
THE DEVELOPMENT OF VOLITIONAL QUALITIES IN PRESCHOOL CHILDREN

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Abstract: The present empirical study focuses on the analysis of the level of development of volitional qualities in preschool children, with particular emphasis on the mechanisms of volitional regulation and manifestations of voluntary behavior. Will is conceptualized as a key regulator of children's activity, ensuring the subordination of behavior to externally imposed rules, as well as the capacity for self-control, goal-directedness, and behavioral correction. The primary aim of the study is to determine the degree of formation of volitional qualities in children aged 5–6 years and to examine potential gender differences in their manifestation.

To achieve the research objectives, the "Model and Rule" methodology developed by L. A. Venger was applied—an established diagnostic instrument for assessing voluntary behavior, rule-following ability, self-regulation, and control over cognitive processes in early childhood. The research sample consisted of 30 children attending a preparatory group in a kindergarten, evenly distributed by gender (15 girls and 15 boys). The results indicate a moderate level of development of volitional qualities ($M = 6.9$; $SD = 1.5$), with the most developed aspects related to following a model and externally imposed rules. At the same time, difficulties were identified in the areas of self-control, sustained attention, and error correction, which may be considered zones for further development.

The analysis of gender differences reveals that girls demonstrate higher scores across all examined indicators, including attention, self-control, and compliance with rules. These differences may be interpreted in the context of uneven development of executive functions and self-regulation between the two genders during the preschool period.

In conclusion, the study confirms the importance of purposeful pedagogical work aimed at fostering volitional qualities from an early age. Practical recommendations include the need for more intensive work with boys to enhance attention and self-control, as well as the introduction of more complex and structured rules of action for girls in order to consolidate and further develop already formed volitional skills.

Keywords: volitional qualities, preschool children, development, pedagogical work.

1. INTRODUCTION

Research on the formation and development of volitional skills in preschool-aged children is essential for creating a more effective educational and learning environment. Willpower is defined as an individual's ability to achieve goals when faced with real-life challenges. Strength, endurance, and determination are core qualities of willpower. For instance, determination may be a key aspect of an individual's willpower, significantly influencing their ability to accomplish life goals (Vostretsova & Martinova, 2020).

In contemporary psycho-pedagogical literature, volitional qualities are frequently associated with the development of self-regulation, self-control, goal-directedness, and resistance to distracting factors (Alexandrovna, 2020; Turdimurodov, 2023a; Heinze et al., 2024). Recent studies emphasize that this process is socio-cultural and context-dependent, with adults playing a critical role in supporting, structuring, and fostering children's regulatory skills (Jiang et al., 2025). In preschool children (≈ 3 –7 years), volitional qualities are not a separate "mystical" attribute but are manifested as intentional behavior (Lazarova, 2022): activation of behavioral self-regulation, the ability to cope with behavioral difficulties, control over one's own behavior, capacity to comply with teacher instructions, and the ability to set goals and achieve results in various activities (Rogacheva, 2024).

Self-regulation is not purely an internal process but develops through social interactions—particularly through positive, warm, and supportive relationships with adults, who provide feedback, behavioral models, and guidance for tasks requiring impulse, attention, and emotional control. This role is especially prominent in pedagogical contexts, where teachers and parents help children learn to plan actions, concentrate on tasks, manage frustration, and follow rules—all of which are key components of willpower (Turdimurodov, 2023b; Nilfyr & Ewe, 2025; Vasseleu, Neilsen-Hewett, & Howard, 2025).

The present empirical study aims to investigate the level of development of volitional qualities in preschool-aged children, with a focus on mechanisms of volitional regulation and intentional behavior. The primary objective is to determine the extent to which these qualities are formed and to analyze potential differences in their manifestation between boys and girls. To achieve this objective, L. A. Venger's "Pattern and Rule" methodology was employed, which is an established diagnostic tool for assessing the ability to comply with externally imposed requirements, regulate behavior, and control cognitive processes in early childhood.

The subject of the study is the manifestation of volitional regulation during the performance of tasks within the “Pattern and Rule” methodology, with specific indicators including the ability to follow a given pattern, adhere to a rule, exercise self-control, and sustain attention. These components are considered key indicators of the development of willpower and intentional behavior during the preschool period.

In accordance with the study’s objectives, the following research tasks were formulated:

- To assess children’s ability to act in accordance with a given pattern.
- To determine the level of mastery and adherence to a rule when completing a specific task.
- To analyze the level of volitional regulation and self-control during the activity.
- To explore and analyze gender differences in the manifestation of volitional qualities.

The research sample included 30 children aged 5 to 6 years, comprising 15 girls and 15 boys, enrolled in a preparatory group at a kindergarten. All participants exhibited typical mental development and had no identified special educational needs, ensuring objectivity and comparability of the obtained results.

2. MATERIALS AND METHODS

The “Model and Rule” method by A.L. Wenger (Gutkina, 2000) aims to assess a child’s ability to navigate a system of conditions, overcome the distracting influence of external factors, and determine the level of development of volitional qualities.

The methodology involves performing a graphic task in which the child:

- orients themselves according to a pre-specified model;
- follows a specific rule that limits the possibility of direct copying.

The task requires conscious control, suppression of impulsive actions, and adherence to externally imposed requirements.

Assessment is based on the following indicators:

- accurate following of the model;
- strict adherence to the rule;
- stability of attention;
- self-control in the occurrence and correction of errors.

For preschool-aged children, the task consists of creating shapes based on given points: two irregular triangles, a square, an irregular trapezoid, a four-pointed star, and a rhombus. The key rule requires that identical points are not connected; instead, lines must be drawn between different points. If a line is drawn incorrectly, the psychologist or teacher provides assistance by erasing the error.

Assessment of volitional qualities using the “Model and Rule” method is carried out by awarding points for each of the six tasks, with scores ranging from 0 to 2 points per task. The total score is obtained by summing the points across all tasks, with 0–4 points indicating a low level, 5–8 points a medium level, and 9–12 points a high level.

The study is conducted individually with each child in a calm and familiar environment. Instructions are provided clearly and comprehensibly, with additional explanations given if necessary, without guiding the child toward the correct solution.

3. RESULTS

Table 1 presents the data from the indicators of A. L. Wenger’s “Model and Rule” method in children aged 5–6 years.

Table 1. Data on the indicators from A. L. Wenger’s “Model and Rule” method.

Indicators	Mean (M)	Standard Deviation (SD)	Level of Development
Accurate following of the model	7.8	1.4	Upper-intermediate
Compliance with rules	7.2	1.6	Intermediate
Stability of attention	6.9	1.8	Intermediate
Self-control in correction errors	6.5	1.7	Intermediate
Self-control in commission errors	6.1	1.9	Intermediate
Overall indicator of volitional qualities	6.9	1.5	Intermediate

Source: Author’s own survey data (2026)

Table 1. shows that the assessed indicators of volitional qualities are predominantly at a moderate level of development, with isolated manifestations of moderately high values.

The highest mean value is observed for the indicator “Accurate Following of the Model” ($M = 7.8$; $SD = 1.4$), indicating a well-developed ability to orient according to a given model and relatively stable adherence to instructions. The lower standard deviation reflects a relative homogeneity of results among the participants.

The indicator “Rule Compliance” ($M = 7.2$; $SD = 1.6$) falls within the moderate range, suggesting that participants generally succeed in following established rules, albeit with some variability in performance.

Attention Stability ($M = 6.9$; $SD = 1.8$) is also at a moderate level, implying that the capacity for sustained concentration is reasonably well developed but may be influenced by fatigue or external distractions.

Lower mean values are observed for indicators related to self-control.

Self-Control in Error Commission ($M = 6.5$; $SD = 1.7$) and Self-Control in Error Correction ($M = 6.1$; $SD = 1.9$) suggest that participants experience certain difficulties both in recognizing their own errors and in correcting them promptly. The higher standard deviations in these measures indicate greater individual variability.

The overall indicator of volitional qualities ($M = 6.9$; $SD = 1.5$) summarizes the results and confirms a moderate level of development in volitional regulation. Strengths are associated with adherence to models and rules, while areas for further development are related to self-control and error correction.

Table 2. presents the mean values and standard deviations for boys and girls in the sample.

Table 2. Means and Standard Deviations for Girls and Boys Across Indicators.

Indicators	Boys		Girls	
	Mean (M)	Standard Deviation (SD)	Mean (M)	Standard Deviation (SD)
Accurate following of the model.	6.2	1.4	7.1	1.2
Rule compliance.	5.9	1.6	6.8	1.3
Stability of attention	5.7	1.5	6.9	1.2
Self-control in error commission and correction.	5.5	1.7	6.7	1.4

Source: Author’s own survey data (2026)

The data from the study show a comparison between boys and girls across four indicators related to cognitive and behavioral functioning. Analysis of the means and standard deviations reveals a consistent trend of higher scores among girls in all examined measures.

Accurate following of the model.

Girls demonstrate a higher mean score ($M = 7.1$, $SD = 1.2$) compared to boys ($M = 6.2$, $SD = 1.4$). This indicates better acquisition and application of the assigned model in girls, while the lower standard deviation suggests greater homogeneity in their performance.

Rule compliance.

On this measure as well, girls achieve a higher mean score ($M = 6.8$, $SD = 1.3$) than boys ($M = 5.9$, $SD = 1.6$). The larger standard deviation observed among boys indicates a wider dispersion of individual scores and greater variability in their ability to follow rules.

Sustained attention.

The difference between the two groups is pronounced, with girls again showing higher values ($M = 6.9$, $SD = 1.2$) compared to boys ($M = 5.7$, $SD = 1.5$). This may be interpreted as a superior capacity for maintaining attention over time in girls.

Self-control in error commission and correction.

Girls attain a higher mean score ($M = 6.7$, $SD = 1.4$), whereas boys exhibit a lower mean score ($M = 5.5$, $SD = 1.7$). The higher standard deviation among boys again reflects greater variability and lower stability of self-control within the group.

4. DISCUSSIONS

The analysis of the results obtained using the "Sample and Rule" methodology (Venger) indicates that volitional qualities in preschool-aged children are in an active process of formation, which is characteristic of this stage of cognitive and emotional development. The participants demonstrate a well-developed ability to orient themselves

according to a visual model and to execute assigned tasks effectively, reflecting established mechanisms of attention and action structuring. Nevertheless, certain difficulties are observed in recognizing one's own errors and in correcting them in a timely manner, which reflects the ongoing refinement of self-regulatory mechanisms and executive functions.

Regarding gender differences, the results show that girls outperform boys across all measured indicators related to rule-following, attention, and self-control. The lower values of standard deviation among girls suggest greater stability and uniformity in behavior, which may be interpreted as an indicator of earlier and more effective development of self-regulatory skills. These observed differences are likely attributable to specific characteristics in the development of cognitive and emotional regulatory mechanisms, as well as to the dynamics of executive functions during the preschool years.

In summary, the results underscore the importance of early stimulation of volitional qualities and self-control, noting that the development of these abilities is not homogeneous but varies according to both gender and individual differences among children.

5. CONCLUSIONS

The empirical study demonstrates that the development of volitional qualities in the preschool years is characterized by high heterogeneity and is strongly influenced both by the individual experiences of the child and by the social and educational environment. The findings indicate that the formation of volitional skills does not occur uniformly but manifests through diverse developmental trajectories, which are determined by the child's personal characteristics, motivation, cognitive abilities, and the quality of pedagogical interaction.

In summary, the observations confirm the significance of targeted pedagogical interventions aimed at fostering volitional qualities during the preschool period. An analysis of gender differences within the studied sample suggests that, for boys, emphasis should be placed on exercises designed to maintain attention, self-control, and perseverance in task completion, whereas for girls, it is advisable to focus on consolidating and complicating action rules, as well as enhancing the ability to plan and organize activities.

These results underscore the necessity of individualized and gender-differentiated pedagogical approaches that support the optimal development of volitional qualities in children and provide conditions for building sustainable personal competencies from an early age.

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