# PREDICTION OF ABILITY AMONG DISABLED SCHOOL STUDENTS: POSSIBILITIES AND LIMITATIONS OF DIAGNOSTIC TOOLS

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Abstract: The research relevance is caused by the fact that forecasting is an element of regulation of the leading activity and behavior, participates in processes of adaptation of the personality to the changing environment conditions. The ability to forecasting is considered as a resource of successful socialization, significant for the child with limited opportunities of health. The analysis of the current state of a problem of forecasting and the most perspective directions of its further development for school students with limited opportunities of health is submitted. As the most important condition of its constructive research need of differentialty, in three basic aspects, cognitive, regulatory and communicative, in significant situations of communication of the school student is proved (with adults, with peers, with parents and family members, virtual communication). The existing psychodiagnostic tools on identification of various aspects of ability of younger school students on anticipation of situations of the future, opportunities of these tools in identification of deficiency of forecasting at school students are estimated. Studying of ability to an anticipation of situations of the future at children of younger school age represents today not only a research task, but also a social mission of scientists to model, predict success of course of processes of socialization, to prevent initial process of formation of deviant behavior at children with limited opportunities of health and to reduce risks of emergence of destructive and deviant behavior at teenage and youthful age.

Keywords: forecasting, an anticipation of situations of the future, social norms, diagnostic tools, younger school students, violations in development.

## 1 Introduction

Neurophysiological and psychophysiological problems of predictive activity by Anokhin, Bernstein, Kinsbourne, and Mills are actively studied. Features of probabilistic forecasting normal and pathologies in Peresleni works, Mendelevich are revealed. Development of anticipation in ontogenesis is studied by Sergienko, Regush, Burgess, at violations of speech development (Anokhin, 1987; Bernstein, 1997; Kinsbourne & Scott, 2009; Mills et al, 2014; Peresleni, 1982; Mendelevich, 1996; Sergienko, 1989; Regush, 1997; Burgess, 2012; Akhmetzyanova, 2015; Akhmetzyanova, 2014; Akhmetzyanova, 2016a; Akhmetzyanova, 2016b). The condition of successful adaptation of the individual distinguishes ability to forecasting as to ability to reflect regularities of the environment in structure of last experience, to form the strategy of behavior, anticipating the course of events in B.F. Lomov's works, E.N. Surkova, Kocie, and Gusev Lomov, 1980; Kocie & Cki Przyluski, 1996; Gusev & Okune, 2017). Huge actual material is saved up, the interesting experimental results disclosing important regularities and mechanisms of anticipation are received; a number of explanatory concepts in the field are formulated. However, forecasting is insufficiently studied as integrated ability of the younger school student with limited opportunities of health for adaptation in society (Denisova et al, 2012; Villalobos Antúnez & Bozo, 2010). The special role in the course of social and psychological adaptation, according to Tvardovskaya, Lindsay belongs to mechanisms of an anticipation of succession of events, abilities of children with limited opportunities in full and most objectively to anticipate, predict development of their disease, need of stay for specialized institutions, feature of their interactions with significant adults and peers (Tvardovskaya, 2015; Lindsay, 2008; Nurhayati, 2018).

The main problems of social development of children with limited opportunities of health are shown in disruption of communication with the surrounding social and objective world,

in low social mobility, in poverty and stereotype of social interaction with peers and adults, in limitation of familiarity of human and national culture (Denisova et al, 2012; Platow et al, 2008).

Development of the diagnostic tools allowing carrying out assessment of anticipation ability of the child with limited opportunities of health is relevant. However, at a large number of techniques of identification of various aspects of forecasting, at the moment there are no means of complex and versatile diagnostics of predictive abilities of younger school students with visual impairment, hearing, the speech, the musculoskeletal device. Studying of ability of children with visual impairment, hearing, the speech, the musculoskeletal device to an anticipation of situations of the future allows assuming its heuristic opportunities for prevention of formation of deviations, preventions of situations of asocial behavior.

#### 2 Methodological framework

The methodological basis of the study was:

- points of system-functional approach of anticipation as a phenomenon that permeates all levels of psychic reflection of reality and have a multi-level structure laid down in the works of Anokhin, Bernstein and Lomov(Anokhin, 1987; Lomov, 1980; Bernstein, 1997).
- basic points of cultural-historical theory of mental ontogenesis by Vygotsky (Vygotsky, 2005).

#### 3 Discussion

Any psychodiagnostic technique has to be based on the certain theoretical construct displaying at the conceptual level of idea of the measured property. The technique developed by us is also based on the following provisions:

#### 1. Cognitive aspect of forecasting

Diagnostics of ability of school students to an anticipation of situations of the future has to consider surely, according to Sergienko, informative activity of the subject of social interaction. Theory and methodology justification of the questionnaire "Specifics of an anticipation of the future" is directed to development of the diagnostic tools revealing specific features of an anticipation of the future of the young men (Malyuchenko et al, 2009). Regush, the technique the "Predictive task" allowing revealing the level of development of predictive ability at teenagers and adults was offered by Somova (Somova, 2002).

For studying of cognitive aspect of predictive activity the technique of a research of features of predictive activity "Guessing game" (Nadin, 2015) on indicators can be used: speed of formation of the forecast, derivation error, reproduction of orders of sets, strategy of forecasting.

In Akhmetzyanova's researches it was revealed that, thanks to an anticipation (forecasting) the younger school student is capable to control educational activity; mental processes are exposed to the high-quality changes connected with consciousness function; the act of communication is accompanied by forecasting of own acts and actions of people around.

The researches directed to studying of a cognitive component of predictive activity at children of younger school age with visual impairment, hearing, the musculoskeletal device, with violations of the speech, allowing to predict success / not success of adaptation of the school student to the changing environment conditions, it was not conducted.

#### 2. Regulatory aspect of forecasting

Anticipation acts as an important component in regulation of behavior, allowing creating the purposes, to carry out planning and programming of behavior of the subject (Isaev, 2013). Diagnostics of predictive abilities of younger school students with violations in development has to be directed to studying of strong-willed effort in response to the difficulties arising in the course of activity and communication, definition of forecasts of results of action (Kocie & Cki Przyluski, 1996; Nielsen et al, 2015)

Ulyenkova's technique "Self-control studying" is directed to studying of features of formation of self-control in intellectual activity (Ulyenkova, 2001). The technique "Not solvable task" of N.N. Aleksandrova, T.I. Shulga allows to diagnose specific features of emotional reaction and intellectual strong-willed effort in response to the difficulties arising in the course of activity and communication (Alexandrov & Shulga, 1987).

However there are no methods of studying of prognosis abilities of younger school students with violations in development at regulation of the social relations.

### 3. Communicative aspect of forecasting

Diagnostics of social development of children and teenagers with limited opportunities of health allows to reveal at them difficulties of forecasting of consequences of the acts and behavior of people around; the aspiration to avoid pressure of rules, norms (Bayanova & Mustafin, 2016; Bayanova et al, 2016); shortcomings of understanding and awareness of need and expediency of observance of social rules and norms (Chernyak & Kushnir, 2014; Veraksa, 2014). Prediction of actions of other person on his mental conditions for children with an autistic range was more difficult, than for children with typical development in Lebedeva's research (Lebedeva, 2006).

A.K. Pashchenko's technique "Perception of a standard situation" allows revealing the level of normativity of perception of a situation by the younger school student (Pashchenko, 2010). This indicator reflects degree of representation of all-group norms in interpretation of external signs of a standard situation of the specific pupil (Artemyeva, 2016; Nigmatullina & Artemyeva, 2015). Ulyanova V. P. technique. "The anticipation of an outcome of a situation with violation of norm" allows defining ability of the teenager to an anticipation of consequences of the behavior in a standard situation (Accusative, 2008).

However, despite problems of social development of children with limited opportunities of health, defective communications with the surrounding social and objective world, methods which would allow to estimate a social context of interaction of younger school students with violations of the speech, hearing, sight, the musculoskeletal device in psychological science it is not developed.

Complex diagnostics of ability of younger school students with limited opportunities of health to an anticipation of situations of the future has to include cognitive, regulatory and communicative aspect of forecasting in significant situations of communication

The interpersonal context is defined by action of threats of social development in a microenvironment of activity (Furnham & Argyle, 1981), subjective perception by children of these relations, formation of communicative activity and features of the interpersonal relations (Iches & Knowles, 1982). The relations with peers at children with limited opportunities of health are characterized by prevalence of situational forms of communication, immaturity of communicative means, shortcomings of understanding of their semantics and communicative sense, existence of peculiar communicative lines, aspiration to isolation and privacy (Killen et al, 2013).

The intra family relations have originality in the families raising children with limited opportunities of health. The dis-adaptation is painfully endured by the child and leads to emergence of feeling of isolation at it, vulnerability, rejection from people around (Denisova et al, 2012, Rean, 2015; Sheeran et al, 2014). In the conditions of limited social interaction, absence of friends and the companies in which the younger school student could have feeling of belonging to group there is a big risk of leaving of the school student to the virtual world which will act for it as the means of communication and self-affirmation, substituting for itself process of real interaction.

#### 4 Conclusion

Thus, the carried-out analysis of modern researches in the field of forecasting allowed us to define structure, significant situations of interaction, diagnostic criteria (recommendations) of complex psychodiagnostic tools about identification of various aspects of ability of younger school students to an anticipation of situations of the future, consequences of own actions and acts. These tools will allow revealing deficiency of predictive competence at children with visual impairment, hearing, the speech, the musculoskeletal device. Development of diagnostic tools, will allow to carry out assessment of predictive ability of the child with limited opportunities of health from positions criteria approach and to estimate risks of further violations of socialization and emergence of deviations.

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