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**FEATURES OF ANTICIPATION CONSISTENCY OF DEVIANT
SCHOOL STUDENTS WITH LIMITED HEALTH
OPPORTUNITIES**

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Abstract

Adolescence is characterized by poor resistance to difficulties of growth processes that quite often provokes development of deviations. This paper provides the analysis of references on the problem of deviant behaviour and anticipation abilities in teenagers with deficiency dysontogenesis. Teenagers with sensory disorders (hearing and visual impaired) possess the ability to predict that reaches the level of common anticipation consistency. It combines a high personal-situational anticipation consistency and space-time anticipation inconsistency. The common ability to anticipation is not formed in teenagers with speech and locomotor disorders. Consideration of obtained data in psychology-pedagogical support of school students with limited health opportunities will allow to establish a personal focused strategy to prevent deviations. The main research objective is to assess the ability to predict future situations and consequences of personal actions and the actions of others, by teenagers with visual impairment, hearing and speech disabilities, and disorders of locomotor system. As a result, the study of anticipation specificity in teenagers with deficiency development inclined and disinclined to deviant behavior was conducted.

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Keywords: Anticipation consistency, forecasting competence, deviant behaviour, school student, limited health opportunities.



1. Introduction

Manifestations of deviant behaviour are increasingly noted in school teenage students. Harmonious development of the child's personality is as rare now as the state of complete physical health. Every third school student can enter the risk group due to these characteristics.

The availability of deviations in teenage development increases the risk of the emergence of deviations. The deviant behaviour of teenagers with limited health opportunities is often their reaction to adverse conditions (social or microsocial) in which they find themselves when socially acceptable ways of behaviour have exhausted or have not been created yet (Peresheina, 2016). Estimating deviations as "normal behaviour in abnormal conditions", researchers note that the problem of differentiation of pathological behaviour forms from "normal" is actually complex: criteria to specify deviations and addictions are not always unambiguous (Pinna, Dell'Osso et al, 2015). All these circumstances substantiate the search of compensatory mechanisms, promoting socialization in teenagers with disturbances of development. Knowledge of similar mechanisms is extremely important to determine the areas of work on prevention of deviations and draw up psycho-correctional programs.

It is known that various forms of psycho-social maladaptation and emergence of deviations in the period of adolescent crisis are directly bound to shortcomings in the act of prediction. The study of anticipation consistency contributed sufficiently to the explanation of personal features of deviant teenagers, mechanisms of neurogenesis in children with normal and impaired development (Mendelevich, 2002; Akhmetzyanova, 2013, 2015).

According to ontogenetic regularities, adolescence is considered a sensitive period regarding the development of the ability to anticipate, the ability to foresee the course of events, personal actions and the actions of people around, and to build activity based on adequate probability forecast. Difficulties of adaptation to new social conditions are determined by reasons which causes various deviations, inappropriate educational conditions of teenagers with limited health opportunities (LHO), and the consequence of impaired development itself.

In this regard, one of the urgent issues of corrective psychology is to detect specific features of anticipation and determine its role in the structure of deviations.

2. Problem Statement

Researches in the field of corrective psychology and pedagogics showed that psychophysical deviations negatively impact the development of the cognitive sphere and interpersonal communication of teenagers, lead to distortion of ideas about surrounding people and interpersonal contacts, to violations of behaviour, and to social and psychological maladaptation. Adolescence is a transition between childhood and maturity; it is often accompanied with decrease in mental stability, control over behaviour, and increase in the level of negative emotions. One of the reasons for the negligence of norms and risky behaviour is the split of development of various neuropsychological systems peculiar to this age. (Vazsonyi, Mikuska & Kelley, 2016; Vazsonyi & Ksinan, 2017).

Sensory impairment and movement disorders can aggravate the adolescent crisis, complicate the choice of profession, predispose the child to different forms of deviant behaviour: aggression, abuse of psychoactive substances. It is shown that corrective work in the sphere of family relations, formation of

communicative skills, gender-role behaviour is required to prevent deviations and promote normal socialization of teenagers with special needs (Al-Yagon, 2015).

One of the patterns of mental development of persons with limited health opportunities is the peculiarity of personality development and self-awareness manifested differently in various alternatives of dysontogenesis (Lubovsky). They include: inadequate self-evaluation, increased suggestibility and low criticality, difficulties in regulation of emotions in the form of impulsiveness and affective excitability with tendency to aggression, and insufficiently developed communicative skills leading to fears in contact (Popova, 2013).

These features lead to the formation of various deviations in behaviour. Inadequate self-evaluation causes problems in interpersonal communication and development of addictive behaviour. Increased suggestibility and low criticality, including asocial forms of behaviour, promote involvement in criminal activity. Impulsiveness can provoke aggression; violations in the communicative sphere result in emergence of various phobias.

For example, children with mental development disorder as a result of a high level of suggestibility are especially vulnerable to physical and sexual abuse, and the syndrome of inclination disinhibition causes the formation of sexual deviations. Teenagers with hearing disabilities can be involved in criminal activities in the distribution of psychoactive substances because of communicative limitations.

Hearing-impaired teenagers have stronger disposition to socially-desirable false answers and delinquency behaviour in comparison with well-hearing ones; hostility level (offenses and suspiciousness) is increased, and the level of physical aggression is reduced (Bababroglu, 2016). Decrease in hearing is a risk factor for problems such as, depression and aggressive behaviour in teenagers (Turner et al., 2007; Salhi et al., 2009).

Manifestations of aggression and auto-aggression as a way to achieve desirable results are characteristic of children and teenagers with psychopathy (Bogdanova et al., 2014). Inadequate assessment of one's self as the subject of professional activity, fixing on movement disturbances, a high level of uneasiness and neuroticism are peculiar to teenagers with cerebral palsy

Popova revealed a complex of features which determines psychological readiness for alcohol intake and emergence of addictive behaviour in persons with limited health opportunities (Popova, 2015). Researches of anticipation in case of deviations and in clinical practice showed that mechanisms to forecast the development of events play an important role during social-psychological adaptation.

The ability to predict and forecast in full and most objectively the development of a disease, to understand the need of staying in specialized institutions, to realize features of interactions with significant adults and peers, and in general one's own future has a special value for children with limited opportunities. The ability to plan personal actions to avoid risk of physical and mental injuries becomes important too (Ziber, Uzdenov, 2013).

Psychology studies the phenomenon of anticipation applying various approaches. Based on the synthesis of diverse definitions, it is possible to identify the following characteristic traits of anticipation: pertaining to different levels of life (psychophysiological approach), functioning within the frames of cognitive sphere (structural-level approach), specificity in the conditions of dysontogenesis (clinical

approach), coherence with the structure of activity (activity approach), and natural conditioning (genetic approach).

At the moment, anticipation consistency is researched by Mendelevich in connection with neurotic frustrations and neurosis-like mental states, by Feygenberg in case of schizophrenia, by Uzelevskaya - in regard to personal frustration, by Demakina - in case of osteochondrosis, by Skidanenko - in regard to epilepsy (Sumina, 2007). Mendelevich showed that the specificity of anticipation in persons with neurotic frustrations is expressed in the tendency to predict favourable outcomes of events and phenomena. As a result, the decrease in the ability to predict and high susceptibility to the surrounding reality in the form of strengthening a negative reaction is observed (Mendelevich, 1996). Demakina states that a low level of anticipation is characteristic for persons suffering from cervical or lumbar intervertebral discs disorders (osteochondrosis) (Demakina, 2004). Examining persons with schizophrenia, Feygenberg found out that the key factor of unsuccessful anticipation activity is the disorder of prediction structure (impossibility to use adequately previous experience to create further forecast) (Feygenberg, 1973).

Uzelevskaya identified specific features of anticipation in persons with different forms of personal frustrations. Thus, people with hysterical type of personalities ignore former failures in their forecasts; therefore, they are guided (count on) only by positive outcome of events. On the contrary, paranoiac types of personality due to a high level of anxiety and distrustfulness tend to predict only adverse succession of events (Uzelevskaya, 2002).

Disabled teenagers with disorders of the locomotor system show higher anticipation inconsistency, than their healthy peers. Difficulties in anticipation of events and decision making with priming of time, dominance of inadequate types of probability prediction - "mono-variant" and "poly-variant" are characteristic for them (Goncharova, 2003). The concept of anticipation consistency turned out to be productive when features of personality structure of teenagers with behavioural deviations were studied (Mendelevich, 2002).

Theoretical analysis of the elaboration of anticipation in norm and pathology can draw a conclusion that prediction has adaptive – maladaptive character, in case of intellectual or mental inconsistency anticipation inconsistency is observed. However, there are insufficient psychological researches in which features of prediction in people with physical disorders are studied. Despite the number of researches of anticipation ability in adolescence, its specificity is not investigated in persons with visual impairment, hearing and speech disabilities, and disorders of locomotor system. It is necessary to find out whether teenagers inclined to deviant behaviour in conditions of dysontogenesis have the same features of anticipation that are inherent in their peers without psychophysical disorders.

3. Research Questions

The key problem of this research is to assess the ability to predict future situations and consequences of personal actions and the actions of others, by teenagers with visual impairment, hearing and speech disabilities, and disorders of locomotor system; that will allow to expand representations on age-specific personality features of school students with limited health opportunities. The study of

anticipation specificity in teenagers with deficiency development inclined and disinclined to deviant behaviour is supposed.

4. Purpose of the Study

The goal of this research is to study features of anticipation consistency in teenagers with deficiency dysontogenesis inclined and disinclined to deviant behaviour, and to identify the availability and nature of interrelation between these indices.

5. Research Methods

The following techniques were applied for diagnostic purposes:

5.1. The questionnaire "Tendency to deviant behaviour (TDB)" (Orel).

It is intended to measure readiness (tendency) of teenagers to realize various forms of deviant behaviour. The questionnaire represents a set of specialized psycho-diagnostic scales: tendency to overcome norms and rules, tendency to addictive (dependent) behaviour, tendency to self-damaging and self-destroying behaviour, tendency to aggression and violence, volitional control of emotional reactions, tendency to delinquent behaviour.

5.2. The test of anticipation consistency (TAC) (V. D. Mendelevich).

It gives the chance to reveal and evaluate the quantity indices of anticipation (prognostic) abilities. The test contains 4 scales: common anticipation consistency, limit of norm: 241 scores (fewer than 241 - anticipation inconsistency); personal - situational, limit of norm: 166 scores (fewer than 166 - anticipation inconsistency); space, limit of norm: 52 scores (fewer than 52 – motor uneasiness (motor anticipation inconsistency); time, limit of norm: 42 scores (fewer than 42 – chronorhythmological anticipation inconsistency).

Statistical methods of results processing were used (Student's t-test) .

The results of diagnostics of teenagers with limited health opportunities of both genders aged between 13-14 years from Kazan and some regions of the Republic of Tatarstan (Russia) made the empirical base of the research. The total sample number were 112 respondents with deficiency dysontogenesis, 46 respondents appeared to have expressed disposition to deviant behaviour.

To realize the objective of this research, the sample was divided into groups according to the leading disorder. So, hearing-impaired teenagers made group 1, teenagers with visual impairment made group 2, group 3 included teenagers with speech disabilities, teenagers with disorders of locomotor system entered group 4.

Table 01. The quantity characteristic of respondents' sample

Group	1	2	3	4
Respondents inclined to deviations (n =46)	12	11	13	10
Respondents disinclined to deviations (n =66)	16	17	20	13

6. Findings

6.1. Predisposition to deviant behaviour in groups of respondents.

According to TDB technique results, 59% of teenagers with LHO (66 people) did not reveal tendency to deviations. The tendency to deviations was observed in 41% (46 people) of the respondents; this result is considered high in selection in general.

Mean values in the sample of teenagers with LHO in general (n=112) are in norm limits on all indices. However, all mean indices according to TDB technique in the subgroup of teenagers with LHO disposed to deviations are higher than norm: tendencies to addictive, auto-destructive, aggressive, delinquent behaviour, and violation of socially accepted standards and rules. In the subgroup without inclination to deviations, all mean values of some types of deviations are in norm. Thus, the idea that all teenagers with LHO enter the risk group of deviations emergence is not confirmed.

These two subgroups were compared by means of Student's t-test on seven indices of TDB technique. Table 02 presents the results.

Table 02. [Statistical comparison of indices on Student's t-test in teenagers inclined and disinclined to deviant behaviour]

Indices	X1 N=46	X2 N=66	Value	Significance level
Installation on socially desired answers	63.50	54.18	7.214***	<0.001
Tendency to overcome norms and rules	54.94	43.88	8.262***	<0.001
Tendency to addictive (dependent) behaviour,	43.67	39.05	3.696***	<0.001
Tendency to self-damaging and self-destroying behaviour	43.26	39.91	2.935**	<0.01
Tendency to aggression and violence	47.98	40.94	5.252***	<0.001
Volitional control of emotional reactions	53.02	40.82	7.562***	<0.001
Tendency to delinquent behaviour	52.54	40.08	10.010***	<0.001

Table 02 demonstrates that those disposed to deviant behaviour significantly (p <0.001) surpass other teenagers with LHO according to all private indices of some deviations.

The sample of teenagers inclined to deviations was divided into 4 subgroups according to the type of disorder. When these 4 subgroups were compared by means of TDB technique, it was revealed:

- An index of socially desirable answers of teenagers in all four nosological groups is above threshold norms. It testifies to the tendency to respect even insignificant social norms; they can deliberately resort to lie to follow them. Mendacity is the most frequent consequence of excessive conformism, tendency to adapt to public norms.

- The group of hearing-impaired teenagers is highly disposed to violation of norms and rules, to addictive behaviour, to auto-destructive and aggressive behaviour. These results find confirmation in modern references.

▪ Three groups of teenagers with deficiency dysontogenesis (visual impairment with disorders of speech and locomotor system) manifested indices of tendency to delinquent behaviour in the range of 50-60 T-scores. It testifies to delinquent tendencies in respondents and a low level of social control. In the group of hearing-impaired teenagers, these indices are even higher, and are in the zone of high readiness for delinquent behaviour.

▪ All respondents revealed tendency to addictive behaviour at a high level; it can demonstrate orientation to a sensual aspect of life. Insufficient sensory experience can be compensated by hidden thrills upon committing acts promoting addiction.

6.2. Anticipation consistency in groups of respondents.

Table 03 presents the results of anticipation mean values comparison according to Student's t-test in teenagers with LHO inclined and indisposed to deviations.

Table 03. Mean values of anticipation consistency scales

Indices	X1 N=46	X2 N=66	Value	Significance level
Common Anticipation Consistency	245.37	256.17	-2.110*	<0.05
Personal - Situational	161.91	168.76	-2.485*	<0.05
Space	45.39	46.45	-0.56	
Time	38.04	39.88	-1.335	

The integral index of ability to anticipation - common anticipation consistency - in both groups of respondents with deficiency dysontogenesis is higher than norm limit (241 scores). At the same time, it is significantly lower ($p < 0.05$) in teenagers with LHO disposed to deviation than in indisposed ones. This distinction is defined by only one private type of anticipation consistency – personal-situational. Space and time anticipation consistency in two groups of teenagers with LHO significantly does not differ significantly.

The divided analysis in the sample of teenagers inclined to deviations in 4 subgroups with different types of impairments showed.

Developed common anticipation consistency is the specific feature of prediction in groups of teenagers with sensory disorders (hearing and visual impaired). It is formed due to a high personal and situational anticipation consistency at anticipation consistency of space and time. Unlike them, teenagers with speech disorders and disorders of locomotor system the common ability to anticipation and prediction is not formed; imperfection of prediction in social interaction and inability to act with space-timing prediction. The most expressed differences from groups with sensory disorders were registered on time and space components; it testifies to the decrease in abilities of teenagers with speech and locomotor system disorders to predict surrounding people's behaviour and their own actions, and time and space anticipation impairment. Thus, it is possible to assume that this kind of retardation is explained by improper development of verbal and cogitative abilities, motor uneasiness or even great disorders of the locomotor sphere.

7. Conclusion

Summing up the research results of anticipation ability in teenagers with LHO inclined and indisposed to deviant behaviour, it is possible to draw the following conclusions:

- Though the share of teenagers with limited opportunities and disposed to deviant behaviour is large (41%), more than a half of them (59%) do not show such inclination.
- The level of common anticipation ability in all teenagers with deficiency dysontogenesis is higher than norm; this can be identified as anticipation consistency.
- Teenagers with limited health opportunities disposed to deviations have authentically lower anticipation ability than those indisposed to deviant behaviour.
- Teenagers with limited health opportunities disposed to deviations significantly fall behind peers displaying no inclination to deviations according to the only index of anticipation consistency – personal-situational. Space and time anticipation consistency in two groups of teenagers with LHO does not differ noticeably.
- Thus, representations that all teenagers with LHO enter the risk group of deviations emergence is not confirmed.

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