

Features of Deviant Behavior Of Junior Schoolchildren With Developmental Disorders, Depending On The Prediction Level*

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Abstract. *Social problems of modern society, tension of social relations, significant number of social deviation among children and youth determines the need for early prediction and prevention of socialization disorders of the younger generation. A particular risk group includes children with disabilities, which socialization takes place under special conditions, so the task of predicting the threats of their social development seems urgent.*

The aim of the study was to detect the relationship between the features of deviant behavior and the ability to anticipate future events in the junior schoolchildren with speech, hearing, vision, musculoskeletal system disorders. The study involved 274 schoolchildren aged from 8 to 11 years old (148 schoolchildren without developmental disorders, 126 schoolchildren with developmental disorders). The diagnostic study of schoolchildren was conducted by the method of expert evaluations by Achenbach, the "Guess" method by Peresleni and the "Anticipating the situation outcome with the norm violation" method by Ulyanova V.P.

It was found that the ability to predict was determined by the level cognitive development of a child, presence/absence of somatic diseases, experience of social interaction. The anticipation of future events by junior schoolchildren with developmental disorders depends on the health and social experience. Prediction depends on the features of attention, ability to focus, as well as social experience and level of external problems in the schoolchildren without developmental disorders.

The materials of this article can be useful for the specialists of educational organizations in the work on preventing behavioral disorders; for the specialists of rehabilitation centers that are engaged in correcting the social and cognitive functions of children with developmental disorders.

Keywords: social norms, prediction, anticipation of future events, junior schoolchildren, children with developmental disorders.

Introduction

Deviant behavior of junior schoolchildren

In the process of school education, communication with peers and adults, personal development, the pupil, according to Lukasheva (Lukasheva E.A. (2009).), comprehends the culture of human experience, gets acquainted with generally accepted norms and rules, as well as develops consciousness and higher mental functions. The inability to understand regulatory requirements reduces the possibility of social adaptation, leads to maladaptation and formation of deviant behavior,¹ The child's assimilation of norms and social roles is considered as a

* Acknowledgements: The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

The research was carried out with the support of the Russian Foundation for Basic Research and the Government of the Republic of Tatarstan within the framework of the research project № 17-16-16004 "Prognostic competence of younger schoolchildren with disabilities in the prevention of deviations."

¹ T. V. Artemyeva, *Diagnosis and Correction of Development of a Junior Schoolchild, Monograph*, Kazan, Publishing House "Otechestvo", 2013.

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socialization process.² The social system in which the pupils' behavior is implemented acts as a socialization space of their personality).³ The issues of social identification are considered in the works of Platow.⁴ The analysis of specialized works⁵ shows interest in the problems of understanding the norm by children. The development of intra - and intergroup judgments of children aged 9.5 to 13.5 years old in the context of moral and socially accepted norms is studied by Killen and *et al.*(2013). The article of Burgess⁶ explores the impact of teaching junior children (7-12 years old) with social and emotional difficulties in solving problems. Implementation of the moral and social choice of children, depending on their will, has been studied by Chernyak & Kushnir.⁷ Nielsen⁸ have studied the ritual actions of junior children in the transfer of normative behavior. It has been revealed that children copy actions of others, despite obvious signals of perception in their cause-effect inefficiency. Lindsay⁹ have revealed the risks of destructive behavior of people with mental disabilities.

THE ABILITY TO PREDICT IN JUNIOR SCHOOLCHILDREN

The ability to predict is seen as a resource of successful socialization that is significant for a child with disabilities. Perception of the norm and its understanding allows successfully predicting the future, according to Parsons.¹⁰ The norms and rules allow a person planning, foreseeing, predicting, make it possible to adjust their behavior in the case of "uncertainty" of the situation. The contribution of Soviet/Russian science

² W. Iches, E. S. Knowles, *Personality, roles and social behavior*. N. Y.; Heidelberg, Berlin, Springer-Verlag, 1982, available at: <http://www.springer.com/gp/book/9781461394716>, accessed 12. 06. 2017; M. Killen, A. Rutland, D. Abrams, K. L. Mulvey, A. Hitti, "Development of intra - and intergroup judgments in the context of moral and social-conventional norms," in *Child Development*, LXXXIV (2013), p. 1063–1080.

³ M. A. Skvortsova, "The Problem of Pedagogical Methods in Creating a Situation of Success in the Educational Environment of a Junior Schoolchild," in *Integration of education*, XIX (2015), no. 4, p. 23-27.

⁴ M. J. Platow, D. M. Grace, N. Wilson, D. Burton, A. Wilson, "Psychological group memberships as outcomes of resource distributions," in *European Journal of Social Psychology*, XXXVIII(2008), no. 5, p. 836–851.

⁵ N. E. Veraksa, "Modern trends in early childhood education development in the natural cultural paradigm," in *European Early Childhood Education Research Journal*, IV (2014), p. 1–5.

⁶ J. Burgess, "The impact of teaching thinking skills as habits of mind to young children with challenging behaviours," in *Emotional and Behavioural Difficulties*, XVII (2012), no. 1, p 47-63.

⁷ N. Chernyak, & T. Kushnir, "The self as a moral agent: Preschoolers behave morally but believe in the freedom to do otherwise," in *Journal of Cognition and Development*, XV (2014), no. 3, p. 453–464.

⁸ M. Nielsen, R. Kapitany, R. Elkins, "The perpetuation of ritualistic actions as revealed by young children's transmission of normative behavior," in *Evolution and Human Behavior*, XXXVI (2015), no. 3, p. 191–198.

⁹ W. R. Lindsay, T. E. Hogue, J. L. Taylor L. Steptoe, P. Mooney, G. O'Brien, S. Johnston & A. H. W. Smith, "Risk assessment in offenders with intellectual disability," in *International Journal of Offender Therapy and Comparative Criminology*, LII (2008), p. 90-111.

¹⁰ T. Parsons, *About Social Systems*, edited by V. F. Chesnokova and S.A. Belanovsky., Moscow, Akademicheskoy Prospekt, 2002.

to the development of anticipation phenomenon was studied by ¹¹. According to Regush (2003),¹² the regulation of normative behavior cannot be carried out without constructing a model of the future, or in other words, an acceptor of action results, which makes it possible to compare the action results obtained by the subject with the social norms of a certain group. This regulation aspect is provided by the anticipation (forecasting) processes, acting as a perception component. The plan of constructing a holistic perception of objects determines the knowledge of environment and the identification of social risks to predict the events. The studies of Akhmetzyanova (2014, 2016) have revealed that due to anticipation (forecasting), the junior schoolchild is able to control learning activity, his mental processes acquire qualitative changes associated with the function of consciousness, the communication act is accompanied by predicting his own actions and the actions of other people. Sheeran¹³ identified such risk elements as risk assessment, perception, anticipatory and anticipated emotions associated with the change in people's intentions and behavior. Prediction with an incomplete set of factors was studied by Gusev¹⁴. The effects of early treatment on the cognitive symptoms of social anxiety are reflected in the study of Mills.¹⁵

Materials and methods

Research methods

To study the features of prediction of junior schoolchildren we used the "Guess" method by others; the "Anticipating the situation outcome with the norm violation" method by.¹⁶

To study the features of behavior deviating from the accepted social norm we used the method of expert evaluations by Achenbach.¹⁷ We identified the following behavior indicators: restraint; somatics; anxiety; socialization disorders; problems of thinking; problems of attention; delinquency; aggression; internal problems; external problems.

Participants

We examined a total amount of 274 schoolchildren aged from 8 to 11 years old. 148 schoolchildren were without developmental disorders. 126 schoolchildren were with developmental disorders, including 31 schoolchildren with hearing disorders, 29

¹¹ M. Nadin, "Anticipation: Learning from the Past The Russian/Soviet Contributions to the Science of Anticipation", *Springer International Publishing Series*, XXV (2015), p. 520.

¹² L. A. Regush, *Prediction Psychology: Successes in the Knowledge of the Future*, St. Petersburg, "Rech", 2003.

¹³ P. Sheeran, P. R.Harris, T. Epton, "Does heightening risk appraisals change people's intentions and behavior? A meta-analysis of experimental studies," in *Psychological Bulletin*, CXL (2014), p. 511-543.

¹⁴ A. Gusev, A. Okunev, "Forecasting with incomplete set of factors determining the predicted factor," in *International Journal of Applied Mathematics and Statistics*, LVI (2017), no. 5, p. 48-52.

¹⁵ A. C. Mills, D. M. M.Grant, M.R. Judah, W. V. Lechner, "Consequences of anticipatory processing on cognitive symptoms of social anxiety," in *Anxiety, Stress and Coping*, XXVII (2014), p. 394-409.

¹⁶ V. P. Ulyanova, "The Method of Diagnosing the Ability to Anticipate the Situation Outcome with Norm Violation," in *Psychology of Teaching*, XII (2013), p. 154-161.

¹⁷ T. Achenbach, The Method of Behavior Observation. http://www.miu.by/kaf_new/mpp/111.pdf, accessed 08. 08. 2017.

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schoolchildren with visual disorders, 41 schoolchildren with visual disorders, 25 schoolchildren with musculoskeletal disorders

Experimental research base

The research work was carried out in the educational organizations of the Republic of Tatarstan, Russia:

- secondary general schools No. 10, 51, 75, 132, 169 (for children without developmental disorders);
- "Lastochkina Kazan Boarding School for Children with Disabilities" (hearing disorders);
- "Kazan Boarding School No. 4 for Children with Disabilities" (musculoskeletal system disorders);
- "Kazan Boarding School No. 7 for Children with Disabilities" (severe speech disorders);
- "Kazan Boarding School No. 172 for Children with Disabilities" (visual disorders);

Results

Table 1. Ability of junior schoolchildren to anticipate future events

scales	School children without disorders (n=148)		School children with disorders (n=126)		t(274)	
	M	SD	M	SD		
Victim allocation	14.37	2.04	3.20	3.22	3.58	<.01
<i>Offender allocation</i>	14.54	1.91	2.87	3.70	2.86	<.01
<i>Holistic reflection of the external signs of the situation</i>	13.82	2.40	2.98	3.34	3.20	<.01
<i>Norm allocation</i>	13.60	2.30	2.69	3.98	2.35	<.01
Norm acceptance	25.62	5.29	3.94	9.54	.06	.915
Holistic reflection of the internal signs of the situation	24.23	6.33	3.57	9.28	.48	.949
Holistic reflection of both external and internal signs of the	24.24	6.50	2.50	9.41	.07	.966

situation							
<i>Exact and complete description of the situation outcome</i>	19.00	6.68		10.24	2.83	<.01	
			6.07				
Coincidence of an accurate description of the situation with a holistic reflection of external and internal signs of the situation	19.54	6.96		10.67	.30	1.074	
			8.43				
<i>Total score</i>	168.81	29.0		53.99	2.17	<.01	
		7	57.67				

Table 2. Correlation of indicators of deviant behavior and the ability to predict in junior schoolchildren with developmental disorders

Scales	2	3	4	5	7	8	9	10	11	12	13
1	.23**										
2		-									
		.39*									
		*									
3											
			.34†								
				.32**	.25**						
							.21*				

Table 3. Correlation of indicators of deviant behavior and the ability to predict in junior schoolchildren without developmental disorders

Scales	2	3	4	5	6	7	8	9	10	11	12	13
										.25.		
										**		
3												
							.26					
							**		.18*			

Note:

1. Overall normativity index
2. Overall anticipation index
3. Prediction errors
4. Restraint
5. Somatic problems
6. Anxiety
7. Socialization disorders.
8. Problems of thinking
9. Problems with attention.

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10. Delinquent behavior
11. Aggression
12. Internal problems
13. External problems.

Discussion

We revealed differences ($p < .01$) with the help of the Student's criterion between schoolchildren with and without developmental disorders according to the "Anticipating the situation outcome with the norm violation" method. The schoolchildren without developmental disorders better allocate the victim and the offender of the norm; analyze the external signs of the situation; allocate a norm, can more accurately and more fully describe the situation outcome. The results of this study are consistent with the studies of Artemyeva,¹⁸ which has found that schoolchildren with developmental disorders cannot adequately represent the results of their own actions or the actions of others, they are poorly oriented in the generally accepted rules and norms of behavior. Life situations are often evaluated biased, a number of elements of the situation are ignored or distorted. As in the studies of Bayanova,¹⁹ we have revealed that the pupil's mastering of norms and rules of school space is determined by the degree to which the pupil has a reflexive ability that determines the possibilities of analyzing the current situation and internalizing the school norms.

The correlation analysis was carried out using the statistical data processing program SPSS 17 and allowed identifying the relationship between the indicators of deviant behavior and the ability to predict in schoolchildren with developmental disorders. The overall normativity index was related to the anticipation index ($r = .23, p < .01$). The ability to anticipate showed feedbacks with prediction errors ($r = -.39, p < .01$); somatic problems ($r = -.21, p < .05$); socialization disorders ($r = -.20, p < .05$). The prediction errors in schoolchildren with developmental disorders are associated with somatic problems ($r = .34, p < .01$); socialization disorders ($r = .32, p < .01$); problems of thinking ($r = .25, p < .01$).

No correlation was found between the normative and anticipatory indicators in schoolchildren without developmental disorders. The prediction errors are associated with the following indicators of deviant behavior: with attention problems ($r = .26, p < .01$); aggression ($r = .25, p < .01$); external problems ($r = .25, p < .01$); delinquency ($r = .18, p < .05$).

The results obtained are consistent with the study of O. A. Denisova (2016), which emphasizes that children with disabilities experience difficulties in predicting the consequences of their actions and the behavior of others; try to avoid pressure of

¹⁸ T. V. Artemyeva, "Normative Behavior of Adolescents with Intellectual Disabilities: a Qualitative Study," in *International Journal of Environmental & Science Education*, XI (2016), no. 7, p. 1551-1558.

¹⁹ L. F. Bayanova, T. Mustafin, "Factors of compliance of a child with rules in a Russian cultural context," in *European Early Childhood Education Research Journal*, 24(2016), no. 3, p. 357-364; A. K. Pashchenko, *Development of Normative Behavior of Junior Schoolchildren: Structural and Dialectical Approach*, Saarbrücken, LAP LAMBERT Academic Publishing, 2012.

rules, norms, requirements. Junior schoolchildren do not understand enough and realize the necessity and expediency of observing social norms, social relations, which can lead to the formation of deviant behavior in schoolchildren.²⁰

Conclusion

Junior schoolchildren can anticipate the consequences of their behavior worse than their peers without developmental disorders, experience difficulties with the allocation of two external signs at once (the victim and the offender). Internal signs of the situation (rule and norm) are not important to them. The lack of norm verbalization is inherent in schoolchildren, and they do not analyze possible situation outcome. It is revealed that the ability to predict is determined by the intellectual abilities of junior schoolchildren.

The ability to predict is closely related (inverse relationship) to somatic problems and a violation of their socialization in junior schoolchildren with developmental disorders.

The ability to predict is most often determined by attention problems, aggression and external problems in junior schoolchildren without developmental disorders.

The schoolchildren with developmental disorders often follow the rules of behavior in an educational institution, but the ability to anticipate the behavior consequences by the schoolchildren with developmental disorders is difficult, in contrast to their peers without developmental disorders. The need to study the normative behavior of junior schoolchildren in different spheres of life, the prediction features determines the further development of children, their full inclusion in the life of society.

²⁰ O. A. Denisova, O. L. Lekhanova, N. V. Golitsyna, "Problematic Ways of Predicting Threats of the Social Development of Children with Disabilities," in *Bulletin of Cherepovets State University*, IV (2012), no. 3, p. 97 - 101.