miry Stabak; Test Pętelkowania; Test Szybkości Pisania słowa „domek” Elżbiety Grzegorzewskiej, Test Karty Rene Zazzo; Test Ozierckiego. Do mierzenia sprawności umysłowej za pomocą bodźców wzrokowych i umiejętności grafomotorycznych podają Test PSI (Processing Speed Index) oraz test nowej generacji – Test Trail Making (TMT). Testy szybkości umysłowej pozwalają oszacować, jak szybko dziecko może wykonać podstawowe, wyuczone zadania, natomiast nie oceniają myślenia, a na wyższym poziomie wymagają prostych reakcji i działań.

Czwarty podrozdział poświęcony zagadnieniom szybkości motorycznej i umysłowej jako zmiennej badawczej, w tym analizie badań w danym obszarze.

W piątym podrozdziale szybkość motoryczna i umysłowa są rozpatrzone w świetle ontogenezy. Autorki dochodzą do wniosku, że szybkość przetwarzania umysłowego wzrasta razem z wiekiem. Wraz z rozwojem pojawiają się wyrafinowane strategie myślenia, przetwarzanie informacji przyspiesza, wzrasta zdolność zrozumienia relacji wyższego rzędu, wraz z elastycznością niezbędną do rozwiązywania problemów.

Przedmiotem analiz w rozdziale drugim są zagadnienia osiągnięć szkolnych w odniesieniu do koncepcji sukcesu szkolnego. Autorki skupiają się na uwarunkowaniach osiągnięć szkolnych. Charakteryzują czynniki: endogenne – predyspozycje ucznia (inteligencja, zdolności, motywacja wewnętrzna uczniów) oraz

czynniki egzogeniczne (wpływy środowiskowe, wpływy dydaktyczne i wychowawcze w szkole i motywacja wewnętrzna uczniów).

Metodologiczne podstawy badań własnych przedstawiono w rozdziale trzecim. Merytorycznie opisane zostały wszystkie aspekty projektu badawczego, przedmiot badań, problemy i hipotezy, zmienne, dobór próby badawczej oraz organizacja badań. W celu uzyskania wiarygodnych wyników oraz poprawy jakości i wydajności badania głównego Autorki poprzedziły je badaniem pilotażowym, przeprowadzonym w roku 2018 wśród 11 uczniów klas II–IV szkoły podstawowej w Sosnowcu. Po zweryfikowaniu zastosowanych narzędzi Autorki przystąpiły do badania głównego. Jego celem było uzyskanie odpowiedzi na następujące pytania:

1. Czy istnieje związek między oceną nauczyciela wyników ucznia na skali a oceną wyrażoną na poziomie klasyfikacyjnym?
2. Czy istnieje związek między szybkością motoryczną i umysłową a funkcjonowaniem ucznia na lekcji ocenianym przez nauczyciela na skali?
3. Jak nauczyciele oceniają wyniki uczniów o różnym tempie motorycznym i umysłowym?
4. W jaki sposób nauczyciele odzwierciedlają różnice w cechach poznawczych uczniów w procesie nauczania?
5. Jakie są opinie rodziców na temat tempa rozwoju motorycznego i psychicznego ich dzieci w odniesieniu do wyników w szkole? (s. 78).

Odpowiedzi na wyżej wymienione pytania udało się uzyskać dzięki prawidłowo wybranej metodologii mieszanej, która polegała na łączeniu elementów metod jakościowych i ilościowych. W głównej fazie badań wykorzystano: testy umiejętności (Kreskowanie Miry Stambak; Pęteltkowanie, TMT-D-KEFS), analizę dokumentów, wywiad częściowo ustrukturyzowany, skalę samooceny ucznia oraz skalę ocen dla nauczyciela. Zastosowanie metody analizy testowej, w której wzięło udział 97 uczniów z klas 3–5 szkoły podstawowej w Sosnowcu (41 dziewczynek i 56 chłopców) umożliwiło uzyskanie wiarygodnych wyników. Badaniem techniką wywiadu częściowo ustrukturyzowanego objęto 10 nauczycieli (8 kobiet i 2 mężczyzn) szkół podstawowych w Sosnowcu oraz 5 wybranych rodziców badanych uczniów (4 osoby – matki chłopców, 1 respondentka – matka dziewczynki). Autorki przeprowadziły badanie ankietowe wśród 7 nauczycieli języka polskiego i matematyki uczących uczniów i oceniających w skali ich funkcjonowanie na przedmiotach język polski i matematyka. Częścią badań była analiza dokumentów – arkuszy ewaluacyjnych, w których oceniano osiągnięcia uczniów.

Rozdział czwarty obejmuje prezentację i interpretację wyników badań. W rezultacie przeprowadzonych analiz teoretycznych oraz na podstawie materiału empirycznego zostały sformułowane zalecenia dla praktyki edukacyjnej: włączenie edukacji kognitywnej do kształcenia przyszłych nauczycieli; wprowadzenie diagnozy szybkości umysłowej do profesjonalnej diagnostyki w poradniach psy-

chologiczno-pedagogicznych; zwrócenie uwagi w badaniach pedagogicznych na wpływ cech osobowościowych nauczycieli i rodziców na ocenę funkcjonowania dzieci w zakresie edukacji; stosowanie kompleksowej diagnozy (w skład której wchodzi badanie funkcji poznawczych) w edukacji; tworzenie programów korekcyjno-kompensacyjnych w celu poprawy funkcjonowania ucznia w klasie.

Badania zostały oparte na bogatej analizie literatury (252 pozycje, publikacje polskie i zagraniczne). Publikacje są dobrze dobrane merytorycznie i właściwie wykorzystane w pracy.

Podsumowując, największe zalety książki, które w moim przekonaniu warto raz jeszcze uwypuklić, są następujące:

- 1) Jest to pierwsze studium dotyczące związku między szybkością umysłową a szybkością motoryczną i ich wpływem na sukces szkolny uczniów.
- 2) W książce zostały wyjaśnione podstawowe pojęcia związane z podejściem kognitywnym w edukacji oraz przedstawiono implikacje nowych teorii dla praktyki pedagogicznej.
- 3) Po przeprowadzeniu badania sformułowano wnioski, na podstawie których zostały opracowane zalecenia dotyczące diagnozy szybkości umysłowej dla poradni psychologiczno-pedagogicznej.

Opiniowana książka jest monografią naukową. Na tle innych publikacji wyróżnia się wartościami poznawczymi oraz metodologicznymi. Jednak grono adresatów książki to nie tylko naukowcy, ale również nauczyciele, a także studenci – kandydaci na pedagogów i nauczycieli.

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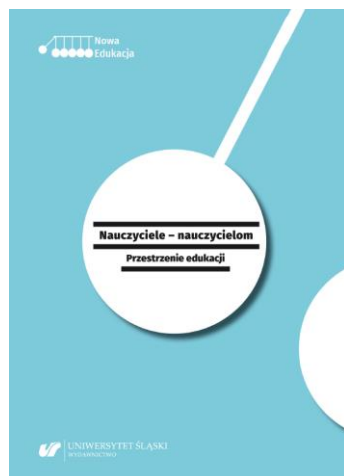
**[rec.] Marta Mamet-Michalkiewicz (red.) (2022).  
*Nauczyciele – nauczycielom. Przestrzenie edukacji.*  
Katowice: Wydawnictwo Uniwersytetu Śląskiego,  
ss. 140**

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Monografia pt. *Nauczyciele – nauczycielom. Przestrzenie edukacji*, wydana przez Uniwersytet Śląski w roku 2022 (Katowice, ISBN: 978-83-226-4251-1, ISSN: 2720-1112, 140 stron) stanowi bardzo interesującą publikację w obszarze międzydyscyplinarnego dialogu pomiędzy nauką akademicką a praktyką edukacyjną. W tym upatruję jej największego waloru. Łączy głosy różne, nie tylko w sensie tematyki dyscyplin, ale też instytucjonalnego osadzenia autorów, a w związku z tym prezentuje różne praktyki dydaktyczne oraz perspektywy badawcze. Takie publikacje, jak każda praca nowatorska, są zwykle wyzwaniem, ponieważ istnieje ryzyko zbyt dużej hybrydyczności lub zróżnicowania narracji. Recenzowana książka jest na granicy takiego ryzyka, ale jej nie przekracza. Budują ją teksty zróżnicowane tematyką, stylistyką



oraz rejestrem, jednak ich kompozycja jest uzasadniona dla głównego przesłania tej niewielkiej objętościowo, ale ciekawej propozycji wydawniczej. Głosy Autorów, w tym znaczących postaci nauki, wprowadzają klimat poważnego namysłu i refleksyjnej dyskusji, a głosy praktyków wskazują na aktualne trendy w zmienianiu jakości dydaktyki oraz myślenia o edukacji. To bardzo cenne połączenie, które już w swej strukturze wprowadza i kreuje wrażenie polifonii głosów w myśleniu o edukacji oraz praktyce edukacyjnej.

Celem autorki niniejszego artykułu jest nasuwająca się podczas lektury tekstów tworzących monografię chęć odniesienia się do elementów teorii analizy transakcyjnej (AT). Nie jest to w żadnym wypadku próba naukowych uzasadnień, a jedynie pewna dyskursywna metaforyzacja oglądu treści i zagadnień poruszanych przez Autorów i Autorki książki. Można bowiem przyjąć, że w każdym z tekstów ujawniają się różne postacie ego Autorów jako narratorów i badaczy, różne rodzaje transakcji pomiędzy wspominanymi przez nich podmiotami kształcenia, pomiędzy nimi oraz instytucją, a także – przy uważnej analizie autorskich narracji prowadzonych w rozdziałach – pomiędzy Autorami a bohaterami ich opowieści. Ci bohaterowie są ludźmi, ale także nie-ludźmi (szkoła, przedmiot, zjawisko społeczne, obiekt badań, metoda kształcenia). Idąc dalej, poprzez naświetlenie wybranej przez Autorów tekstów tematyki, można wyodrębnić w nich obecność typów osobowości „występujących” w każdym z nich. Chcąc wykonać takie salto metodologiczne w poniższej recenzji, proponuję przyjrzenie się każdemu rozdziałowi jak odrębnej narracji osadzonej w jednej większej całości, dotyczącej przestrzeni edukacji, w której nauczyciele nauczycielom mówią coś ważnego. Za każdym razem jako inne osobowości wobec kogoś lub czegoś, jak też z innym skrypkiem transakcyjnym, mniej lub bardziej uświadamianym, oraz innego typu modelami osobowości (typami Ja) (Berne 2004).

Autorka *Słowa wstępnego*, a jednocześnie redaktorka tomu, Marta Mamet-Michalkiewicz spójnie i ciekawie wprowadza treści całej książki, zarazem informując o podłożu jej powstania i merytorycznym osadzeniu w zrealizowanym w uczelni projekcie pozakonkursowym pt. „Śląska Szkoła Ćwiczeń”<sup>1</sup>. Występuje tutaj jako Dorosły, który racjonalnie opisuje rzeczywistość kreowania idei publikacji, swoistego Dziecka projektu. Wprowadza informacje faktograficzne, ale także opinię w kształcie założenia, że nowatorski projekt zrodził wiele inspiracji Autorom, którzy postanowili zebrać je w tomie zbiorowym. Tytuł tomu ma sugerować ową wymianę między nauczycielami, horyzontalną wzajemność doświadczeń oraz refleksji wokół nich. Sugeruje wymianę nie liniową, a przestrzenną, dodając do motta głównego „nauczyciele – nauczycielom” dopisek

<sup>1</sup> Projekt „IQ”: W trosce o jakość w ilości – program interdyscyplinarnego wspierania studenta w oparciu o metodę tutoringu akademickiego w Uniwersytecie Gdańskim (Ideal Quality in Good Quantity); EEA Grants and Norway Grants (FRSE); 2014–2016 Uniwersytet Gdański.



„przestrzenie edukacji”. W publikacjach na temat doskonalenia kompetencji dydaktycznych w akademii zaistniało już wcześniej motto „nauczyciele nauczycielom”, np. w tytule rozdziału monografii wydanej przez Wydawnictwo UJ pt. *Rozwijanie kompetencji dydaktycznych nauczycieli akademickich. Wybrane praktyki* (Maciejowska, Sajdak-Burska 2018) (tam rozdział pt. *Nauczyciele nauczycielom: Centrum Tutorów, Laboratorium Inicjatyw Dydaktycznych oraz Doktoratorium Uniwersytetu Gdańskiego* – B. Karpińska-Musiał, M. Zieliński). Widniało już też jako część nazwy projektu realizowanego w Uniwersytecie Gdańskim w 2015 roku<sup>2</sup>, co jednak tylko potwierdza i wzmacnia jego ważne przesłanie dla wspólnoty myślenia o budowaniu uniwersytetu opartego na dociekaniach poznawczych oraz dobrych praktykach dydaktycznych.

Rozdział autorstwa Tadeusza Sławka, zatytułowany *Nowhere Man. O szkole, która się waha*, jest adekwatnym dla całej monografii, przekrojowym wprowadzeniem w tematykę sensu i znaczenia edukacji w perspektywie filozofii „Sokratejskiego kształcenia w drodze”. Tekst postrzegam jako wysoce humanistyczną i metaforyczną sublimację esencji kształcenia, której Autor dokonuje poprzez luźno ze sobą powiązane refleksje, nawiązujące do kategorii pedagogicznych i humanistycznych wokół instytucji szkoły. Spośród nich czyni kategorie „wahania” oraz nieustannego wzmacniania cnót obywatelskich i sztuki myślenia krytycznego priorytetami wartościowego kształcenia. Postuluje o oderwanie kształcenia instrumentalnego opartego na wiedzy od procesu dydaktycznego i kształcenia jednostek w kierunku ich samostanowienia, akceptacji i sztuki bycia w nieustannej drodze poszukiwań oraz w dążeniu do mądrości rozumianej przez pryzmat nieustannego zapytywania o świat. Tym samym, co kluczowe, owo budowanie mądrości odbywa się zdaniem Autora także przez pryzmat języka. W ujęciu analizy transakcyjnej uwidacznia się tu postulat wspierania przez szkolną edukację rozwoju osobowości uczniów i uczennic w kierunku stanu Dziecka Spontanicznego – poszukującego i ciekawego nowości, żywo reagującego na świat oraz komunikującego się w tym świecie. Na przeciwległym biegunie dydaktyki opartej o instrumentalną narzędziowość stoi ego Dziecka Przystosowanego, jakie bardzo często można odnaleźć w szkole jako instytucji kształcenia formalnego. Głos Tadeusza Sławka stanowi wartościowy, filozoficzno-refleksyjny namysł nad współczesną kondycją edukacji, a struktura prowadzonych teoretycznych rozważań dobrze wprowadza czytelnika w paletę dalszych rozdziałów książki, traktujących o wybranych praktycznych aspektach kształcenia akademickiego oraz szkolnego.

Rozdział Marty Mamet-Michalkiewicz, pt. *Edukacja to relacja. O potrzebie dialogu i dialogicznej postawie w nauczaniu*, płynnie wpisuje się w narrację prowadzoną przez Tadeusza Sławka i stanowi kontynuację myślenia o edukacji

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<sup>2</sup> [https://fil.ug.edu.pl/media/aktualnosci/49714/centrum\\_tutorow\\_ug\\_nauczyciele\\_nauczycielom](https://fil.ug.edu.pl/media/aktualnosci/49714/centrum_tutorow_ug_nauczyciele_nauczycielom).

w kategoriach relacji, a zatem także interakcji i transakcji symbolicznych. Autorka pochyla się nad edukacją dialogiczną, a w szczególności nad specyfiką tejże w zestawieniu z postawą dialektyczną u edukatorów, o bardziej liniowym i dychotomicznym charakterze. Posługuje się metaforami w doprecyzowaniu kategorii wspólnoty, pisząc o edukacji ku wspólnotowości i relacji, które postrzega jako naczelną parametry edukacji do przyszłości. Postuluje słusznie o kształcenie w nauczycielach kompetencji miękkich, które pozwalają na budowanie bliskiej relacji w edukacji. Na poparcie istotności dialogicznego podejścia do kształcenia powołuje się na wielu filozofów dialogu, a niektóre ich myśli – wsłuchanie się w mity (teorie osobiste?) uczących się, danie im przestrzeni na głos własny – traktuje jako bazowe wytyczne dla kształcenia na każdym poziomie. Nauczycielom nadany jest postulatywnie stan Rodzica Opiekuńczego wobec Dziecka często Zbuntowanego oraz Przystosowanego w klasie szkolnej. Nauczyciele tymczasem wobec siebie (a może i uczniów?) często pełnią rolę Rodzica Krytycznego lub Ratunkowego (postawy dialektyczne?), a te postawy ego w interakcjach w ramach środowiska szkolnego nie wydają się być korzystne. Kompetencje miękkie i sztuka budowania relacji jako Ja-Dorośli z drugim Dorosłym lub Dzieckiem Spontanicznym stanowią przedmiot wielu szkoleń doskonalących dla nauczycieli zarówno akademickich, jak i szkolnych (Projekt IQ w UG 2014–2016 lub ogólnopolski projekt „Wychować Człowieka Mądrego” realizowany przez Instytut Tutoringu Szkolnego 2018), o których autorka wspomina w swoich rozważaniach.

Trzeci tekst w tomie, Magdaleny Piotrowskiej-Grot – pt. *Jedna zmiana w twojej szkole – dla kogo, kiedy i z kim?* – kieruje nas już w stronę realiów edukacji szkolnej. Stanowi dyskusję na temat realnej współpracy środowiska szkolnego ze sobą, z uwagą zwróconą w stronę roli dyrektorów placówek jako liderów w edukacji. Autorka poddaje analizie teoretyczną koncepcję przywództwa w kontekście szkoły, zauważa jego złożoność i wielowymiarowość, różnicuje i wyodrębnia jej znaczenie od tego przyjmowanego w biznesie. Tekst opatruje pytaniem o zmianę w szkole i na tej kanwie stawia pytania o warunki takiej zmiany i rolę w niej dobrego lidera zespołu nauczycielskiego. Można tu z pewnością odnaleźć przestrzeń dla tropów transakcji równoległych lub krzyżowych według teorii analizy transakcyjnej. Liderowanie w edukacji to nieustanna żonglerka komunikacyjna, od której jakości zależy zgodność lub konfliktogenność podmiotów środowiska szkolnego, i to nie tylko w ludzkim, werbalnym wymiarze, ale także nie-ludzkim związanym z infrastrukturą szkoły, jej proksemiką, wyposażeniem, przestrzenią fizyczną i symboliczną.

Rozdział Marka Kaczmarzyka, *Biologiczne podłoże mechanizmów uczenia się – co nam dają neuronauki w edukacji?*, stanowi przekrojowe spojrzenie na tematykę jego wieloletnich badań i pracy popularyzatorskiej w obszarze edukacji i neurodydaktyki. Wpisuje się bardzo dobrze w dyskusję nad przestrzeniami edukacji współcześnie. Zwraca bowiem uwagę na niekompatybilność formalnego

systemu kształcenia (wspólne efekty kształcenia dla określonego szczebla kształcenia) z biologicznie i ewolucyjnie uwarunkowanym etapem socjalizacji uczniów w grupie, tzw. „dostosowaniem łącznym”, które wymaga uczenia się od siebie, we współpracy (uczenie się społeczne), a najlepiej, jeśli młodsi uczą się od starszych lub mniej kompetentni od bardziej kompetentnych. Środowisko uczenia się, zdaniem badacza, jeśli ma sprzyjać biologicznym fazom adolescencji, powinno brać pod uwagę także wysoką dynamikę zmian w mózgu nastolatka, które rzutują na wiele problemów wychowawczych także w szkole. Autor postuluje zatem, nie po raz pierwszy, o uwzględnianie tej wiedzy w budowaniu systemu społecznego w szkole. Ten głos jest wciąż bardzo aktualny jako uzupełnienie wiedzy płynącej z nauk społecznych, chociaż opisany został na dość dużym poziomie ogólności. Warto po jego lekturze sięgnąć głębiej po neurobiologiczne uwarunkowania procesów poznawczych zarówno w wymiarze indywidualnej, idiosynkratycznej jednostki ucznia/uczenicy, jak i w kształceniu kolektywnym, we współpracy grupowej. Wiedza ta staje się coraz powszechniej dostępna, a stanowi ważny element profesjonalizacji nauczycieli chcących lepiej zrozumieć złożoność rzeczywistości kształcenia. Trudno w przypadku rozdziału Marka Kaczmarzyka nie zauważyć możliwych odniesień do kierowanej psychologią rozwojową oraz biologicznymi uwarunkowaniami rozwoju fluktuacji między różnymi typami osobowości Dziecka w dorastających nastolatkach. Niezwykle szybka dynamika zmian w osobowości adolescenta generuje interakcje krzyżowe obok liniowych, z przewagą najpewniej tych pierwszych. Dogłębne poznanie owych procesów, być może nawet za pomocą narzędzi AT, mogłoby wspierać procesy kształcenia ku ich jak najgłębszej, relacyjnej naturze i merytorycznej efektywności.

Po czterech rozdziałach rozważających przestrzenie edukacyjne w ujęciu różnych teoretycznych przesłanek i podstaw paradygmatycznych, kolejne cztery nasświetlają wybrane praktyki dydaktyczne w obszarze różnych kursów przedmiotowych. Rozdział autorstwa Sylwii Kani, pt. *Czy liczby mogą kłamać? O nauczaniu matematycznym w Polsce*, omawia wątek kształcenia matematycznego w szkołach i jest ważnym głosem w obszarze praktycznej dydaktyki matematyki. Autorka podkreśla konieczną precyzję języka matematyki, wskazując jednocześnie na potrzebę łączenia formalizmu z aktywizującymi metodami „opowiadania” o matematyce, które pozwolą uczniom na większe zaangażowanie, zaciekawienie i przez to ułatwią przyswajanie twardej logiki twierdzeń oraz działań matematycznych. Tekst czyta się płynnie, ciekawie przytoczono kilka przykładów metod aktywizujących w przedmiotowym kształceniu matematycznym (memy, sofizmaty, zagadki). Zabrakło jedynie trochę odniesień do niektórych wątków oraz tekstów źródłowych i badań na temat cyfryzacji młodego pokolenia, która pozwala na wykorzystywanie szerokiego spektrum narzędzi z obszaru ICT w nauczaniu przedmiotów ścisłych. Autorka skupiła się na wypukleniu znaczenia opowieści matematycznych, czyniąc je symbolicznym podmiotem sprawczym, ale –

jeśli przyjąć ujęcie analizy transakcyjnej – jest to podmiot jakoby o osobowości Dorosłego, który stara się zaopiekować się swoimi dziećmi (uczniami i uczennicami) z pozycji Rodzica Opiekunczego. Matematyka to bowiem przedmiot racjonalny, nauka formalna, jednak opowiadanie lub inne aktywizujące zadania, pobudzające owe dzieci do myślenia, liczenia, rozwiązywania problemów, czyli inaczej „opowieściowa” twarz nauki ścisłej, zostaje „zmiękczone” przez metodę. Nagina się do potrzeb dziecka, by odzyskać z niego emocje poznawcze i nałożyć je na formalną siatkę suchych pojęć, liczb i wzorów – czyniąc tym sposobem dydaktykę matematyki żywym procesem transakcyjnym.

Dialektyka między formalną nauką ścisłą a przestrzenią do kształcenia w jej zakresie jeszcze bardziej uwidacznia się w rozdziale wieloautorskim Marzeny Podgórznej, Macieja Serdy i Anety Słodek pt. *Chemia w badaniach naukowych i nauczaniu: o różnych zastosowaniach węgla*. Pełen jest on naukowych i definicyjnych ujęć przykładowych związków węgla, opisanych hermetycznym językiem z zakresu nauk chemicznych. Stanowi przykład surowego Dorosłego, z całym ekwipunkiem faktów, racjonalnie i skrupulatnie podanych na tacy nauki oraz edukacji. Każdy typ osobowości Dziecka potrzebowałby tutaj więcej wyjaśnień, zadawałby pytania, ponieważ niewiele jest w tym tekście odniesień do dydaktyki chemii na przykładzie opisywanych związków chemicznych. Otrzymujemy bardzo szczegółowe naukowe charakterystyki – trudne w lekturze dla niechemika – związków i substancji, znalazło się też miejsce, w którym autorzy wspominają o umieszczeniu opisywanych substancji i ich właściwości w programach szkolnych. Dorosły o nazwie CHEMIA ma pewną trudność w pokazaniu, JAK przystępnie można naświetlić uczniom ową przydatność i zastosowanie związków węgla w życiu praktycznym. Obawiam się, że transakcje krzyżowe wniosłyby tu parę konfliktów, dysonansów poznawczych i wątpliwości, zanim procesy zrozumienia – w tym przypadku szczególnie wymagające precyzji i dobrego przekładu z języka nauki na język uczenia się – doprowadzą Dziecko do Dorosłego. Warto jednak próbować!

Próbuje tak uczynić Mateusz Staśko, który w tekście pt. *Nauczanie znaków drogowych z wykorzystaniem gier oraz programów edukacyjnych* podejmuje tematykę wykorzystania oprogramowania Scratch do zbudowania rodzaju gry opartej na zagadkach, wspomagającej proces kształcenia dzieci w obszarze przepisów ruchu drogowego. Autor dobrze określa pole problemowe, przywołuje treści oficjalnych dokumentów mających wpływ na podstawę programową w przedmiocie, porównuje też dane z różnych krajów europejskich. Na tle teoretycznych i oficjalnych danych stara się wskazać znaczenie programowania w edukacji, czyli zbliżenia jej metodycznie do kognitywnych procesów w uczniach na tyle, by wzmocnić ich ciekawość oraz utrwalić wiedzę dzięki ciekawości osobniczej typowej dla każdego typu Ja-Dziecko. Autor wobec podmiotu/bohatera swojego tekstu – oprogramowania – występuje jako Rodzic

Opiekuńczy. Jest jego wytwórcą i dba o niego, chce uczynić go najlepszym z możliwych. Zarazem gra reprezentuje Rodzica Opiekuńczego wobec uczniów. Z racji niehumanoidalnej formy gra bezpiecznie indukuje relację Ja-OK, Ty-OK, stymuluje do mierzenia się z wyzwaniem, mimo przewagi poprawnościowej w sposób racjonalnie konsekwentny koryguje błędy i naprowadza na wiedzę/informację obiektywną (dotyczy semantyki znaków drogowych).

W obszarze informatyki wypowiada się także Małgorzata Przybyła-Kasperek, która – w swoim zamykającym tom tekście pt. *Jak odkryć wiedzę z danych? Sztuczna inteligencja i systemy ekspertowe* – porusza bardzo ciekawy i aktualny temat w edukacji – zastosowanie sztucznej inteligencji w kształceniu szkolnym. Konkretnie, przywołuje sposoby wplatania wiedzy oraz umiejętności z nią związanych w program szkolnej nauki i dydaktyki informatyki. Autorka kompetentnie porusza się po oprogramowaniu związanym z AI, zna też rozmaite źródła i opracowania na temat. Rekomenduje jej wykorzystywanie w dydaktyce, dzieląc tekst na część o historii prac nad AI, część o aplikacji w edukacji oraz część o samych narzędziach. Choć części te nie są uwspólnione wyraźną linią argumentacyjną i napisane są dość schematycznie i definicyjnie, z pewnością rzucają nowe, przyszłościowe światło na przestrzeń edukacji szkolnej. Warto stawiać pytania o przyszłość, o to, czy sztuczna inteligencja zmodyfikuje instytucję szkoły, zmieni kształt edukacji, zastąpi czy wesprze postać nauczyciela jako sprawcę i koordynatora procesów dydaktycznych. W jakim stopniu niewinna gra edukacyjna oparta na oprogramowaniu stworzonym przez człowieka, stawiająca relację w formacie transakcji Ja-OK–Ty-OK (o jakiej pisze wcześniej Mateusz Staśko), może być załączkiem czegoś trudnego do kontroli, co zdominowane będzie przez transakcję Ja-OK–Ty-nie-OK?

Są to pytania, na które nie mamy jeszcze odpowiedzi, ale które powinny towarzyszyć nam w badaniach nad edukacją przyszłości. Dlatego tak cenne jest ich zadawanie i w tym znaczeniu recenzowana publikacja stanowi konieczny element budowania przestrzeni dociekań naukowych. Jak się okazuje, w każdym dociekanu odnajdujemy jakiś typ relacji i to właśnie relacje, tutaj typy transakcji (AT), nadają im dynamikę, głębszy namysł oraz jakość naukową.

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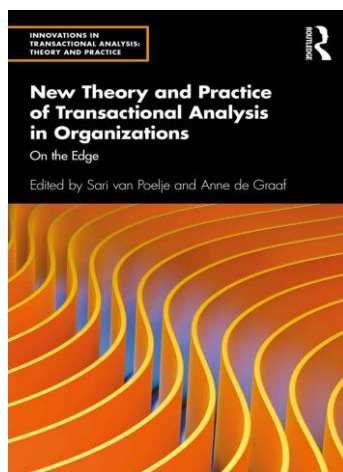
**[rec.] Sari van Poelje, Anne de Graaf (red.) (2021).  
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Recenzowana książka jest kolejną pozycją z serii wydawniczej o nazwie „Innovations in Transactional Analysis: Theory and Practice” [„Innowacje w Analizie Transakcyjnej, Teoria i Praktyka”], wydawnictwa Routledge Taylor & Francis Group. Zgodnie z opisem wydawnictwa, ideą serii jest prowadzenie dyskusji, debaty, krytyki i integracji różnych modeli dla wspierania innowacji we wszystkich obszarach teorii i praktyki analizy transakcyjnej: psychoterapii, doradztwa, edukacji, rozwoju organizacji, opieki zdrowotnej i coachingu. Stworzenie takiej serii pokazuje, że analiza transakcyjna jest nurtem, który nie traci na popularności, a poszczególne pozycje mogą być inspiracją zarówno do rozwoju osobistego, jak i pracy opartej o model analizy transakcyjnej. Publikacje z listy nie są jeszcze dostępne w języku



polskim, pozostaje mieć nadzieję, że sytuacja ta będzie się poprawiać w najbliższych latach.

Opracowanie pod tytułem *New Theory and Practice of Transactional Analysis in Organizations: On the Edge* [Nowa teoria i praktyka analizy transakcyjnej w organizacjach: Na granicy], pod redakcją Sari van Poelje i Anne de Graaf, nie jest proste do recenzowania, co wynika z dość specyficznej konstrukcji opracowania. Opracowania zbiorowe często składają się z komplementarnych części, które mają stworzyć pewną całościową wizję tematu. Tutaj zamysł Redaktorek był inny, co ma swoje dobre i złe strony. Opracowanie jest bowiem zbiorem odrębnych rozdziałów, z większym naciskiem na teorię niż na praktykę pracy w organizacjach, co mógłby sugerować tytuł. Tym samym w książce znajdziemy coś, co można nazwać nie tyle nową spójną teorią pracy organizacyjnej analizy transakcyjnej, ale zestawem nowych perspektyw teoretycznych. Każdy rozdział stanowi osobną całość wraz z teoretycznym wprowadzeniem odnoszącym się do wybranego obszaru analizy, co jest korzystne, jeśli używa się wybranych teorii, ale nieco męczące dla czytelnika, który chce zapoznać się z całością. Na plus opracowania można uznać to, iż pomimo powtórzeń poszczególne rozdziały zawierają mocne pierwiastki autorskie i pokazują odmienne perspektywy pracy organizacyjnej. To, co łączy rozdziały w całość, to przyjęcie kilku wspólnych perspektyw. Pierwsza z nich to zmiana popandemiczna. Kryzys COVID-19 pokazał nam, że świat nie może już funkcjonować w oparciu o indywidualną odpowiedzialność. Jesteśmy zmuszeni przyjąć odpowiedzialność zbiorową za nasze działania. Zamieszanie, jakie to powoduje, doskonale obrazowało wezwanie do „dystansu społecznego” w dniach, kiedy ludzie potrzebowali siebie bardziej niż kiedykolwiek. Druga perspektywa to wzrost na poziomie egzystencjalnym potrzeby przejścia od myślenia „ja” do myślenia „my” w kulturze organizacyjnej. Trzecia perspektywa to potrzeba tworzenia struktur, które umożliwiają współpracę między funkcjami i dyscyplinami. Wyzwaniem na tym poziomie jest utrzymanie granic i tożsamości, jednocześnie umożliwiające wystarczającą przepuszczalność, aby nowe informacje, partnerstwa i myślenie mogły wpływać na organizację. Druga strona tego trendu to kosztownie organizacji, które nie są gotowe do zmiany. Można to podsumować słowami, że w organizacjach nigdy nie jesteśmy sami, czy tego chcemy, czy nie.

Podtytuł opracowania odnosi się do tematu najmocniej zaakcentowanego w poszczególnych rozdziałach, czyli do granic, które stanowią kluczową dla opracowania koncepcję. Przyjęta za Erikiem Berne’em definicja granicy oznacza różniczenie konstytucyjne, psychologiczne lub przestrzenne, które choć jest tylko linią w umyśle, jest rzutowane na realną organizację. Przekonanie, że każda organizacja jest przede wszystkim organizacją w umyśle, pozwala na zmianę perspektywy postrzegania rzeczywistości, do której namawiają nas Autorzy. Jak przekonują, granice są niezbędne do funkcjonowania organizacji i czynią różnice, które przekładają się na funkcjonowanie transakcji w rozumieniu analizy trans-



akcyjnej. Poszczególne rozdziały dotyczą procesów zmiany, balansu między porządkiem a nieporządkiem, między integracją a różnicowaniem, między stabilnością a niestabilnością, między równowagą a nierównowagą. Inspirując się słowami Autorów, można powiedzieć, że każda osoba praktykująca organizacyjną analizę transakcyjną powinna żyć na granicy. W poszczególnych rozdziałach możemy znaleźć bogaty zestaw perspektyw teoretycznych, poniżej przedstawione jest krótkie podsumowanie.

*Three levels of leadership (Trzy poziomy przywództwa)* – Sari van Poelje pisze tu o zarządzaniu paradoksami: paradoksem między reaktywnością rynku a tożsamością korporacyjną, między scentralizowaną kontrolą a delegowaniem zadań oraz między niezależnością a współzależnością zespołów.

*Adapting leadership power to its purpose (Dostosowanie siły przywódczej do jej celu)* autorstwa Corinne Laurier – dowiadujemy się, że organizacyjne, osobiste i historyczne czynniki władzy muszą być dostosowane do roli i celów.

*Leading self-organising teams. A paradox or a necessity? (Kierowanie samoorganizującymi się zespołami. Paradoks czy konieczność?)* autorstwa Kathrin Rutz – opisuje cztery podstawowe warunki pracy z samoorganizującymi się zespołami: jasne struktury, silne przywództwo, negocjowane kontrakty i kulturę dialogu. Próbuje też wyjaśnić, dlaczego popularne staje się tworzenie struktur zarządzania, które można określić jako samoorganizujące się.

*Force fields in organisations. A new perspective on intervening in groups, systems and organisations (Pola sił w organizacjach. Nowe spojrzenie na interwencję w grupach, systemach i organizacjach)* – Jacques Moreau przedstawia swoją perspektywę na pracę z napięciami. Definiuje grupy jako żywe organizmy, proponując nową definicję wewnętrznych i zewnętrznych granic i napięć oraz opisując złożoność środowiska w kategoriach równowagi trzech sił. Pokazuje, że analiza transakcyjna jest skutecznym sposobem rozwiązywania tych napięć, pomagając ludziom i systemom osiągnąć nowy stan równowagi.

*Managing boundary dynamics (Zarządzanie dynamiką granic)* – Patrice Fosset podaje praktyczne wskazówki, jak przejść od diagnozy do rozwiązania problemu w organizacjach poprzez zmianę siły i przepuszczalności granic.

*Leading through people – managing vulnerability in working relationships (Przewodzenie przez ludzi – radzenie sobie z wrażliwością w relacjach zawodowych)* – Graeme Summers pokazuje, jak dużym wyzwaniem jest bycie liderem w złożonych organizacjach. Opisuje koncepcje wektora przywództwa, pokazuje, że możliwe jest zapewnienie ram dla przywództwa poprzez budowanie i utrzymywanie efektywnych relacji ponad różnymi granicami, przy jednoczesnej akceptacji wrażliwości w tym procesie.

*Managing fear and anxiety (Radzenie sobie ze strachem i niepokojem)* – w tym rozdziale Anne de Graaf przekonuje, że organizacje są w pewnym sensie systemami emocji, często skonstruowanymi w taki sposób, aby zarządzać strachem

swoich menedżerów. Z jednej strony ten niepokój może prowadzić do innowacji, ale jeśli nie jest kontrolowany, jest wyzwalaczem życiowych skryptów. Analiza transakcyjna oferuje głęboką teorię i pomocną strategię dla menedżerów, aby zrozumieć i poradzić sobie ze strachem w sobie oraz z niepokojem związanym z ich powstaniem.

*Learning practices at work. A case for cognitive apprenticeship (Praktyki uczenia się w pracy. Argumenty przemawiające za praktyką poznawczą)* – Mandy Lacy skupia się na swoich badaniach na temat praktyk poznawczych i wspólnej refleksji w miejscu pracy jako sposobie na stymulowanie innowacji. Wprowadza pojęcie mikronauczania jako kluczowego elementu pracy w zespole.

*Organizational cultures and change interventions (Kultury organizacyjne i interwencje zmian)* – Ugo De Ambrogio opisuje pięć modeli kultury organizacyjnej: kultura spójności (paternalistyczna), kultura porządku (efektywna), kultura wyzwań (spontaniczność), kultura zasad i procedur (hiperbiurokratyczna) oraz kultura posłuszeństwa (zamknięta). Postuluje pracę w sposób zintegrowany z osobowością organizacyjną, dialogując ze wszystkimi stanami siebie i organizacji, bez dominacji stanu ego i niewielkiej obecności innego.

*Berne's organizational theory applied to the prevention of psychosocial risks. A European phenomenon (Teoria organizacji Berne'a i jej zastosowanie do zapobiegania zagrożeniom psychospołecznym. Fenomen europejski)* – ma charakter studium przypadku. Marleine Mazouz pokazuje nam, jak pracować z zapobieganiem zagrożeniom psychospołecznym, jak pracować z pierwotnymi, drugorzędnymi i trzeciorzędnymi strategiami zapobiegania ryzyka i przedstawia wybrane strategie interwencyjne.

*Transactional analysis. A passport for the next decades (Analiza transakcyjna. Paszport na kolejne dekady)* – w ostatnim rozdziale Rosa R. Krausz przedstawia zmiany, których oczekuje w środowisku organizacyjnym, oraz wkład, jaki analiza transakcyjna może wnieść w zrozumienie i dostosowanie się do tych zmian. Pokazuje, jak organizacja może skorzystać z zasobów oferowanych przez analizę transakcyjną w rozwoju dominującego klimatu bycia OK wśród jednostek, zespołów i organizacji.

Lektura książki daje wrażenie świeżego spojrzenia na analizę transakcyjną w organizacjach. Cytaty z klasyków teorii łączone są z aktualnymi opisami i współczesną perspektywą społeczną. To połączenie wygląda dobrze i pokazuje, że oryginalne myśli Erica Berne'a nie tracą na znaczeniu, a sama teoria podlega stałemu rozwojowi. Można mocno poczuć, jak silna jest rola lidera, jaka spoczywa na nim odpowiedzialność i co może się stać, gdy władza jest zbyt silna lub zbyt słaba w stosunku do celu, który chce się osiągnąć w zależności od okoliczności. Pozostaje też poczucie odpowiedzialności za tak kluczowy dla naszego życia obszar, jakim jest miejsce pracy, świadomość, że jesteśmy jego częścią, oraz to, że władza nie jest dana raz na zawsze, jest to stały proces, proces życia na granicy.



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**[rec.] Monika Dawid-Sawicka, Elżbieta Stelmach  
(2023). 13 wzorców dobrej komunikacji i relacji.  
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Nie minęło wiele czasu, odkąd w ostatnim numerze tego periodyku anonsowaliśmy ukazanie się pozycji o podobnym charakterze<sup>1</sup>. Jest to widomy dowód na istnienie zapotrzebowania na tego rodzaju publikacje. Są one bowiem adresowane do podobnego kręgu odbiorców skupiających się na praktycznych zastosowaniach analizy transakcyjnej. Dają możliwość tworzenia scenariuszy szkoleniowych oraz różnego rodzaju działań coachingowych. Praktyczny wymiar tego rodzaju publikacji jest nie do przecenienia, nie zawsze jednak bywa w wystarczającym stopniu doceniany w środowisku akademickim, skupionym

Monika Dawid-Sawicka • Elżbieta Stelmach

**13 wzorców dobrej komunikacji i relacji**

Analiza transakcyjna w praktyce



Wolters Kluwer

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<sup>1</sup> J. Jagieła (2002). [rec.] Hélène Dejean, Cathaerine Frugier (2022). *Jak mieć lepsze życie i relacje? 50 prostych ćwiczeń z psychologii w nurcie Analizy Transakcyjnej*. Poznań: Wydawnictwo Grupa Spotkanie, ss. 135. *Edukacyjna Analiza Transakcyjna*, 11, 237–239.

głównie na teoriach i badaniach. Wyływająca z własnych doświadczeń oraz przemyśleń wiedza, nazywana też niekiedy „wiedzą gorącą”, w odróżnieniu od „wiedzy zimnej”, będącej jedynie produktem intelektualnych dywagacji, zbliża do rzeczywistości takiej, jaką ona jest w swej istocie. Chroni przed budowaniem konstruktów, mających wprawdzie czasem walor logicznej spójności oraz swego rodzaju elegancji myślenia, ale odbiegających niekiedy od realnych problemów codzienności. Nie chodzi tu o mechaniczne i bezrefleksyjne przeciwstawianie jednych drugim, na zasadzie zwykłej opozycyjności, ale na wskazanie ich wzajemnej oraz koniecznej kompatybilności i synergii. Wydaje się, że omawiana książka spełnia tego rodzaju oczekiwania.

Publikacja skupia się na dwóch istotnych aspektach AT, którymi są komunikacja oraz relacje międzyludzkie. Dostarcza trzynastu tego typu wzorców i scenariuszy pomocnych w zrozumieniu niektórych podstawowych kwestii obecnych w koncepcji analizy transakcyjnej, tworzących jednocześnie w ten sposób kolejne rozdziały. Każdy z rozdziałów zawiera niezbędny podstawowy zakres wiedzy dotyczącej omawianej dalej kwestii oraz część praktyczną. We wstępie Autorki piszą:

W swojej pracy skupiamy się na wspieraniu osób, zespołów i organizacji w rozwoju. Dlatego też w ramach każdego rozdziału prezentujemy podrozdział, który zatytułowaliśmy *Okiem praktyka analizy transakcyjnej*, dzieląc się w nim swoimi dodatkowymi praktycznymi obserwacjami lub ćwiczeniami.

W innym miejscu czytamy:

Zapraszamy zatem do poznania kolejnych rozdziałów. Ich układ jest nieprzypadkowy. Te, które pojawiają się na początku książki, stanowią fundamenty AT i pomagają zrozumieć kolejne treści, które omawiamy w dalszej części. Nie nadajemy im określonej hierarchii ważności.

I na tę właśnie kolejność rozdziałów chciałbym zwrócić uwagę, doceniając jednocześnie ich trafność. Nie jest bowiem w przypadku analizy transakcyjnej łatwo zbudować zwartą i spójną całość danej pracy. Posłużmy się znanym cytatem z samego Berne'a, który stwierdził:

Analiza transakcyjna jest zawiłym labiryntem wzajemnie połączonych i spójnych pojęć, po którym można się poruszać w dowolnym kierunku, zawsze napotykać na coś interesującego i użytecznego<sup>2</sup>.

To niewątpliwie bardzo charakterystyczna cecha AT, czyniąca tę koncepcję koherentną i logiczną, powoduje jednocześnie, iż omawiając jedno z zagadnień, nie sposób nie odwołać się jeszcze do innego, które stanowi ważne uzupełnienie poprzedniego. Gdy się powie o czymś konkretnym – chciałoby się zaraz powiedzieć w sposób konieczny o czymś jeszcze innym. I tak, pisząc o transakcjach i ich rodzajach, trudno nie odwołać się do modelu strukturalnego oraz funkcjonalnego czy rodzajów zawieranych kontraktów. Podobnie, omawiając gry psy-

<sup>2</sup> E. Berne (1998). *Dzień dobry...i co dalej?* Poznań: Dom Wydawniczy Rebis, s. 489.

chologiczne, nie sposób pominąć zmiany ról wynikającej z Trójkąta Dramatycznego. Pasywności nie da się do końca zrozumieć, gdy nie uwzględnimy gładów transakcyjnych. Przykłady można by wymieniać w nieskończoność. Autorkom udało się uniknąć wszystkich tych pułapek, co trzeba zauważyć z satysfakcją.

I jeszcze kilka słów o szacie graficznej, a właściwie samej okładce książki. Uwodzi ona swoją prostotą utrzymaną w konwencji czarno-białej stylistyki. Ktoś nadmiernie wrażliwy mógłby jej zarzucić, iż napawa ona jakimś smutkiem lub przygnębieniem, ale nie w tym rzecz, wszak: *there is no accounting for tastes*. Pojawiają się tu jednak dobrze nam znane kółka, które stały się niejako znakiem firmowym całej koncepcji. Ktoś, kto odnajduje ten właśnie model Venna na okładce jakiejś napotkanej książki lub czasopisma z reguły nie ma wątpliwości, o jaką teorię tutaj chodzi. Kółka te umieszczone są jednak oddzielnie, tj. nie stykają się ze sobą. Drobny szczegół i być może nieistotny? Można by uznać, że czepiam się nie wiadomo po co mało znaczącego szczegółu – i pewnie będzie to prawda. Z tym jednak, że tak zaprezentowany model, zgodnie z przesłaniem AT, oznacza nic innego, jak dezintegrację osobowości. Jak wiadomo, w zintegrowanej i dobrze funkcjonującej osobowości przepływ informacji i energii między poszczególnymi stanami Ja powinien być niezakłócony oraz ciągły. Jeśli taką właśnie dezintegrację chciał zaznaczyć autor grafiki, to wszystko jest OK. Przyjmijmy, że tak było i postawmy w tym miejscu kropkę. Piszę o tym nieprzypadkowo i niejako przy okazji, gdyż sam natrafiłem na podobny problem w odniesieniu do jednej z moich książek, gdy zamiast kółek pojawiły się owale pod hasłem: „bo tak może będzie ładniej?“, a najlepiej, „gdyby to jednak były kwadraty“. Jeden z zachodnich transakcjonalistów przekonywał wprawdzie swego czasu, że gdyby Berne od początku zastąpił model funkcjonalny kwadratami, a kółka pozostawił dla układu strukturalnego, to uniknięto by zdarzającego się czasem zamieszania w ich odróżnianiu. I zapewne miał rację. Choć przyjęto się inaczej... i tak już zostało. Zapewne na wieki wieków. Pewnego rodzaju zmiana nastąpiła dopiero wraz z koncepcją płynności funkcjonalnej Susannah Temple, ale to już zupełnie inna historia do opowiedzenia.

Autorkami książki są konsultantki, doradczynie zawodowe, które swoją wiedzą i doświadczeniem dzielą się zarówno w środowisku akademickim, jak i współpracują z kadrą zarządzającą oraz przedstawicielami HR. Monika Dawid-Sawicka oraz Elżbieta Stelmach reprezentują zatem nurt organizacyjny i doradczy zastosowań analizy transakcyjnej. Rekomendacji książce udzieliły również dwie panie – Kamila Pępiak-Kowalska (wykładowczyni, konsultantka biznesowa i coach) oraz dobrze znana w środowisku analityków transakcyjnych i ceniona Agnieszka Woś-Szymanowska, której blog internetowy poświęcony AT cieszy się niestąbnącym powodzeniem.

Jeśli zatem omawiana tu książka jest napisana i adresowana „przez praktyków i dla praktyków” – jak stwierdzają autorki – to nie pozostaje nic innego, jak zachęcić do poznania jej przez wszystkich tych, którzy zajmują się upowszechnianiem analizy transakcyjnej w swojej działalności zawodowej.