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# Conditioning of Perseverance in Children and Adolescents and Its Pedagogical Implications

## Uwarunkowania wytrwałości w działaniu dzieci i młodzieży oraz ich implikacje pedagogiczne

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**Abstract**

**Aim.** The article analyzes the determinants of perseverance in children and young people in the individual, situational, and family dimensions. Its aim is to indicate practical recommendations for teachers and parents in the field of supporting this competence in the school and family environment.

**Methods and materials.** The study is based on a critical analysis of the scientific literature in the field of psychology, and pedagogy on perseverance and related phenomena. Theoretical models of self-regulation, action control, factors and mechanisms supporting and disturbing perseverance, such as mental simulations, parenting styles and methods, were analyzed. The results of empirical studies on temperament, personality, situational context, and the influence of the family environment on the development of perseverance in action were taken into account.

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**Results and conclusion.** Perseverance contributes to school success and good psychosocial functioning of children and adolescents. The conclusions indicate the need for a holistic approach to supporting its development, with particular consideration of individual characteristics (*e.g.*, temperamental traits, self-regulation abilities) and external factors (situational, family). For this reason, parents and teachers should create conditions for children to develop perseverance in action through appropriate educational and upbringing strategies, matching actions to the child's orientation in action. In this respect, adapting tasks, appropriate organization of work and environment, strategies for action control, emotional regulation, methods of upbringing, and communication in the family are of great importance.

***Keywords:*** persistence in action, action control, volitional strategies, individual factors, situational conditions, family factors, children and youth, development support

**Abstract**

**Cel.** Artykuł przedstawia analizę uwarunkowań wytrwałości w działaniu dzieci i młodzieży w trzech głównych wymiarach: indywidualnym, sytuacyjnym oraz rodzinnym. Celem pracy jest wskazanie praktycznych rekomendacji dla nauczycieli i rodziców w zakresie wspierania tej kompetencji w środowisku szkolnym i rodzinnym.

**Metody i materiały.** Opracowanie opiera się na krytycznej analizie literatury naukowej z zakresu psychologii i pedagogiki dotyczącej wytrwałości i zjawisk z nią powiązanych. Przeanalizowano teoretyczne modele samoregulacji, kontroli działania oraz czynniki i mechanizmy wspierające i zaburzające wytrwałość, takie jak kontrola uwagi, segmentaryzacja zadania, informacje zwrotne, symulacje mentalne oraz style i metody wychowania. Uwzględniono wyniki badań empirycznych dotyczących temperamentu, osobowości, kontekstu sytuacyjnego oraz wpływu środowiska rodzinnego na kształtowanie się wytrwałości w działaniu.

**Wyniki i wnioski.** Wytrwałość w działaniu przyczynia się do sukcesu szkolnego i dobrego funkcjonowania psychospołecznego dzieci i młodzieży. Wnioski wskazują na konieczność całościowego podejścia do wspomagania jej rozwoju, ze szczególnym uwzględnieniem indywidualnych właściwości (np. cech temperamentalnych, zdolności samoregulacji) oraz czynników zewnętrznych (sytuacyjnych, rodzinnych). Z tego powodu rodzice i nauczyciele powinni tworzyć dzieciom warunki do rozwoju wytrwałości w działaniu poprzez odpowiednie strategie wychowawcze i edukacyjne. Powinni dopasowywać swoje działania do orientacji w działaniu przejawianej przez dziecko. Istotne znaczenie w tym zakresie ma dostosowywanie zadań, odpowiednia organizacja pracy i otoczenia, strategie kontroli działania, regulacji emocjonalnej, sposoby wychowania i komunikacji w rodzinie.

***Słowa kluczowe:*** wytrwałość w działaniu, kontrola działania, strategie wolicjonalne, czynniki indywidualne, czynniki rodzinne, czynniki sytuacyjne, dzieci i młodzież, wspomaganie rozwoju

## Introduction

Perseverance in action, understood as the ability to achieve long-term goals, cope with obstacles and control impulses, plays a fundamental role in shaping a person's life success. Thanks to it, children make an effort, act in the face of challenges, cope with difficulties. Supporting the development of this feature is not only an important educational task for parents and teachers but also an investment in the future success and well-being of young people.

This article focuses on a multi-faceted analysis of perseverance, taking into account its individual, situational, and family determinants. The key objective of the article is to present practical tips for teachers, educators, and parents so that they can support the development of perseverance in children and adolescents in the school and home environments.

## Definitions of Perseverance in Action

There are three main approaches to understanding the concept of perseverance. The first assumes that perseverance is a disposition or a property of the subject, which determines the maintenance of action and is independent of the situational context. The second approach assumes that perseverance is a feature of behavior, determined only by external factors. The third perspective combines both approaches, making perseverance dependent on individual and situational factors at the same time (Kadzikowska-Wrzosek, 2011, 2013; Łukaszewski & Marszał-Wiśniewska, 2006).

Perseverance is also defined as willpower (Kadzikowska-Wrzosek, 2011, 2013), the ability of an individual to continue their activity, to maintain goal-oriented action and to complete the decisions made, to achieve the set goal, overcoming all obstacles and difficulties on the way to it (Maruszewski *et al.*, 2008; Tyszkowa, 1976), despite the frustration of pursuing the goal (obstacles and difficulties that arise) (Łukaszewski & Marszał-Wiśniewska, 2006). Łukaszewski and Marszał-Wiśniewska (2006) write that persistent action involves overcoming discomfort, obstacles, the desire to abandon the action, or rejecting attractive temptations.

Modern psychology sees the determinants of perseverance in action in many different factors, both individual (temperamental, personality) and situational — task-related, contextual (Baumeister & Tierney, 2013; Kadzikowska-Wrzosek, 2013; Łukaszewski & Marszał-Wiśniewska, 2006; Maruszewski *et al.*, 2008). In addition, perseverance, willpower and orientation in action are shaped by environmental factors, mainly family (Brenner & Salovey, 1999; Kuhl, 1994; Marszał-Wiśniewska, 2001).

## Individual Conditions of Perseverance in Action

Factors directly related to an individual, determining the formation and development of perseverance in action, are their temperamental and personality dispositions, permanent motivational orientations, as well as cognitive and emotional resources.

Among the temperamental factors for perseverance in action, the most important are: emotional reactivity, endurance, sensory sensitivity, activity, perseveration, and briskness.

Emotional reactivity is a tendency to react intensively to stimuli that evoke emotions, expressed in high sensitivity and low emotional resilience (Strelau & Zawadzki, 2008). Research by Polish scientists has shown that high emotional reactivity has a negative impact on perseverance in action, because:

- shortens the time of action, lowers the level of task execution and reduces its accuracy;
- leads to interruption of task execution;
- leads to the formulation of goals related to the Self, not to the task;
- makes it difficult to perform persistent actions when performing many activities simultaneously or during activities requiring long-term concentration of attention, in the case of continuous tasks (alternating, unproductive performance of activities);
- increases tension, anxiety, and worry, causes passive self-regulation in the individual;
- co-occurs with a sense of threat, and low self-esteem (Eliasz, 1974; Łukaszewski & Marszał-Wiśniewska, 2006; Strelau, 1985).

Studies by Strelau's team (1985) revealed that performing tasks in a shared mode by highly reactive people promotes concentration and perseverance because it allows one to avoid fatigue and overstimulation. Low reactivity promotes performing many activities simultaneously and performing continuous, homogeneous activities when there is a high level of motivation. When the activity is boring and monotonous, people with a low level of reactivity cope worse.

The research by Marszał-Wiśniewska (1999) clearly shows that low reactivity promotes greater perseverance, while high reactivity does the opposite. The conclusions from this research are presented in the table below.

**Table 1**

*Relationships between reactivity and perseverance in action*

| | **Low reactivity (high need for stimulation)** | **High reactivity (low need for stimulation)** |
|---|---|---|
| Efficiency of action according to volitional strategies with free choice of activities | higher operation efficiency | lower operation efficiency |
| Perceived social pressure | feeling of little social pressure | feeling of greater social pressure |
| Consistency of intentions with their implementation | greater perseverance | less perseverance |
| Highly stimulating activity | greater perseverance | less perseverance |
| Consistency of intentions with the individual need for stimulation in a given situation | greater perseverance | less perseverance |

*Source*: Based on Łukaszewski & Marszał-Wiśniewska (2006).

The next important temperament trait for perseverance in action is endurance, or the ability to respond adequately in situations requiring long-term or highly stimulating activity and in conditions of strong external stimulation (Strelau & Zawadzki, 2008). Based on the research by Łukaszewski and Marszał-Wiśniewska (2006), it was concluded that only during the implementation of difficult tasks (higher cognitive load, higher stimulation) and the occurrence of distractors, a high level of this trait promotes persistent work. In a monotonous and continuous situation, a high level of endurance negatively affects persistence, low stimulation leads to demotivation, loss of interest and abandonment of activity.

Another temperamental trait is activity, which mainly affects the level of task performance. It is a tendency to undertake behaviors of high stimulating value (Strelau & Zawadzki, 2008). In a situation of continuous performance of easy tasks, high activity affects the low level of task performance, while in the case of performing difficult tasks — it promotes accuracy. Therefore, people with a low level of activity and a low need for stimulation in situations of high stimulating value show a decrease in the effectiveness of their actions (Strelau, 2002).

Among the temperamental traits significant for perseverance, it is worth mentioning sensory sensitivity. It is the ability to respond to sensory stimuli of low stimulating value (Strelau & Zawadzki, 2008). High sensory sensitivity promotes perseverance in continuous task performance, in situations requiring high cognitive or emotional involvement. It also supports the individual's ability to effectively process and regulate stimulation (Łukaszewski & Marszał-Wiśniewska, 2006). In people with low processing ability and high emotional reactivity, it can lead to passive regulation of stimulation, *i.e.*, an increase in tension and taking actions that additionally increase arousal (Eliasz, 1981).

The next factors are perseveration and briskness. Perseveration is the tendency to continue and repeat behaviors and experience emotional states after the stimulus (Strelau & Zawadzki, 2008), and briskness is the tendency to react quickly, to maintain a high tempo of activity and to easily change one behavior (reaction) to another (Strelau & Zawadzki, 2008). In their research, Łukaszewski and Marszał-Wiśniewska (2006) established that perseveration mainly affects the time of performing tasks, while briskness affects their quality. A high level of perseveration makes perseverance difficult if external temptations are present during the performance of shared tasks. It promotes perseverance when negative distractors are influencing, evoking not very strong negative emotions, in monotonous situations, with uninterrupted tasks. A high level of briskness promotes precision in performing tasks when receiving positive feedback, and reduces the accuracy of performing monotonous and continuous tasks.

There are also non-temperamental personality traits that are important for perseverance in action, such as the obstacle vs oneself orientation, action vs state orientation, volitional traits, volitional strategies (action control), self-control, and self-regulation, and mechanisms of maintaining activity.

The concept referring to the frustration of Newcomb's aspirations (1962) assumed that perseverance depends on the subject's concentration on an obstacle or oneself. The first orientation is associated with constructive coping with difficulties and persistent pursuit of a goal. The second corresponds to distracting emotional reactions that make it difficult to persistently achieve a goal.

In Kuhl's action control theory (Kuhl & Eisenbeiser, 1986), the key issue is volitional control, defined as the efficiency of action control mechanisms. The basic assumption of the concept is that people differ in their general ability to exercise volitional control. It is expressed in the action or the state orientation in two types of situations: in failure situations and decision-making situations, as well as in the orientation to action or variability during the performance of the activity. People with a low ability of volitional control are characterized by state orientation (or in the case of performing an activity — variability), while people with a high ability of control are oriented to action and these people can be said to be perseverance in action. Action orientation activates cognitive and emotional processes that help in the control of action and the implementation of the intention. For state orientation, difficulties in this area will therefore be typical.

Łukaszewski and Marszał-Wiśniewska (2006; Marszał-Wiśniewska, 2001) confirmed in their studies the influence of volitional characteristics (individual tendencies to be action-oriented or state-oriented) on perseverance in action. At the same time, they stated that they depend on situational conditions. Orientation towards action in the face of failure is the ability to detach oneself from unpleasant experiences and continue with the activity. Receiving negative feedback, performing continuous

tasks, and mental simulation of persistence in the event of failure affect the increase in the level of task performance. A similar increase was observed in the case of action orientation in decision-making situations.

According to Kuhl (1985), how effectively a person copes with obstacles on the way to realizing an intention is determined by two factors. The first is the amount of effort (degree of self-control) necessary to realize a given intention. The second is the effectiveness of the volitional strategies that the individual has. Volitional strategies support actions when internal or external obstacles to realizing the intention appear, they help maintain the current intention and protect against competing actions. Volitional strategies include: control of attention, emotions, and motivation, active overcoming of the effects of failures, economical processing of information, and control of the environment. The description of Kuhl's action control strategy (1987; Rheinberg, 2006) can be found in Table 2.

**Table 2**

*Volitional strategies (action control) according to Kuhl*

| Strategy | Description |
|---|---|
| Attention control | Consciously controlling or suppressing information that supports counter-intentional motivational tendencies |
| Motivation control | Deliberately increasing own motivation to fulfill the current intention |
| Control of emotions | Influence on one's emotional states, which increases the effectiveness of action control |
| Action-oriented overcoming of failures | Using one's repertoire of actions after experiencing failure or giving up on unattainable goals |
| Environmental Control | Changing your environment in a way that supports persistence with the current intention (*e.g.*, removing a distraction) |
| Economy in information processing | Avoiding over consideration of alternative actions |

*Source*: Rheinberg, 2006, pp. 181–182.

Action-oriented people more often realize their intentions and have effective strategies for controlling their behavior, compared to state-oriented people (Kuhl, 1982). Action-oriented people may consciously abandon tasks they deem unachievable or unsolvable. In contrast, state-oriented individuals often fixate on goals or ineffective actions, failing to achieve the desired results (Kuhl, 1994).

A new perspective on perseverance in action was provided by Baumeister's self-regulation model (Baumeister *et al.*, 1998). The basic assumptions of the concept refer to cognitive and energy resources. It was assumed that control over one's behavior is a manifestation of the executive function of the Self and requires effort. The resources

needed for self-control are exhaustible and dependent on the intensity and complexity of self-control. For this reason, an individual can control a limited number of events. If the resources of an individual are insufficient, then different tasks will be performed at different levels (some better, others worse) (Nęcka, 2000). It should be remembered that this process is individualized, and resources as a result of obtaining social support, experiencing pleasant emotions, sleep or training, and regeneration (Maruszewski *et al.*, 2008).

Kanfer (1996) observed that an individual's control resources are directed, depending on needs, on three objects: the task, the conditions, and its performer. In difficult, complex situations (time pressure, information deficit, task difficulty), control is reduced or one of the objects is omitted. First, cognitive resources are disconnected from the conditions, and last, from the tasks.

Arousal, attention, memory and emotions are important elements in maintaining goal-oriented action (Nęcka, 2000). Energetic arousal increases attention and working memory, at the cost of their effectiveness (omissions, narrowing the field of attention). The intensity and specificity of arousal are important for persistent action. Anxiety-producing arousal has a negative effect, increasing susceptibility to distractors (Matthews *et al.*, 1991). Emotions have a significant impact on resources: positive ones renew them; negative ones contribute to their loss. Not only the result (failure/success), but also the fluency of action affects emotions. Clumsiness and lack of harmony in action cause negative emotions and interruption of action, as evidenced by the research described by Łukaszewski and Marszał-Wiśniewska (2006).

Perseverance in action is influenced by factors such as the ability to delay gratification (crucial in long-term actions lacking immediate rewards), attention control (focus on the goal and inhibition of distracting thoughts), belief in free choice and influence on events, estimation of success probability, goal-oriented activity organization (*e.g.*, fragmentation and segmentation techniques; Maruszewski *et al.*, 2008), and the efficiency of cognitive action schemes (Karolczak, 2005).

Research by Mischel's team (Kadzikowska-Wrzosek, 2011) shows that delaying gratification can be aided by self-instructions, minimizing eye contact with temptation, focusing on its cognitive aspect, or segmenting actions into intermediate goals with rewards. Believing that tasks become easier after halfway completion also helps (Maruszewski *et al.*, 2008).

Attention mechanisms are key to perseverance, as they focus on goals and block intrusive thoughts. Conscious cognitive control enhances this by increasing goal value, evoking positive emotions, and organizing the environment (Beckmann, 1998).

The belief in choice in the implementation of an action and control supports persistence. Restricting choice generates resistance and interrupts actions (Brehm, 1966, as cited in Maruszewski *et al.*, 2008). Those with high perceived control take on difficult

tasks, employ volitional strategies, and better manage failures (Kuhl, 1985; Locke & Latham, 1990; Mischel *et al.,* 1996).

The level of its cognitive representation has a positive effect on the smooth and stable course of action. A low level emphasizes details, which may hinder organization but is useful in tough situations (Vallacher & Wegner, 1985, 1987; Vallacher *et al.*, 1992 — all as cited in Maruszewski *et al.*, 2008).

An important factor of perseverance is the assessment of the probability of success (compares actions with standards and strives to reduce the discrepancies): high — fosters persistence, low assessment leads to task abandonment (Carver & Scheier, 1985).

## Situational Determinants of Perseverance in Action

Situational factors, *i.e.*, those related to the characteristics of tasks and their context, also play an important role in perseverance in action, which has already been emphasized and partially discussed in the previous part of the article. In this part, key situational aspects will be discussed, such as the influence of distractors, the specificity of tasks, the organization of action, feedback and mental simulations.

Mischel (Mischel & Baker, 1975) divided distractors (distracting factors) into positive (temptations) and negative (obstacles, threats). He drew attention to the properties of temptation, which can balance a distant, more valuable goal due to its obviousness and proximity. In the case of difficult tasks, distractor actions are not registered by the individual. When dealing with easy tasks, some resources are directed to the perception of peripheral stimuli, and in the case of difficult tasks, resources are directed only to the task and/or self-control (Łukaszewski & Marszał-Wiśniewska, 2006).

The factor that determines persistent action is the organization of activity through fragmentation (segmentation). It strengthens persistence by promoting fluidity of action, increasing gratification and evoking positive emotions. Breaks between stages allow for regeneration of strength, especially in demanding tasks, and each stage can be individually rewarded. Segmentation is particularly beneficial for highly reactive people. Studies show that persistence improves with easy tasks performed continuously, and difficult tasks performed in divided conditions, optimizing effort and increasing the probability of gratification (Łukaszewski & Marszał-Wiśniewska, 2006; Maruszewski *et al.*, 2008).

Łukaszewski and Marszał-Wiśniewska (2006), based on their studies, confirmed that the degree of task difficulty affects the time and the quality of their performance. The more difficult the task, the worse the time and performance were. According to Beckmann and Heckhausen (2018), a factor that positively conditions the action of an individual who has suffered a failure is the announcement of another task.

Then, the individual returns more quickly to cognitions related to the action and looks to the future, instead of focusing on the failure and negative self-assessment.

Feedback is valuable when individuals cannot assess their progress or goal alignment but can also disrupt actions. Its impact depends on recipient traits (*e.g.*, women rate their work lower than men; low-reactivity individuals view feedback as motivating), the nature of the feedback (positive or negative), its delivery (descriptive or evaluative), task type, and difficulty (Łukaszewski & Marszał-Wiśniewska, 2006; Maruszewski *et al.*, 2008). Feedback sustains perseverance by boosting motivation, satisfaction, and self-esteem, even when peers perform tasks faster or more efficiently (Cywińska, 2012).

Research by Łukaszewski's team (Łukaszewski & Marszał-Wiśniewska, 2006) shows that mental simulations, such as imagining actions, results, and traits needed for tasks, significantly enhance perseverance. Visualizing the process of achieving a goal fosters realistic expectations and improves effectiveness, unlike fantasizing about outcomes, which can lead to unrealistic optimism (Oettingen, Pak, & Schnetter, 2001). Visualizing specific traits like perseverance or mindfulness is more effective than focusing on general traits. The effectiveness of visualization depends on the availability of cognitive and energy resources. Mental simulations, thanks to realistic and detailed images, increase motivation, and effectiveness in achieving goals and familiarizing with obstacles (Łukaszewski & Marszał-Wiśniewska, 2006).

## Family Conditioning of Perseverance in Action

Personality and situational factors are undeniably important for perseverance in action, but the social context of its development cannot be omitted. The research by Kuhl and Marszał-Wiśniewska (Kuhl, 1994; Marszał-Wiśniewska, 2001) confirmed that dysfunctions in this area, expressed in the state orientation, are family conditioned.

The first years of a child's life are crucial for development, and poor physical and social conditions, along with limited learning opportunities, can hinder their activity and the development of purposeful action and willpower. An important factor stimulating perseverance in children is the physical environment at home, which shapes a sense of initiative and independence (Mielcarek & Ratajczyk, 2014). This is particularly important for preschool children, where the key developmental task is taking initiative in action. Preschool age is critical for shaping motivation (the child begins to set goals and organize activities around them) and action (the child learns to regulate actions and reconcile desires with environmental demands) (Matejczuk, 2014). This remains significant during school age, as willpower develops alongside autonomous moral feelings (Marszał-Wiśniewska, 2001).

Another negative factor is parental overprotection (Kuhl, 1994; Marszał-Wiśniewska, 2001). Overprotective parents often prevent children from acting on their own initiative, controlling them excessively and imposing their will. This limits the child's ability to cope with difficulties, hindering autonomy, agency, and volitional control while excluding the need for self-regulation. Such parenting can foster unmet needs, such as an excessive desire for acceptance, linked to vague or unattainable goals. Research on attachment shows that lack of eye contact (under-stimulation) or overprotection impairs the satisfaction of critical needs, influencing the development of state orientation. This results in hesitation and delays in acting on intentions in decision-making situations (Kuhl, 1994; Marszał-Wiśniewska, 2001).

An authoritarian parenting style, characterized by excessive demands, rigid rules, high standards, and emotional coldness, weakens the child's self-regulation system (Marszał-Wiśniewska, 2001). Parental pressure for obedience, focus on achievements, and adherence to imposed rules fosters excessive dutifulness. Repeated task imposition and instructions, without considering exceptions, disrupt the natural process of aligning personal standards with those of others. This leads to the internalization of external beliefs and goals, resulting in passivity and state orientation. Research by Marszał-Wiśniewska (2001) showed that an excessively demanding upbringing by mothers enhances volitional control in sons, while the same approach by fathers reduces volitional control in daughters. This differentiation is linked to the distinct roles of mothers and fathers in upbringing and different identification patterns between sexes. For girls, weakened volitional control results from parents creating conditions for failure through unrealistic moral and school expectations, and excessive emphasis on behavioral conformity (Kuhl & Kazen-Saada, 1988, as cited in Marszał-Wiśniewska, 2001).

The most desirable parenting style from the perspective of perseverance in action is the flexible style (Rękosiewicz & Kram, 2014) and the democratic style (Liberska & Matuszewska, 2014). Both parenting styles depend on the parent's ability to adapt to the child's needs, including their action or state orientation. Caregivers adjust the level of directiveness (ordering and controlling actions) and emotional support based on the situation. A flexible parenting style involves tailoring parental assistance to the child's skills and willingness to perform a task (Mielcarek & Ratajczyk, 2014).

Frustrating a child's needs is a significant family condition that negatively impacts volitional control. Inadequate responses to emotional needs, such as lack of support or excessive criticism, weaken self-regulation. Difficulties in satisfying needs may lead the child to focus on past unpleasant experiences or future desires, disrupting current actions and fostering state orientation (Marszał-Wiśniewska, 2001).

Unpredictable and inconsistent parenting can hinder the development of perseverance. Inconsistent caregiver responses, such as interrupting tasks or assigning multiple tasks, increase state orientation in children and adolescents. Research by

Marszał-Wiśniewska (2001) found that maternal inconsistency raises state orientation in daughters. Inconsistent rewards and punishments from teachers also negatively impact perseverance, reducing students' volitional control, especially in externally regulated tasks. Adolescents perform better when rewards and punishments are applied predictably and fairly. Girls benefit from reduced punishments, whereas boys thrive on a balance of rewards and punishments.

Parental encouragement to complete tasks fosters perseverance in children. A study of children aged 5–7 found that those encouraged by their mothers showed greater persistence, enthusiasm, and lower frustration compared to those without such support (Brenner & Salovey, 1999). Conversely, frequent interruptions by mothers, such as calling children away from activities, were linked to higher state orientation (Kuhl, 1994). This state is also associated with reminding and talking about mistakes and excessive attention to the compliance of the child's behavior with his/her previous promises.

State orientation and dysfunctions in action programs can arise when adults (parents and teachers) create developmental conditions where children face frequent failures and unpredictable situations. These experiences heighten the gap between the current and expected state, directing the child's attention to the source of the discrepancy (Kuhl, 1994). The low effectiveness of volitional control is influenced by the experience of punishments by children and young people, both at home and at school, especially if they outweigh the rewards.

Perseverance in action, action orientation and volitional strategies maintain activity and enable achieving the set goal. They are associated with effective coping with difficult situations, which affects better psychosocial functioning, reducing experienced failures and increasing the chance of success, in the case of students — success at school. Lack of perseverance, *i.e.*, abandoning tasks, avoiding or giving up ambitious activities, experiencing failure, are risk factors. By creating conditions for the child to change this state of affairs, we can prevent, for example, a sense of helplessness, withdrawal, lower self-esteem, and lack of motivation to act, and support in actively coping with difficult situations.

## Conclusion for Pedagogical Practice

Perseverance is an important aspect of psychosocial development and is essential for the educational success of students, which is why it requires conscious support in the educational process. Although the presented theories and cited research require details and further exploration, they can be a source of knowledge for psychological and pedagogical practice and optimizing educational activities. This subsection collects

recommendations for teachers, educators and parents to better support the perseverance of children and young people at school and at home.

Supporting children's development in the volitional area should take into account the diverse conditions for the development of perseverance: temperamental, personality, situational, family, and school. In the education processes, the temperamental capabilities of the individual should be taken into account and teaching methods, as well as ways of upbringing and stimulating development should be adapted to them. Students with high emotional reactivity need strategies for coping with unpleasant emotions and tension, such as breaks in activity, segmenting tasks, or relaxation techniques. It is also worth providing positive feedback that will build a sense of security and reduce fear of failure. Less reactive students are recommended to complete complex tasks that require longer concentration. Common to all children is the creation of a safe educational environment with a low level of stress and limited stimuli. Children with a low level of activity may require additional control, motivation, and engaging tasks. On the other hand, more active students cope better in dynamic situations, tasks that require greater cognitive engagement, and group work, although they may have difficulty with long-term concentration. It is worth enabling them to choose activities that are in line with their interests and have short physical activities between tasks. People with low endurance can quickly feel tired, so they need a balanced organization of classes, and the use of regeneration techniques. It is worth formulating motivating messages to students, emphasizing the importance of perseverance, and setting rewards for completing long-term projects. Students with high sensory sensitivity should be provided with an orderly work environment, limiting the effects of distractors. It is also worth teaching children strategies for dealing with an excess of stimuli and managing the environment. Perseverance requires support for students in setting priorities, time limits, and reflecting on the effectiveness of work orientation in order to avoid excessive focus on one task. Briskness, on the other hand, indicates the need for diversified didactic methods. For students with high briskness, it is worth dynamically organizing the didactic process, and for students with low briskness, gradually introducing topics and supporting concentration (mindfulness techniques). An important element for both groups seems to be strengthening patience and consistency in action, *e.g.*, by jointly analyzing the steps necessary to complete the task.

Kuhl's concept emphasizes differences in the ability of individuals to cope with obstacles to achieving goals, depending on the dominant orientation: action-oriented or state-oriented. Action-oriented individuals are more likely to take action in the face of difficulties, while state-oriented individuals have a problem in this respect, especially in situations requiring decisions, or after failures. Teachers can support the development of action control in students by recognizing their orientation and individualizing the approach (using adequate and differentiated methods of supporting development).

It is worth posing more complex challenges to action-oriented students, and providing support to state-oriented individuals in the form of reminders, clear instructions, and visual action plans. Based on the described individual and situational conditions, recommendations and strategies supporting perseverance in action were developed. They are:

- volitional strategies: learning to plan actions, set goals appropriate to predispositions (*e.g.*, dividing goals into smaller ones, schedules), controlling attention and emotions, identifying resources and deficits, *etc.*;
- coping with failures: analyzing failures without focusing too much on negative emotions;
- visualizations: imagining the process of achieving the goal;
- minimizing the feeling of being overwhelmed: dividing tasks into smaller steps, using tools that make it easier to get started (visualizations, checklists, daily plans);
- motivating to act and creating positive experiences: organizing satisfying, joyful activities in which students quickly see the effects of their actions;
- developing self-regulation skills: practicing emotion regulation, relaxation techniques, and mindfulness; learning to control the environment and eliminate distractions from the learning environment;
- building a positive routine: setting times for completing tasks, and setting daily priorities;
- feedback on the activity and its results (what was done well, with suggestions for improvement) adapted to the student's orientation: for action-oriented students — specific information about the results, for state-oriented students — supportive information, minimizing their tendency to focus on difficult emotions;
- building a sense of agency, motivation, and healthy self-esteem: appreciating efforts and small progress; emphasizing that students have control over their results and the potential to improve;
- reinterpreting failures and mistakes as opportunities to learn;
- organizing teamwork so that students share responsibility and support;
- experiencing success and shaping the belief in success in action: adapting tasks and communication to the orientation and skill level of the student, setting challenges that are ambitious but achievable; celebrating small progress;
- training of volitional competencies: strengthening the ability to cope with obstacles on the way to the goal, adequate to the action orientation.

The development of action control should also include other aspects of students' functioning and psychosocial development, such as self-assessment, self-regulation, attributions of events, and social and emotional competencies.

Based on the analysis of the family determinants of perseverance in action in children and adolescents, guidelines for parents and guardians have been developed. To support the development of perseverance in action, parents should create a home environment that stimulates development, in which the child can take the initiative and act freely. The action orientation can be strengthened in a child by the conscious resignation of the parent from an overly protective attitude in favor of a flexible, democratic style of upbringing and supporting the child's independence. It is also important to set requirements adequate to the child's abilities, and dynamically adjust parental help, always taking into account the child's will. Children will cope better with challenges and difficulties if their parents show them emotional support, acceptance and understanding, and at the same time are predictable and consistent for the child.

Parents can model perseverance, making an effort, dealing with obstacles, finding solutions and consistently achieving goals. Building a child's resilience to failure is an important element of parenting. Encouraging persistent action, support in dealing with distractions, organizing action and mastering volitional strategies will be helpful. It is worth showing the child that mistakes are a natural part of learning, presenting failure as material for analysis and an opportunity for development. It is also valuable to share with the child your own experiences in which perseverance led to success. It is important to focus on positive reinforcement of the child's commitment and progress, rather than using punishment for failure. It is recommended that parents use external rewards in moderation, in favor of supporting internal motivation by praising the child for their commitment and progress and discovering their interests.

Recommendations developed based on empirical data and scientific theories related to perseverance and its determinants can help parents and teachers to consciously and effectively support and stimulate volitional competencies and related aspects of psychosocial development of children and adolescents.

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