Shifting Paradigms Towards Supporting Individuals with Disabilities: A Psycho-Cybernetic Approach to Social Work

Izabela Ziębacz[1]

[1] Jan Długosz University in Czestochowa, Poland

CORRESPONDING AUTHOR:
Izabela Ziębacz;
i.ziebacz@ujd.edu.pl

ABSTRACT:

The concept of researching an individual's character in a cybernetic framework, according to M. Mazur's theory (CTC), presents an interesting tool for diagnosing and supporting excluded individuals, combining elements of cybernetics and social sciences in an innovative, interdisciplinary approach. The cybernetic characterization of an individual's character allows for identifying its components and determining their interrelations, opening new perspectives for understanding the mechanisms shaping the individual's functioning and identifying areas requiring support. In the context of social work, the proposed application of Mazur's concept emphasizes the need for a paradigmatic shift from the medical model to an emancipatory one in working with people with disabilities. This paper delves into the CTC's theoretical and practical applications in special education, highlighting its potential to individualize educational processes and promote inclusivity. Such an approach has the potential not only to enrich the scientific literature in the field of special education but also to contribute to the promotion of a more inclusive society where equal opportunities for personal development and self-fulfillment become the norm. This study, though pioneering, marks the beginning of the journey, calling for further detailed explorations and empirical verifications of the proposed concepts.

Keywords: social work, people with disabilities, psycho-cybernetics, special pedagogy

INTRODUCTION

In the face of global social transformations, the growing awareness of the rights and needs of people with disabilities becomes a key element in the process of shaping more inclusive communities. The history of supporting individuals with disabilities is complex and multidimensional, often dominated by the medical model, which focuses on deficits and disorders as the primary aspects of disability, emphasizing the need for 'curing' or 'repair.' However, this model neglects the complexity of human experience, marginalizing individuals and focusing on limitations rather than potential or rights. In recent decades, we have observed a significant shift towards an emancipatory model, which understands disability in the context of the interaction between individuals and their social and physical environment, highlighting the role of barriers these people encounter and promoting their rights and autonomy (Oliver, 2013; Oliver, 1990; Shakespeare 2013; Shakespeare & Watson, 2002; Thomas 1999; Thomas 2004; Davis, 1995; Davis, 2013; Linton 1998).

In this context, a need arises to seek new, interdisciplinary approaches that would allow for a more comprehensive understanding and support of people with disabilities, going beyond traditional, limited models and methods. One such innovative approach is psycho-cybernetics, which, in the context of social work, opens new horizons in terms of diagnosis and support of people with disabilities. This paper focuses on key theories and approaches in special education that show connections with the cybernetic theory of character formulated by M. Mazur. The analysis will cover both historical foundations and contemporary works, considering the development of methodologies and their applications in educational practice.

1) *Behavioral approach in special education* - Behavioral therapy, widely used in interventions for children with autism spectrum disorders, is based on a systematic analysis of behavior using techniques to strengthen positive responses and minimize undesirable ones. This approach has its roots in behaviorism, convergent with the cybernetic theory of character, which emphasizes the analysis and regulation of behaviors (Cooper, et al., 2021; Leaf et al., 2016).

2) *Systems theory in special education* - The systemic approach in special education recognizes educational processes as complex systems that include teachers, students, families, and communities. This idea is consistent with the cybernetic concept, which analyzes dynamic interactions between various system components (Farmer et al., 2007).

3) *Technologies in special education* - Modern technologies, such as adaptive software and applications, are used to personalize education for students with disabilities. This trend reflects advanced technologies used in cybernetics. David Rose is a pioneer in the field of Universal Design for Learning (UDL), a strategy aimed at adapting educational content to diverse learning styles (Rose & Meyer, 2007). Joy Zabala (1995) focuses on developing resources that adapt education to the needs of students with disabilities.

4) *Inclusion and diversity pedagogy* - Promoting an inclusive educational environment where students with varied educational and socio-emotional needs can learn together reflects the profound values embedded in M. Mazur's Cybernetic Theory of Character (CTC). This model, which focuses on the dynamic processes of regulation and control in systems, views education as an open and adaptive system. In the context of inclusion, CTC suggests that education should be flexible and responsive, adjusting teaching methods and strategies to each student's individual needs, reflecting the dynamic nature of human behavior and diversity (Hehir, 2005; Sapon-Shevin, 2007).

5) *Neuroeducation and brain research* - Developments in neuroeducation and brain research have opened new horizons in understanding how the human brain functions in the context of learning and development. The convergence of this field with M. Mazur's Cybernetic Theory of Character (CTC) lies in a holistic approach to education. CTC, focusing on systems and regulatory processes, pays attention to how different elements in the educational system, including the student's brain, interact and influence each other. Works by Jensen (2008) and Denckla (2007) in the field of neuroeducation emphasize that understanding neurological processes and their impact on learning is crucial for developing effective pedagogical strategies. These strategies, consistent with CTC, must be dynamic and adapted to continuous changes in the structure and functioning of the brain.

Many theories in the scientific literature on personality and behavior formation emphasize the interaction between internal mechanisms and the external environment. These interactions are the main axis of Marian Mazur's character cybernetics. In particular, in the area of support for people with disabilities, there is a need for research that integrates personal (biological, psychological), social, and systemic aspects. Howev-

er, a review of the literature shows that although psycho-cybernetics is an essential direction of research, there is still a lack of analyses focused on the practical application of this approach in working with people with disabilities.

Based on M. Mazur's theory, psycho-cybernetics combines elements of cybernetics and psychology, offering a comprehensive insight into the mechanisms of control and self-regulation of an individual's character. Through the analysis of character structure, psycho-cybernetics allows not only for identifying character components but also for understanding how these components interact and affect the individual's functioning in various contexts, including education and social work. This concept assumes that an individual's functioning results from the dynamic interaction of biological, psychological, and social components (Mazur, 1999; Biriukow & Geller, 1983; Mazur, 1983).

The article's purpose is to demonstrate how psycho-cybernetics can enrich the practice of social work, but also to emphasize the importance of continually seeking innovative, interdisciplinary solutions that can contribute to creating a more just, inclusive society.

The research questions arising from these objectives are:
1) How can Mazur's theory (CTC) be used in social work to develop individualized support strategies for people with disabilities?
2) What benefits can the application of Mazur's Cybernetic Theory of Character bring to social work in supporting the personal development of people with disabilities?
3) How does CTC contribute to the shift from a medical model to an emancipatory model in the context of supporting people with disabilities?

This study assumes that psychocybernetics can play a significant role in developing support strategies that are both effective and tailored to the individual needs of people with disabilities. This concept forms the basis for formulating hypotheses and research questions about the effectiveness and application of psychocybernetics in this context. Although the scientific literature indicates that psychocybernetics is not the only one of many theoretical approaches in the educational context, combining different concepts and methods becomes essential. This emphasizes the need for an interdisciplinary and holistic approach in special education. Highlighting the importance of research in this area is equally crucial to developing interdisciplinary solutions that contribute to creating a more just, inclusive society.

Psychocybernetic approach to social work aimed at supporting individuals with disabilities

Relying on the solid foundations of exact sciences, such as physics and mathematics, gives psycho-cybernetics precision and the ability to quantify mental processes, which are often difficult to measure objectively (Staffova, 2017; Wilsz, 2003; 2012; Kossecki, 2001). Crucially, this forms the basis for predicting and effectively shaping educational behaviors, which is particularly important in the context of social work and supporting people with disabilities, including students. In the area of support for people with disabilities, a psycho-cybernetic perspective can bring significant benefits. Disability, regardless of its nature, shapes the way an individual processes information, responds to external stimuli, and adapts to the environment. By utilizing M. Mazur's Cybernetic Theory of Characters, educators and social workers can better appreciate the unique needs and potential of people with disabilities, which can help them adapt educational methods and forms of support.

Based on cybernetic assumptions, character analysis enables the anticipation of reactions, understanding of preferences, and identification of potential obstacles in the educational process (Zaniewski, 2003). For students with disabilities, such a personalized approach is invaluable as it allows for developing a tailored support and education plan, considering both the specifics of their limitations and the unique features of their character. It is also essential to use cybernetics in the analysis of complex systems. Individuals with disabilities often face multiple challenges, ranging from physical limitations to cognitive difficulties to social barriers. The cybernetic analysis allows for a deeper understanding of these complex dynamics and the identification of critical factors that influence the success of the educational process (Biriukow & Geller, 1983; Ziebacz, 2022; Ziebacz, 2023). When undertaking support activities for people with disabilities, it is also crucial to recognize that they are not merely passive recipients of help. The psycho-cybernetic perspective allows us to see their active role in the learning and adaptation process, considering their internal control mechanisms that shape their behaviors, choices, and ambitions. Understanding these mechanisms enables more accurate interventions and support.

Theoretical assumptions of M. Mazur's CTC (Cybernetic Theory of Character)

The foundation of the Cybernetic Theory of Character (CTC) is the concept of an autonomous system. Mazur focuses on the controlling mechanisms that are crucial

to the system's operation. These mechanisms often function independently of external stimuli, which led Mazur to call them 'rigid properties.' In light of this theory, an individual's character is perceived as a set of these immutable control mechanisms, which Mazur terms 'character parameters.' The main implication arising from this theory is the belief in the constancy of character. It is assumed that modifying one's character, individually and in others, is nearly impossible, making attempts to change it futile. Therefore, the goal is to achieve a state where an individual's character is in harmony with their environment - this is considered the ideal fit. Key in this context is the belief that 'compliance with one's character means compliance with each of its parameters.' Among the various character parameters that determine our predispositions, goals, or preferences, Mazur distinguishes those related to energy processing, such as dynamism, tolerance, or susceptibility. For example, dynamism refers to the direction we strive for goals, depending on factors such as age or the pace of the body's aging. Tolerance and susceptibility, conversely, define our ability to adapt to external stimuli.

Table 1. **Character Classes in a Cybernetic Approach**

Character Classes	Description
Exodynamism (very distinct positive dynamism).	Exodynamists are individuals who live creatively, often through the expressive articulation of their current experiences. They are characterized by unpredictability and an absence of fixed beliefs and morality, and they create their own imagined world, which is more real to them than reality. They may appear superficial, credulous, and naive. Instead of clinging to memories, they share ongoing thoughts and sensations, quickly forgetting hurts due to continual new experiences. They speak spontaneously, without reflecting on the truth of their words, and express feelings in a euphoric manner. They are also reckless, impulsive, impatient, and averse to structures and rules, and their extravagance and naturalness often attract others.
Exostatism (fairly pronounced positive dynamism)	Exodynamists strive for pleasure in life, but not without limits. They are characterized by individualism; they fundamentally adhere to norms but reject those they find unacceptable from their perspective. They need to stand out and elicit admiration, which often manifests through some form of extravagance. Exostatics, on the other hand, respect the law but tend to avoid or bend those rules that do not suit them, adapting them to their preferences. Their perception of the world is usually realistic but embellished, and when they share it, they focus on the aspects they find most intriguing. They often make decisions rashly, disregarding potential consequences. They easily establish interpersonal contacts, though these are usually superficial. In discussions, they are inclined to attract attention by vividly presenting their views, emphasizing the substantive justification of their arguments less.
Statism (dynamism close to zero).	Statists are individuals whose goal is to maintain balance in every aspect of life. Their characteristic features include a principled nature, unwavering loyalty to specific rules, and a deep sense of justice, reliability, and orderliness. They exhibit systematic behavior, consistent adherence to norms, and consistency in views, which is associated with moral rigor and a belief in the righteousness of the law. They are driven by a desire for a profound understanding of the world and the rules governing it, a belief in the objectivity of the knowledge acquired, and the imperative of providing accurate information to others. They are also honest and straightforward in expressing emotions.
Endostatism (quite pronounced negative dynamism)	Endostatics prefer a comfortable, rational life, adapting rules to current needs. They value efficiency, focusing on organization and improvements. They are morally pragmatic and skeptical about information; in communication, they are concise and cautious. They avoid risk, listen in discussions, and are effective negotiators.
Endodynamics (very distinct negative dynamism)	Endodynamic individuals are those who strive for power and influence, operating under their own rules yet often not adhering to them themselves. They are sparing in giving out information, frequently communicating authoritatively. Their defining traits include a desire for dominance, egocentrism, and moral pragmatism, acting on the principle that the end justifies the means. They are distrustful and resentful, focusing on their failures and planning revenge. They rarely share feelings or information, maintaining emotional impenetrability. Their main goal is long-term success, which they pursue with unwavering consistency. They are capable of holding high positions, but if their career does not develop as expected, they can become destructive in the work environment. In the power struggle, they are dangerous. In contrast, exodynamics are true creators, exhibiting originality, creativity, and the ability to innovate.

Note. Author's elaboration upon (Mazur, 1999; Kossecki, 2001; Wilsz, 2012; Zaniewski, 2003; Pawlak, 2020; Ziębacz, 2022).

Based on these parameters, Mazur presented a classification of five character categories, briefly presented in Table 1. Each of them (exodynamism, exostatism, statism, endostatism, and endodynamism) is characterized by a specific set of traits and behaviors significant in an individual's personal and professional life.

MATERIAL AND METHODS

The study on character dynamism was conducted on a group of 10 students with disabilities, registered at the university's Office for Person with Disabilities and attending full-time studies. The participants of the study, who voluntarily expressed their willingness to participate, remained anonymous. In selecting participants, no additional criteria such as age, gender, or type of disabilities were considered. According to the assumptions of the Cybernetic Theory of Character (CTC), parameters such as age (in the range of 19-25 years) or gender (female/male) do not influence the results of the study. Although in a wider age range, the impact of biological age could be significant for the class of character dynamism, limiting the sample to a group of students excluded these differences. During the selection of the sample, no distinc-

tion was also made in terms of the types of disabilities of the subject. It was assumed that all participants who had gone through the recruitment procedure were verified as intellectually capable of studying, and their overall intellectual level was sufficient to understand the instructions and respond to the questionnaire questions.

In the study of character dynamism, a questionnaire consisting of 35 detailed manifestations (a model developed by M. Mazur within the framework of the Cybernetic Theory of Character) was used, reflecting various aspects of character dynamism. Based on Mazur's theory, this study allows for the exploration of detailed assertions (35 manifestations of character) regarding the responses of different character types to specific situations and phenomena. Understanding these assertions enables the proper interpretation of the behaviors of representatives of each character type. The manifestations of character dynamism were carefully developed and adapted to the understanding needs of the participants, with special consideration of detailed characteristics for each character class, according to Mazur. Considering that M. Mazur CTC was developed in the 1970s and used specific cybernetic vocabulary, it was necessary to adjust the language of the questionnaire to the level of understanding

Table 2. **Detailed manifestations of character dynamism (selected examples)**

	Type of dynamism	Exodynamism	Exostatism	Statism	Endostatism	Endodynamism
No.	Character class	C	BC	B	AB	A
1	Life orientation (method of processing information and energy)	Dispersing information and energy, not accumulating anything	Prevalence of dispersing information and energy over accumulating them	Maintaining balance in all aspects of life, equilibrium in accumulating and dispersing information and Energy	Prevalence of accumulating information and energy over dispersing them	Accumulating information and energy (accumulates everything, disperses nothing)
2	Intensity of life	Vivacity, seeking pleasure in life regardless of the possible consequences of such an attitude	Variety, seeking pleasure in life, but not at any cost	Moderation (willing to endure moderate discomfort for pleasure)	Comfort (willing to face only minor discomfort for pleasure, likes to live comfortably)	Calmness (unwilling to endure any discomfort for pleasure, wants to live peacefully and safely)
3	Attitude towards rules	Capriciousness (lack of attachment to rules, does not bend one's actions to anyone's requirements)	Individualism (follows general rules but rejects those that do not suit them)	Principled (adhering to specific rules)	Flexibility (acknowledges general rules with deviations depending on needs)	Arbitrariness (creates rules for one's benefit but does not adhere to them)
…		…	…	…	…	…
35		…	…	….	…	…

Note. Author's elaborations upon Mazur, 1999.

Table 3. **Summary table of the results of the character dynamism research in numerical form**

Student No.	Cybernetic character classes				
	A Exodynamism	AA Exostatism	B Statism	C Endostatism	CC Endodynamism
1	12	5	4	7	7
2	5	4	13	6	7
3	5	8	16	5	1
4	5	7	15	7	1
5	2	5	14	8	6
6	9	10	9	6	1
7	7	11	6	7	4
8	9	8	11	3	4
9	6	8	11	7	3
10	11	7	5	4	8

Table 4. **Matrix of detailed manifestations of character dynamism (simplified form)**

Student No.	A/AA	B	C/CC
1	17	4	14
2	9	13	13
3	13	16	6
4	12	15	8
5	7	14	14
6	19	9	7
7	18	6	11
8	17	11	7
10	14	11	10
11	18	5	12

Table 5. **Character dynamism**

Student No.	Dynamism factor [n=C/A]	Dynamism [D] [D=Log n]	D	Cybernetic character class
1	1	-0.08432	D<0	endodynamic
2	1.222222	0.159701	D>0	exodynamic
3	1.166667	-0.33579	D<0	endodynamic
4	0.4	-0.17609	D<0	endodynamic
5	0.545455	0.30103	D>0	exodynamic
6	0.266667	0	D=0	static
7	0.615385	-0.21388	D<0	endodynamic
8	0.230769	0	D=0	static
9	0.777778	-0.14613	D<0	endodynamic
10	1	-0.17609	D<0	endodynamic

of contemporary study participants. The questionnaire used a five-point rating scale, allowing for the collection of information on the degrees of representation of individual manifestations of character dynamism by the respondents concerning the different character classes (5 classes) in Mazur/s CTC. Character dynamism is defined as a behavioral algorithm an individual strives towards as they achieve their best self-realization by freely exhibiting these behaviors. Sample character aspects are presented in Table 2.

Understanding the complex manifestations of character dynamism allows us to establish relationships with people of various character types appropriately. Based on the study, a matrix of detailed manifestations of character dynamism was created for a randomly selected group of 10 students with disabilities (see Table 3).

Based on the matrix of detailed manifestations of character dynamism, the dynamism was determined (Table 5), and then other energetic parameters, such as susceptibility and tolerance of the character of the examined staff resource (Table 8).

The ranges of numerical values for individual character classes are presented in Table 6.

Table 6. **The numerical ranges for character classes**

C<A	n<1	D<0	endodynamism
C=A	n=1	D=0	statism
C>A	n>1	D>0	exodynamism

In the study, information entropy, according to C. F. Shannon (Mitzenmacher & Upfal, 2009; Zalewski, 1973) was applied to analyze a human being as a source of information, aiming to determine the aforementioned

energetic parameters of character. The entropy method was used to establish the values of five classes of character dynamism according to the formula:

$$H = -\sum_{i=1}^{n} p_i \log(p_i)$$

where:

$P_i = \dfrac{p_i}{\sum}$ — *the probability of the intensities of the detailed manifestations of the dynamism of the character of the researched resource.*

This analysis method allows for a deeper understanding of how diverse character traits can be classified and understood in the context of information theory. Entropy, in the context of Shannon's information theory, is a measure of uncertainty or complexity of information; in this case, it is used to assess the complexity and dynamics of character traits. Researchers can obtain new, quantitative methods of assessing and comparing personality types by quantifying character traits and their dynamism through entropy. This approach can have significant implications in various fields, from psychology to anthropology and even artificial intelligence, where understanding human nature and behavior is crucial. In the context of M. Mazur's CTC (Cybernetic Theory of Character), the interpretation of informational entropy dynamics takes special significance. Entropy, as a measure of uncertainty or complexity of information, provides insight into the degree of complexity and dynamics of character traits. High entropy indicates a greater diversity of possible character states and reactions in this theory, suggesting a more complex and less predictable character. Conversely, low entropy indicates a more ho-

Table 7. **Entropy estimates for character dynamism**

Student No.	Entropy (H)			∑H$_c$
1	0.1523	0.1077	0.1592	0.4192
2	0.1517	0.1598	0.1598	0.4712
3	0.1598	0.1554	0.1313	0.4465
4	0.1594	0.1577	0.1465	0.4636
5	0.1398	0.1592	0.1592	0.4581
6	0.1440	0.1517	0.1398	0.4355
7	0.1485	0.1313	0.1580	0.4378
8	0.1523	0.1580	0.1398	0.4501
9	0.1592	0.1580	0.1554	0.4726
10	0.1485	0.1207	0.1594	0.4286

mogeneous and predictable character, with fewer possible states and reactions. Table 7 presents entropy estimations for character dynamism.

The dynamics of entropy in the analysis of character dynamism means that as a person reacts to different situations, the complexity of their reactions and behaviors can change. For example, character entropy may increase in new or stressful situations, reflecting greater unpredictability and complexity of responses. In contrast, entropy may be lower in more familiar and controlled conditions, indicating more stable and predictable behavior patterns. In practice, understanding entropy allows not only the classification of character traits but also for understanding how these traits can change and adapt in different contexts. This provides the opportunity to assess how a person may cope with change and what adaptive strategies they may adopt.

Summarizing, in justifying the use of C.F.Shannon's information entropy in the analysis of character dynamism in the context of M.Mazur Cybernetic Theory of Character (CTC), several key points can be highlighted:

1) *Quantification of character complexity* – Information entropy serves as a measure of uncertainty or complexity of information. In the context of personality, this allows for quantifying and comparing the complexity of different character traits, which is unattainable using more subjective assessment methods.

2) *Objectification of character analysis* – Utilizing entropy enables an objective approach to character analysis, reducing the influence of subjective interpretations by the researcher. This ensures greater reliability and repeatability of research findings.

3) *Differentiation of character dynamism* – Mazur's CTC focuses on character dynamism. Information entropy allows for the differentiation and assessment of this dynamism, illustrating how different personality types may react to varying situations.

Therefore, applying information entropy in the context of the cybernetic theory of character opens new possibilities for researchers, enabling a deeper and more objective study and understanding of human character and personality.

RESULTS

This section will present a detailed analysis and interpretation of the data collected in the study. The focus is on presenting and discussing results concerning entropy in the context of Mazur's CTC. The distribution of entropy for individual character classes, graphically depicted in Figure 1., serves as a starting point for further analysis, illustrating the application of entropy in assessing character dynamism. These results provide valuable insights into the complexity and variability of character traits, opening new perspectives for understanding human interactions and behaviors.

Another researched character parameter was tolerance (T). Tolerance is the difference between the boundary dynamism of the character's dynamic range. It represents a measure of variability in character dynamism and is defined (Ziebacz, 2022) as the total entropy of character dynamism manifestations. Conformity (M) is the difference between the insurmountable dynamism and the nearest limiting dynamism in the character's dynamic range and is calculated according to the formula:

$$H_{max} = H = -\sum_{i=1}^{n} \frac{1}{N} log\left(\frac{1}{N}\right) = log(N)$$

Compliance (redundancy) M = 1- $\sum H_c$ / H max
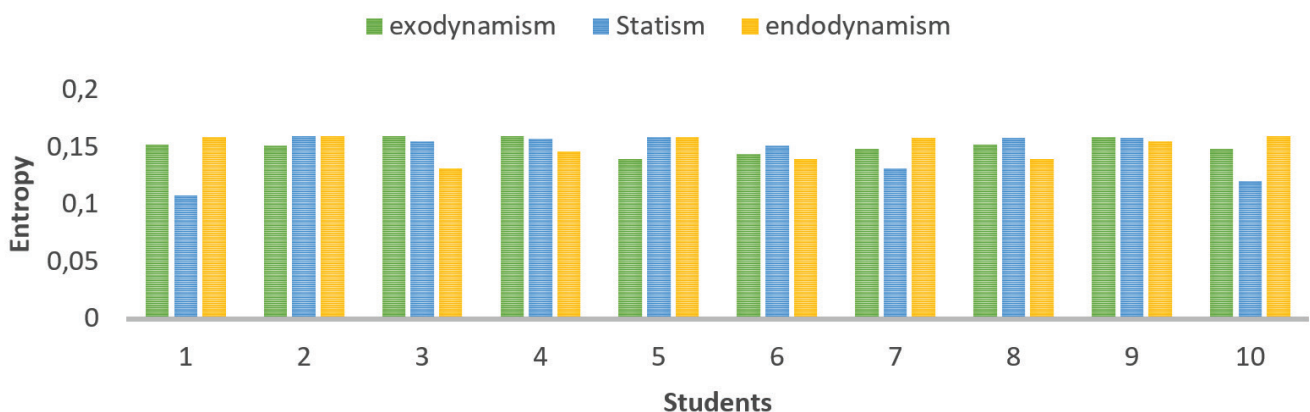
where: N – the size of the collection

Fig. 1. Share of character classes for the researched resource

Table 8. **Character tolerance and susceptibility in terms of cybernetic**

Student No.	Tolerance [T=H]	The width of character [L=log5]	Susceptibility [L-H]
1	0.419163	1.54407	1.124905
2	0.471191	1.54407	1.072877
3	0.446465	1.54407	1.097603
4	0.463603	1.54407	1.080465
5	0.458146	1.54407	1.085922
6	0.435491	1.54407	1.108577
7	0.437807	1.54407	1.106261
8	0.450107	1.54407	1.093961
9	0.472608	1.54407	1.07146
10	0.428641	1.54407	1.115427

Tolerance, in the context of this study, refers to the character's ability to adapt and be flexible in various situations, taking into account the breadth of the spectrum of possible reactions and behaviors. This is significant because high tolerance may indicate a more remarkable ability to cope with stress and unpredictable circumstances, while low tolerance might suggest a lesser adaptability. Conversely, conformity may refer to the degree to which an individual can change their behavior within certain limits without experiencing stress or internal conflict. This can be crucial for understanding how individuals cope in situations that require adapting to new standards or expectations. Sensitivity, defined as excess, might reflect the level of 'excessive' energy or responses an individual has to manage within their character. This may relate to the emotional reactivity or intensity of reactions to external stimuli. The way an individual works this excess energy can significantly impact their well-being and effectiveness in dealing with life's challenges. The breadth of character (L) is the sum of tolerance and susceptibility. The breadth of character is defined as the maximum value of entropy of the researched detailed manifestations of character dynamism.

The data analysis in Table 8 pertains to entropy dynamics in the context of tolerance and susceptibility. In evaluating these data, the Focus was on interpreting these parameters in the context of informational entropy. Tolerance (T) refers to a character's ability to adapt in various situations, considering the breadth of the spectrum of possible reactions to behaviors. The tolerance value in Table 7 allows for assessing how wide a range of variability a given character possesses. Susceptibility (M) can
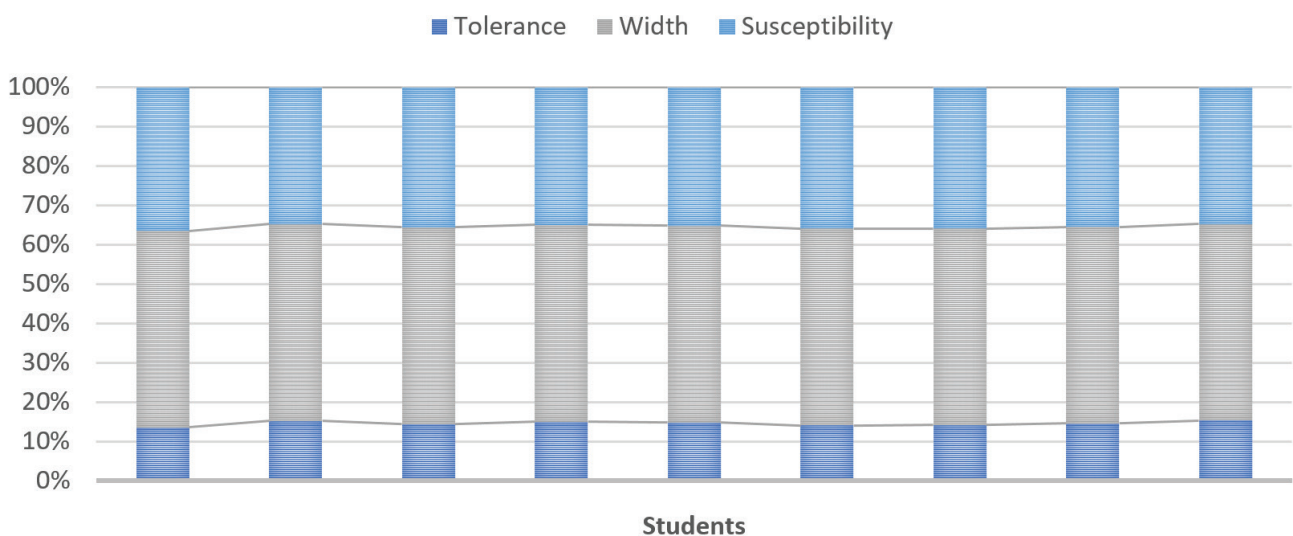

Fig. 2. Width, tolerance, susceptibility of character

be interpreted as a measure of how resistant a character is to changes or how easily external factors influence it. Table 7 presents varying 'T' and 'M' values for individual students. These values differ among individuals, indicating individual character differences and dynamics. For example, students with a higher 'T' and lower 'M' might exhibit greater flexibility and adaptability in different situations. In contrast, students with lower 'T' and higher 'M' may be more stable and less prone to changes.

Thanks to human tolerance, a person can distinguish situations that are consistent with their character from all possible conditions. In contrast, the range of character dynamism is determined by character dynamism and character tolerance. A lack of understanding of the breadth of character and its components is, in principle, the source of harmful, or at least unnecessary, friction in interpersonal relationships based on one person's dependence on another. The students in the study group (10 people) have characteristics described in Figure 2 (features of cybernetic character), which educators should consider when choosing information transmission methods to achieve the best results in their teaching work. The above considerations may find practical application in organizing all human activities, including in pedagogy.

DISCUSSION

The application of the theory of cybernetic character in special education opens new possibilities for developing individualized support strategies for people with disabilities in social work, simultaneously connecting with research directions such as Individualized teaching, Emancipatory models in education, Adaptive educational systems, and Interdisciplinary approaches in psychology and education. Integrating this perspective with pedagogy and teaching practice can lead to a deeper understanding of the mechanisms controlling character, which is crucial for adapting teaching methods to students' individual needs, in line with the assumptions of Individualized teaching. As Wilsz (2012) notes, the effectiveness of educational interventions can vary depending on the individual controlling properties of students, which Kossecki (2001) emphasizes, pointing out the need to distinguish different educational situations and adapt to them in line with the concepts of Adaptative educational systems (Chen et al., 2020).

In the context of supporting people with disabilities, understanding the internal transformations of students resulting from developmental processes, aging, environmental impact, and individual influence on the environ-ment is crucial in optimizing the educational process. The use of psycho-cybernetics can contribute to the development of more effective, individually tailored support methods that take into account the specific character traits and needs of people with disabilities, including an interdisciplinary approach in psychology and education. Long-term changes resulting from the application of psycho-cybernetics in social work may include improving the quality of life of people with disabilities by better understanding their needs and adapting support methods to them. Introducing individual educational strategies tailored to character specifics can also contribute to more effective adaptation to the environment and better coping in daily life. Psycho-cybernetics also contributes to the transition from the medical model to the emancipatory model in the context of supporting people with disabilities. Focusing on individual character traits and their dynamics enables a more holistic and person-centered approach to education and support, which aligns with the spirit of the emancipatory model, opening new possibilities within Emancipatory Models in education. Through this focus, psycho-cybernetics facilitates a shift towards empowering and supporting their specific needs, thereby aligning with the principles of the emancipatory model in education.

Nevertheless, in applying Mazur's cybernetic theory of character in special education and social work, it is also essential to consider certain limitations of this method. Firstly, this theory can be complex to understand and may require specialized knowledge for its proper application, which could be a barrier for some teachers and social workers. Secondly, there is a risk of excessive generalization or oversimplification of complex human behaviors, which can lead to inadequate conclusions. Additionally, psycho-cybernetics may not fully take into account the socio-cultural context, which is especially important when working with diverse social groups. Finally, there is a need for further empirical research to confirm the effectiveness of this method in educational and social practice. Therefore, although this theory offers an innovative approach, it should be applied cautiously and in conjunction with other methods and tools in pedagogy and social work. Further research in this area should focus on developing and evaluating the long-term effects of such innovative educational practices, utilizing modern technologies to personalize the teaching process, and developing training programs for teachers based on the CTC. An interdisciplinary approach to research can significantly contribute to a deeper understanding of learning mechanisms and adaptation, which is essential

for the full utilization of the potential of this methodology in practical educational applications,

In summary, applying CTC in the context of education and social work with people with disabilities opens new perspectives for individualized approaches and support. Understanding the dynamics of character and the complexity of individual traits allows for developing more effective and tailored educational strategies and support that meet the specific needs and preferences of people with disabilities. Such an approach not only facilitates better adaptation to the environment and improves the quality of life but also supports the transition from the medical model to the emancipatory model,

emphasizing the role of a holistic and person-centered approach. However, this requires further research and exploration to fully utilize the potential and possibilities that psycho-cybernetics offers in the context of special education and social work.

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