

The Practice of Countering the Research Behavior of the Child in Culture and Education

Alexander Savenkov^{1*}, Polina Smirnova² and Natallia Murodhodjaeva³

¹Moscow City University, Moscow, Russia

²Assistant Professor, Moscow City University, Moscow, Russia

³Assistant Professor, Moscow City University, Moscow, Russia

***Corresponding Author:** Alexander Savenkov, Professor, Director, Institute of Pedagogy and Psychology of Education, Moscow City University, Member of the Russian Academy of Education, Moscow, Russia.

Received: May 20, 2019; **Published:** June 28, 2019

Abstract

The human need in the study of the surrounding world is among the vital needs. The child's aspiration to novelty is universal and manifests itself in the research behavior. Research behavior is one of the effective tools of cognitive, psycho-social and psycho-physical development. However, in culture and educational practice, there are many mechanisms that inhibit the child's research behaviour. This article is devoted to their description.

Keywords: Exploratory Behavior; Education; Preschoolers; Schoolers; Culture; Counteraction

Introduction

The desire to explore the world around us is one of the most amazing features of the psyche of living beings. Nature has given it not only people, but also animals. This desire is universal and manifests itself in exploratory behavior ("exploratory behavior"). It can be observed in living beings of all kinds, in all spheres of life and in all without exception activities. Research behavior serves as one of the most effective tools for learning, improving the cognitive functions of all levels, acquiring social experience [1-3].

Despite the fact that the very phenomenon of research behavior has been known to mankind for a long time, its scientific study within the framework of psychology has a relatively brief history and is based on the works of the first Russian Nobel laureate, I.P. Pavlova [4] for indicative research responses. His works of the beginning of the twentieth century gave the start to scientific, psychological research in this area. Over the course of the twentieth century, this issue was discussed with varying degrees of intensity, interest in it either intensified, or somewhat faded away [1-3,5,6]. At present, in the light of the actualization of the tasks of cognitive development through the individualization-differentiation of education, this problem has become particularly relevant [2,3,7].

A.N. Poddjakov, specializing in the development of a child's research behavior, rightly notes: "The analysis of social interaction without opposition is also incomplete, as the mathematical theory is not complete without negative numbers" [2]. One cannot but agree with the statement that the child's mental development in games and classical education is carried out not only in cooperative situations, but also in opposition situations. Cultural traditions in general, and educational as their integral part, are often aimed at limiting a child's search activity and even limiting cognitive needs [2,5].

Voluntary or involuntary counteractions to development are found in the process of any formation. Often this opposition is a tribute to traditions, the true meaning of which is poorly understood or has long been lost and is reproduced by inertia by participants in the

educational process. Counteraction to research behavior, and, consequently, children's curiosity, on the basis of which the cognitive need is formed, is carried out at all age levels and at all levels of education. It manifests itself in different areas of culture.

For example, it is known and not disputed by anyone that the purpose of stimulating the research behavior of babies is their normal mental development. The absence or reduction of the research activity of the baby is the most important symptom of serious mental and physical distress. In infancy, the formation of the cognitive sphere and the motivational basis of cognitive activity. To stimulate the development of the child's research behavior, various means are used and didactic systems are created, but at the same time, we often encounter situations of opposition.

For example, one of the main ways of manifesting exploratory behavior, and, consequently, acquaintance with the world for an infant, is movement. Through movement, the child explores and cognizes the world around us, makes cognitive contacts with the environment. This explains the important role of the movement in the development of the intellect of infants. Adaptation of the baby to the outside world occurs mainly by improving the coordination of perception and movement. At the beginning of the twentieth century, M. Montessori argued that the infant's biological need for sensory sensations cannot be satisfied if he is constantly lying on his back in a stroller or in a crib [8]. For the full cognitive development of the child should be given the opportunity to practice in research behavior.

By the middle of the twentieth century in Italy, the system of "Raggio Emilia" by L. Malaguzzi arises, in which manifestations of the child's subjectivity, his independence, and the variability of behavior are raised to an even higher level [9]. The activity of the child is built on the basis of research behavior. The teacher delicately monitors the sustainability of the interest and involvement of the child in various activities, fills the environment with new materials and objects.

Children themselves begin to receive new information for them, mainly due to their need for a research search, from the first minutes of their life. Therefore, it is naive to think that if the formal education of children begins in most countries of the world from 5-6 years old, then learning begins at this time. By this age, the child already knows about the world as much as he is unlikely to learn for the rest of his life.

At the same time in our culture there are many restrictions on the research behavior of the child. These are various prohibitions of adults, "ready-made" toys, not intended for transformation, cribs and playpens that limit the movement of a child in space. We are accustomed to convince ourselves that our constant restrictions on the use of surrounding objects protect the child from dangers. They are really insanely many, not only on the street, in kindergartens and elementary schools, but even at home, in an ordinary apartment. But are we thinking about the fact that, in saving the child from these external dangers, we are actually trying to put him in a physical, educational, emotional vacuum. Thereby exposing it to another, no less serious danger - limiting research activity, which leads to a limitation of cognitive experience, its impoverishment.

The kid touches and feels various objects: heavy and light, sharp and dull, soft and hard. He draws, tears paper, scatters toys, overturns something. Many fascinating research games begin with unusual effects obtained from random physical actions - splashing through puddles, splashing water, pouring sand, deformation of plastic materials (clay, plasticine), etc.

Children, even the youngest, do not need to be pushed to search for a new, to conduct their own research. It is enough for a child to simply give freedom for experimentation and the manifestation of natural search activity. It is important to constantly remember: the more this freedom, the wider the range of searches, the more opportunities it receives for the development of cognitive abilities and social experience. Restricting the freedom of action of children, expressed in various forms: restriction of physical activity or in constant "no", "do not go there", "do not touch", can seriously prevent the development of children's curiosity [2,7,10].

In the conducted P.V. Smirnov's longitudinal study [10] showed that at a young age the child demonstrates manifestations of exploratory behavior, despite the environmental restraints (the paucity of the home environment, the inattention of adults to the issues of education, the lack of new impressions, features of the individual pace of development, temperament). In this case, children need direction from an adult. The data of one of the cognitive studies of recent years [11].

During the study, P.V. Smirnova, compared the figures for the same child throughout his early childhood. She managed to find out that the older a child becomes, the more noticeable is the influence of the home environment on the further development of his research abilities [10].

In our study, 75% of the surveyed children who demonstrated a high level of manifestation of exploratory behavior had siblings. Also, 18% of children who showed an average were brought up with siblings and 50% - low levels of research behavior. At the same time, among children with a high level of research behavior, 75% of the youngest children were in the family, and only 25% were the first-born children. And among those who demonstrated moderate and low levels of research behavior, 82% and 70%, respectively, were older children.

We explain this by saying that the youngest child in the family, as a rule, has more time and opportunities for free experimentation and games. Younger children are more often more likely to occupy themselves, to develop through imitative reactions. Younger children in the family and those who have siblings, much earlier master social skills (social intelligence), develop social flexibility [3]. In various studies of psychologists, it was repeatedly noted that the younger children in the family grew more creative and able to make non-standard decisions [12,13].

Important factors in stimulating manifestations of exploratory behavior were "family flexibility in transforming apartment space in the interests of child development and play" (75% in children with a high level of research behavior, 72% in children with an average level, 30% - in children with a low level of research behavior, respectively) and "saturation of the subject-spatial environment (a sufficient number of various toys, accessories for creativity, children's books, etc.)" (10% in children with high level of research behavior, 54% - in children with an average level, 16% - in children with a low level of research behavior).

Also important was the provision to the child of a regular opportunity to acquire new experiences. In families that regularly provide children with the opportunity to acquire new experience, children's exploratory behavior manifested itself in 75% of cases at a high level and in 36% of cases on an average. The frequency of meeting a child with new circumstances (toys, adults, children, places of residence) also increases the likelihood of encountering situations of social experimentation.

The study showed that the ancestors in general had a positive effect on supporting the research behavior of the child. Probably, the change of adults under whose supervision the child is during the day has a beneficial effect on the ability to show research activity, it gives an opportunity to train in social experimentation.

The research behavior of children is manifested in situations of novelty and uncertainty. In early childhood, conditions create a new place (even moving to a new room inside the house), a new toy or object, situations of interaction with another child, meeting a new adult.

The directional impact on each child in the family by significant adults (parents finding time for personal communication, games, reading and other activities with each of their children) was one of the powerful stimulating factors for the development of a child's research behavior during early childhood.

Modern sciences and, first of all, psychology and pedagogy, know only a very approximate answer to the question about the true horizons of human educational opportunities. The reason for this is not so much the degree of scientific achievement, as in the complexity of the subject of the study itself. Methods of early education that are common in our time change stereotypes about the educational opportunities of children [14]. Methods of early learning are of particular importance in terms of improving not only cognitive experience, but also the research behavior itself. Their value, in this case, is that as a result of their use, the area of the child's research search is significantly expanded.

Early learning is built without coercion and makes the most of the organizational resource of the game. It is also important to understand that these methodologies do not at all suggest to roughly speed up the training and development of the child, as this, unfortunately, is often done in the modern practice of preschool education, especially with the so-called "preparing the child for school". So, in the framework of our research to identify predictors of educational success of a child in the early stages of education, parents of future first-graders

were interviewed. It turned out that most of the older preschool children from our sample are overloaded with additional classes and circles (which probably indicates high ambitions of parents, family resources and some disregard for the features of preschool children). As a rule, the only children in the family, whose parents often since birth tend to develop and form intensively, are at risk with respect to these influences. The revealed tendency is explained by the widespread depreciation by modern parents of an undirected, spontaneous children's game as the main form of research and development [15].

Separately, we note the stimulating effects of toys on the cognitive development of the child. Usually the toy is not designed for the fact that its potential and the contents will be actively explored (disassemble, break, etc.). And the desire of the child to include a toy in the program of his own research activities leads to the fact that it is thrown, drowned in water, buried in the sand, dismantled. All this usually leads to a toy in disrepair. In some countries, there is a strict rule in no case to punish a child for broken toys. The emergence of transformable toys that can be disassembled and assembled, to study their capabilities and device, without at the same time causing the toy to become unusable, could be a solution to the problem. However, technically this problem is extremely difficult to solve.

There are alternative and, moreover, highly productive ways. One of these ways is to give the child a minimum of ready-made toys, try to make it play with toys that he made himself, or in the creation of which he himself took part, to allow the child to find himself toys among the objects around him. Many observant teachers and parents know that often expensive, new toys from the store are inferior in competition for the child's attention to simple glass or stones, wooden bars or unknown metal objects, fragments of old dishes or pieces of foam rubber. This is no accident - the child is a researcher by nature. It is much more interesting to him that it does not have rigidly fixed functions, and therefore it can be used for various purposes. The most interested baby plays with toys that give him the "joy of achievement." In order to experience this "joy of achievement", children are usually not offered ready-made toys, but sets of parts from which you can assemble a toy yourself. From them you can make something new, unusual, they can be used for a variety of purposes.

An important role in stimulating and deterring the research behavior of a child is played by literature for children. In recent decades, the flow of children's encyclopedias and reference books has significantly expanded. Most of them are well illustrated and contain interesting, well prepared texts. Special notebooks and textbooks are also produced, designed for children's experimentation or the inclusion of a child in their own long-term research activities [3].

Interesting data on the promotion and deterrence of research behavior can provide an analysis of children's fiction, fiction and animated films for children. The results of the analysis from this point of view of the behavior of the characters of children's fairy tales. And if in traditional fairy tales exploratory behavior is rarely supported and far from all characters, in modern works its share increases [3].

In the practice of modern primary schools, one can also find many examples confirming the fact of the containment of the research behavior of a child. The most powerful of them, limiting research behavior, is a widespread class-less system as an option for organizing educational activities, with its powerful mechanisms for limiting the physical and mental activity of a child. The content of education, built as a set of unshakable postulates, is also a factor constraining the research activity of the child. Restrains the research behavior of the younger student and the constant desire of teachers to use mainly reproductive teaching methods.

Among the pedagogical errors that have the most detrimental effect on the development of children's research behavior, it is necessary to note the formation of so-called learned helplessness, when as a result of the teacher's actions the student is convinced of the futility of any of his efforts, the futility of any attempts at active independent search [1]. In this case, the syndrome of learned helplessness is the absence or low level of search activity, in other words, the voluntary restriction of one's actions that can change something [16].

And even in situations of introducing research methods in modern education, there are ways to limit the research behavior of a child. One of the most characteristic examples is the replacement of children's educational research works with project ones.

In addition, all the potential benefits of teaching and research assignments in school education are practically reduced to zero, and often have a negative educational effect as soon as they turn into a formality. Obtaining a task from the school administration about the need to prepare in the classroom with children a certain amount of research work for the festival, an ordinary teacher, as a rule, involves responsible parents in this task. The topic, as a rule, in such cases is chosen the most "harmonious", with an application for participation in competitions, based on the capabilities and interests of the parent and teachers. And parents, focusing on their ideas, do the whole amount of work. It remains for the child to memorize the prepared text of the report and not become entangled in the ideal "adult" presentation. Every year at various school, city and All-Russian competitions of research and design work, one can observe "children's" educational research works with a well-formulated and confirmed hypothesis, achieved during observations and experiments, goals, tasks and other attributes.

The reluctance and inability to give a child the freedom and time to discover the research issues of interest to him, as a rule, hides the lack of willingness of adults to take responsibility and their own fear of facing a difficulty ("not getting quick results", "do ordinary work", "choose not a competitive topic"; not to confirm the stated hypothesis; not to speak clearly, etc. ").

Over the past two decades, our society has clearly seen a tendency to limit the uncontrolled adult interaction with the world of children and adolescents outside of school. As a result, children do not play freely in the courtyards, they are led "by the hand" to and from school, thus depriving them of many opportunities for independent contacts with the outside world.

Many concerns arise regarding the harmful effects of computers, computer games and networks on the children's organism and psyche. However, many experts [5] noticed that both gifted children and their usual "normal" peers, with obvious pleasure and great interest, are rapidly mastering computer equipment. Studies by a number of specialists have clearly demonstrated that computer games have great potential in terms of developing the intellectual and creative potential of a child's personality [3,5,6]. The main factors here are: the use of software to enrich the content of education; expanding opportunities for presenting educational information; saving study time due to the exclusion of routine operations in the processing of various kinds of educational information; expanding the sphere of independent research activities of children; variability types of educational activities.

Computer games today have become diverse and interesting. Their developmental capabilities must be investigated, and the process of creating these games must be managed. One of the most effective means of developing research behavior and mental abilities is "strategic" computer games. The player must examine the conditions, at the same time keep in mind a number of situations and manage a multitude of difficultly related variables. This allows him to develop important qualities, in particular, the ability to solve complex problems.

It should be remembered that the computer programs themselves and the global computer networks have a powerful unifying effect on the individual. Therefore, it is necessary to take into account that the more saturated the child's environment is with computer equipment, the more essential is the requirement for teachers and parents to facilitate in every way the manifestation of each child's own style of knowledge. It is necessary to focus the child on the attitude to the computer as a means of realizing their own needs for research behavior. It should be considered primarily as an object and source for conducting its own research.

Conclusion

So, it is important for parents and teachers to always remember that the environment can be very helpful in timely stimulating the development of a child. Certain conditions must be created for the development of a child's research behavior. The main way of developing the research behavior of a child is his own research practice, built on a spontaneous desire to study the environment. Accordingly, for the maintenance and improvement of research behavior, the most effective means is the maximum reduction of restrictions on children's research.

Opposition to exploratory behavior is manifested everywhere. With this in mind, it is necessary to overcome stereotypes and learn to look at traditional educational activities from new perspectives. But it should always be remembered that this opposition has its positive sides. Society hinders the acquisition and dissemination of experience that destroys its moral principles and cultural values. This includes the experience of socially disapproving addictions (smoking, drugs, etc.), age restrictions on the acquisition of experience and knowledge of a sexual nature, the dissemination of the experience of criminal activity. Education should prevent the spread of experience deemed erroneous or outdated.

The most curious thing is that countering research behavior can contribute to personal growth and development. And it's not just in the well-known sweetness of the "forbidden fruit". In humanistic psychology there is a special term "overcompensation." This is the name of the ability of the individual to resist the circumstances in society, and develop in spite of them. The task of successful development of personal qualities, as well as the development of intelligence and creativity necessarily requires that the student learns to overcome difficulties and obstacles. From this point of view, the conditions for not only facilitation, but also counteraction should be considered as favorable.

The modern professional community is increasingly aware of the idea that the life success of an individual and the very survival of humanity in the modern dynamic world depend on the understanding of the mechanisms of functioning and development of research behavior; on the skillful use of this knowledge.

Bibliography

1. Bondarenko SM and Rothenberg VS. "Brain, Training, Health". M (2017).
2. Poddyakov AN. Research behavior: Strategies of cognition, help, counteraction to conflict. 2nd issue, etc. (2006): 239.
3. Savenkov AI. "Psychological basis of the research approach to learning". M: 479.
4. Pavlov IP. Physiology. Selected works. M, Series: Anthology of Thought (2016).
5. Babayeva YU and Voykunovsky AE. "Gifted child at the computer". M (2003).
6. Savenkov AI., et al. "Effectiveness of the basic predictors of the child's educational success in the early stages of education". News of the Institute of Pedagogy and Psychology of education MCU 3 (2018): 98-106.
7. Savenkov A. "Theoretical Model of Preschoolers' Social Intelligence Development". *EC Psychology and Psychiatry* 8.3 (2019): 206-211.
8. Montessori M. "Absorbing mind of the child". M (2011): 320.
9. One city, many children. Reggio Emilia, a history of the present. With interviews and texts by Renzo Bonazzi, Simona Bonilauri, Ettore Borghi, Jerome Bruner, Antonio Canovi, Luciano Corradini, Gunilla Dahlberg, Graziano Delrio, Paul Ginsborg, Loris Malaguzzi, Carla Rinaldi, Vea Vecchi Edited by Rolando Baldini, Ilaria Cavallini and Vania Vecchi. Reggio Emilia: Reggio Children Publisher (2012): 272.
10. Smirnova PV. "Specifics of empirical study of early childhood research behavior". Procedures and methods of experimental-psychological research. "Integration of academic and University Psychology" series. M.: IP RAS (2016): 853-859.
11. Brandon C., et al. "Predicting the birth of a spoken word".
12. Roe A. "The making of a scientist". N.Y (1953).
13. Sidorenko EV. ""Inferiority complex" and analysis of early memories in the concept of A. Adler". SPB (1993).

14. Doman G and Doman J. "Preschool education of the child". M (1995): 400.
15. Rachel E White. "The power of play: A research summary on play and learning". Minnesota Children's Museum.
16. Seligman M. "Helplessness: On Depression, Development, and Death". San Francisco: W. H. Freeman (1975).

Volume 8 Issue 7 July 2019

©All rights reserved by Alexander Savenkov, et al.