

# Reflective Analysis of the Pedagogical Strategies of Teachers from Municipal and Private Kindergartens

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## Abstract

The reflection on pedagogical strategies, based on the analysis of the development of a child in a certain environment, allows a teacher to define why, what and how he/she organizes his/her pedagogical activity (Bartlett, 1990; Hashweh, 2005; Shadrikov, & Kurginyan, 2015). The given study is aimed at describing the pedagogical strategies of teachers from the municipal and private kindergartens based on reflective analysis of the development of preschoolers aged 5-6. 126 children and 126 mothers attending different types of kindergartens were involved in the study. Data were collected through tests to diagnose the features of executive functions (EF) of preschoolers and their overall intellectual and emotional development. Mothers were questioned about the ability of a child to abide by the social rules. The reflective analysis allowed us to distinguish two types of pedagogical strategies that can lead to different developmental lines. Teachers from the municipal kindergartens support integration (within the culture as well as inner integration), whereas teachers from the private kindergartens support individualization (to be different from the other).

*Keywords:* pedagogical strategy; reflection on; kindergarten environment; development; preschool age.

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## **Introduction**

Reflective analysis on the pedagogical strategies of a teacher includes focusing on why, what and how he/she does something with children (Bartlett, 1990; Tsangaridou, & O'Sullivan, 1994; Hashweh, 2005; Navaneedhan & Girija, 2010). It usually includes the analysis of two sides, a teacher and a child, as well as interrelationships between them. Moreover, system reflection of pedagogical strategies involves exploring the dynamic of children's development, which takes place in a certain pedagogical environment (Davidson, 1992; Birch & Ladd, 1997; Birch & Ladd, 1998). The development of a child always occurs in the presence of a significant other (Elkonin, 1960; Vygotsky, 1984) and for a child in a kindergarten this significant other is a teacher. The development of a child mirrors the quality of a teacher's activity and allows observation of its components: "internal and external conditions", "needs and goals", "decision-making processes", "plan of action", "course of implementation" and so on (Shadrikov & Kurginyan, 2015).

Today, many approaches have been developed to describe the types of pedagogical strategies, for example, Baumgartner (2004), Joyce, Weil and Calhoun (2000). Knowing one's input into the process of child development, the teacher, according to Baumgartner's (2004) learning I-II-III typology, can change "teaching and learning strategies and activities", i.e. how a teacher cooperates with a child and what he/she supports in learning.

In recent years, a large number of private kindergartens have appeared in Russia, each of which offers its own forms of developing environment. It is positioned that private kindergartens offer different pedagogical strategies than municipal kindergartens. At the same time, researches of differences in pedagogical strategies of teachers from municipal and private kindergartens are not enough. Moreover, the influence of different pedagogical strategies on the formation of a child in preschool age is not sufficiently investigated.

## **Purpose and objectives of the study**

The aim of our research is to describe the pedagogical strategies of the municipal and private kindergarten teachers based on reflective analysis of the development of preschoolers.

## **Literature review**

The overall development of a child can be seen as a development of different mental spheres (such as social, emotional, cognitive, and volitional) that integrate with each other, supporting the wholeness. The theoretical foundation of our research included the concepts of cultural-historical development (Vygotsky, 1984), "normative situation" (Veraksa, 2000) and "cultural congruence" (Byanova, 2017). The exploration of volitional sphere (executive functioning) was based on the concept of "unity-and-diversity" proposed by Miyake, Friedman, Emerson, Witzki, & Howerter (2000). We hypothesized that groups of children being cared for in different pedagogical circumstances (municipal and private kindergartens) have different features of the development of social, emotional, volitional and cognitive spheres. We also hypothesized that the features of the development of preschoolers can reflect the pedagogical strategy of the significant other of the child– the teacher.

## **Methodology**

The participants involved in the study were children (total 126: 62 girls and 64 boys aged 5-6) and their mothers aged between 22-44 (total 126), attending the municipal and private kindergartens of

Tatarstan. Municipal kindergartens were attended by 69 children, 57 children participated from private kindergartens. Groups of children having been taken for the study had the same teachers for the last two or three years. Before the research both the mothers and the administration of the kindergartens signed an agreement on the participation of the children. The diagnostic study was conducted individually and it was run in a quiet room for approximately 20 minutes with each child. The complex of diagnostic procedures included four blocks.

Measure of cultural congruence was the Questionnaire for Studying Children's Compliance with Rules in a Normative Situation (Byanova & Mustafin, 2015).

Methods used to distinguish the main components of EF (working memory, cognitive flexibility and inhibitory control) are the subtests of the neuropsychological complex NEPSY-II (Korkman, 1999; Korkman, Kirk, & Kemp, 2007). The possibility to apply them in Russia was shown in several previous researches (Cheie, Veraksa, Zinchenko, Gorovaya, & Visu-Petra, 2015; Veraksa, 2014; Veraksa, 2015; Almazova, Bukhalenkova, Veraksa, 2016).

Dimensional Change Card Sort task (DCCS) (Zelazo, 2006).

Memory for Designs (subtest of NEPSY-II).

Sentence Repetition (subtest of NEPSY-II).

Inhibition (subtest of NEPSY-II).

Measures of overall intellectual development

Progressive Raven matrices (children variant).

Measures of emotional development of children

Affect Recognition (subtest of NEPSY-II).

The test of anxiety "Choose the right person" (R. Temmple, V. Amen, M. Dorki) (Rogov, 1999).

Statistical analysis applied was SPSS 25.0 program for Windows. All the data were previously normalized. One-way analysis of variance was applied to compare means of two samples (using the F distribution). For the correlation analysis the Pearson coefficient was applied.

## Results

The obtained data is presented in two parts: first – the comparison of groups of children from the municipal and private kindergartens. The second part highlights the results of correlational analysis within each of the groups.

*The comparison of groups of children from municipal and private kindergartens*

*Cultural Congruence.* Children from the municipal and private kindergartens were significantly different in the level of "safety" regulation (51.43 and 46.36 respectively;  $F=4.102$ ,  $P=0.045$ ). The compliance with other cultural rules did not differ by a significant level.

*Measures of EF.* It was found that children of private kindergartens are more cognitively flexible than those from the municipal kindergartens: they are better at doing the Post-Switch task in the DCCS (5.64 and 4.87 respectively;  $F=7.77$ ,  $p=0.006$ ) and are better at switching in the pattern of execution according to the additional factor in DCCS-Borders (8.31 and 6.78 respectively;  $F=7.38$ ,  $p=0.008$ ). They also have significantly higher level of verbal memory (19.08 and 17.31 respectively;  $F=7.01$ ,  $p=0.009$ ). The comparison of visual memory demonstrated that the both groups of children have equal level of remembering the content of the picture. At the same time, the ability to remember the spatial component of the picture was significantly higher in the group of children from private kindergartens: high values of significance level were obtained for each try (3.52 and 2.84 respectively for the children from the private





|            |  |  |  |  |  |      |      |  |  |  |  |  |      |
|------------|--|--|--|--|--|------|------|--|--|--|--|--|------|
| inhibition |  |  |  |  |  | .285 | .246 |  |  |  |  |  |      |
| -          |  |  |  |  |  |      |      |  |  |  |  |  |      |
| time       |  |  |  |  |  |      |      |  |  |  |  |  |      |
| R          |  |  |  |  |  |      |      |  |  |  |  |  |      |
| Raven      |  |  |  |  |  |      |      |  |  |  |  |  | .287 |
|            |  |  |  |  |  |      |      |  |  |  |  |  |      |

respectively,  $F=4.68$   $p=0.033$ ; for “neutral” the difference achieved the tendency level: 1.76 and 1.40 respectively,  $F=2.88$   $p=0.09$ ). But they were worse in recognizing “sadness” and “disgust” (for “sad”: 2.15 and 2.62 respectively,  $F=4.74$   $p=0.032$ ; for “disgust”: 0.79 and 1.13,  $F=4.92$   $p=0.029$ ).

#### *Interrelationships between explored characteristics within the groups*

Table 1 presents the Pearson coefficients within the groups that achieved the significant level ( $p \leq 0.05$ ). The table shows that characteristics explored have more significant connections in the group of children of the municipal kindergartens: 36 interrelationships against 13 in the private kindergartens. In particular, there are connections between the indicators of cultural congruence and cognitive control (Naming-corrected errors), cultural congruence and verbal memory (SR), cultural congruence and recognizing of affects (AF). There are strong positive connections between the indicator of cognitive flexibility (DCCS-total) and visual memory in this group of children. The more flexible children from this group are, the faster they complete tasks (Naming-time). There are also some relationships that are typical for the both of groups: the indicator of overall intellect (Raven) is connected with different indicators of visual memory (MD), cognitive flexibility (DCCS-total) is connected with verbal memory (SR) and ability to differentiate neutral emotions is negatively connected with MD-spatial.

### **Discussions**

The given study is aimed at reflecting the pedagogical strategies of the teacher based on the analysis of different characteristics of the development of preschoolers. We hypothesized that groups of children being cared for in different pedagogical circumstances (municipal and private kindergartens) have different features of the development of social, emotional and volitional spheres. We also hypothesized that the features of the development of preschoolers can reflect the pedagogical strategy of the significant other of the child – the teacher.

This hypothesis was supported as we managed to reveal the differences of the development of children of the two explored groups. Children of the municipal kindergartens better abide by the social rules, i.e., the rules of safety regulation and that means that they are more congruent to their culture. A higher level of cultural congruence is coherent with a higher level of recognizing sad feelings. But the ability to differentiate this kind of feelings is not so high. Instead, children of the municipal kindergartens better recognize happy feelings. They also have a lower level of verbal memory and spatial component of visual memory than another group of children. They are slower, less cognitively flexible and worse at puzzling logic tasks. But at the same time, the explored characteristics of their development are more interconnected and integrated with each other than in the group of children of private kindergartens.

Children of the private kindergartens have a better level of cognitive flexibility and spatial memory, a higher level of overall intellectual development. But being of a higher level, these indicators of the development have three times less interconnections between each other. It means that interconnections

between characteristics in this group are less coherent. This group of children better recognizes sad feelings and disgust; they are also less culturally congruent.

These data may indicate that these two groups of children are cared for in different environment with various pedagogical strategies. Analyzing the features of the development we may assume that the pedagogical strategies in explored municipal kindergartens are characterized by supporting a child's orientation to the rules of the normative situation. Rather than achieving the results, teachers of these kindergartens support the integration of different psychic spheres and the recognition of positive feelings. Teachers of the private kindergartens encourage the child's free expression of his/her negative feelings, more focused on the development of cognitive flexibility, formal intelligence, tempo characteristics and willingness to take risks. We may say that these teachers support a child's individualization. Hence, it is possible to distinguish two different pedagogical strategies: support for integration (inner integration as well as social integration) and support for individualization ("to be different from the other").

### Conclusion

The most important limitation of this study is that we did not explore other factors that may influence the differences of the children of both groups (for example, economical level of the family, its structure or the influence of the parents). Another limitation concerns the method used: we did not test teachers (did not observe their work) to define their pedagogical strategies. Following researches may include these important aspects.

First, our study proposes the way to distinguish the pedagogical strategy of a teacher – the reflexive analysis of the development of a child. This method may be used in many pedagogical situations as well as researches of pedagogical environment. Being used it may increase the ability of a teacher to reflect his/her professional activity. Second, we described two different pedagogical strategies, basically used in two explored types of kindergartens: support for integration (within the culture, as well as inner integration), support for individualization (to be different than the other). These pedagogical strategies lead to different developmental lines and may cause different limitations and benefits in the development of a child. The understanding and exploring of these strategies can be important for many pedagogical researches.

### References

- Almazova, O. V., Bukhalenkova, D. A., & Veraksa, A. N. (2016). The voluntariness in the preschool age: a comparative analysis of various approaches and diagnostic tools. *National Psychological Journal*, 4, 14-22.
- Bartlett, L. (1990). Teacher development through reflective teaching. In J.C. Richards and D. Nunan (Eds.), *Second language teacher education*. Cambridge: Cambridge University Press.
- Baumgartner, P. (2004). *The Zen Art of Teaching – Communication and Interactions in Education*. Proceedings of the International Workshop ICL2004, Villach / Austria 29 September-1 October 2004, Villach, Kassel University Press. CD-ROM, ISBN: 3-89958-089-3.
- Birch, S. H., & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology*, 35, 61-79.
- Birch, S. H., & Ladd, G. W. (1998). Children's interpersonal behaviors and the teacher-child relationship. *Developmental Psychology*, 34, 934-946.
- Byanova, L. F. (2017). *Psychologiya doshkolnika v normativnoy situatsiyi* [The Psychology of a

- Preschooler in a Normative Situation]. Kazan: Izdatelstvo Kazanskogo universiteta.
- Byanova, L. F., & Mustafin, T. R. (2015). Techniques for studying children's compliance with rules in a normative situation. *Philology and culture*, 3(41), 325-332.
- Cheie, L., Veraksa, A., Zinchenko, Y., Gorovaya, A., & Visu-Petra, L. (2015). A cross-cultural investigation of inhibitory control, generative fluency, and anxiety symptoms in Romanian and Russian preschoolers. *Child Neuropsychology*, 21(2), 121-149. doi: 10.1080/09297049.2013.879111
- Davidson, P. (1992). The Role of Social Interaction in Cognitive Development: A Propaedeutic. In Winegar, L. and Valsiner, J. (Eds.), *Children's Development within Social Context. Volume 1. Metatheory and Theory* (pp. 19-37). New Jersey: Hillsdale, LEA.
- Elkonin, D. B. (1960). *Detskaya psihologiya* [Child psychology]. Moscow: Prosveshchenie.
- Hashweh, M. Z. (2005). Teacher pedagogical constructions: a reconfiguration of pedagogical content knowledge. *Teachers and Teaching: theory and practice*, 11(3), 273-292.
- Joyce, B., Weil, M., & Calhoun, E. (2014). *Models of Teaching*. London: Pearson.
- Korkman, M. (1999). Applying Luria's diagnostic principles in the neuropsychological assessment of children. *Neuropsychology Review*, 9(2), 89-105. doi: 10.1023/A:1025659808004
- Korkman, M., Kirk, U., & Kemp, S. L. (2007). *NEPSY II. Administrative manual*. San Antonio, TX: Psychological Corporation.
- Miyake, A., Friedman, N., Emerson, M., Witzki, A., & Howerter, A. (2000). The unity and diversity of executive functions and their contributions to complex 'frontal lobe' tasks: A latent variable analysis. *Cognitive Psychology*, 41, 49-100. doi:10.1006=cogp.1999.0734
- Navaneedhan, C., & Girija. (2010). Reflective teaching pedagogy as innovative approach in teacher education through open and distance learning. *Journal of Media and Communication Studies*, Vol. 3(12). DOI: 10.5897/JMCS11.028 <http://hdl.handle.net/11599/2224>
- Rogov, E. I. (1999). *Nastolnaya kniga prakticheskogo psihologa. V 2 kn. Kn.1.* [Handbook of a practical psychologist]. Moscow: Vados.
- Shadrikov, V. D., & Kurginyan, S. S. (2015). Investigation of an activity reflection and its diagnostics by assessment of constructs of psychological functional activity system. *Experimental Psychology* 8(1), 106-126.
- Tsangaridou, N., & O'Sullivan, M. (1994). Using Pedagogical Reflective Strategies to Enhance Reflection Among Preservice Physical Education Teachers. *Journal of teaching in physical education*, 14, 13-33.
- Veraksa, N. E. (2000). Culture and Personality: Structural-Dialectical Approach. *Changes*, 1, 81-107.
- Vygotsky, L. S. (1984). *Sobranie sochinenij: V 6-ti tomakh. T. 4. Detskaya psihologiya* [Collected works: In 6 volumes. Vol. 4. Child psychology]. Moscow: Pedagogika.
- Veraksa, A. N. (2014). Social aspect in the development of executive functions in childhood: Contemporary foreign research review. *Psychology*, 4, 91-101.
- Veraksa, A. N. (2015). The development of the executive functions of preschool children in the educational process. *Psychology*, 3, 65-73.
- Zelazo, P. D. (2006). The Dimensional Change Card Sort (DCCS): A method of assessing executive function in children. *Nature Protocols*, 1, 297-301. doi: 10.1038/nprot.2006.46