

# Specific aspects of forecasting and perception of the norm by junior schoolchildren with developmental disorders

Akhmetzyanova A., Artemyeva T., Tvardovskaya A.  
*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

---

## Abstract

**Introduction:** junior schoolchildren with special needs should take into account the existing system of norms and rules in the school space. They should understand both their own inner world and that of surrounding people, but in conditions of deficiency dysontogenesis, the inability to forecast the outcome of any situation and the use of irrational behavioural strategies reduce the opportunities for successful social adaptation. The purpose of this study is to identify the specifics of forecasting and understanding normative situations by junior schoolchildren with musculoskeletal system disorder, as well as with vision, hearing and speech impairment. **Materials and Methods:** to study the forecasting specifics of junior schoolchildren, we used the guessing game methodology by L. I. Peresleni. We studied the specific character of normative behaviour using a set of methodologies: Perception of the normative situation by A. K. Pashchenko, Anticipation of the outcome with violation of the norm by V. P. Ulyanova, and Identification of the cultural congruity of junior schoolchildren by L. F. Bayanova. **Results:** the study made it possible to identify the forecasting characteristics of junior schoolchildren with normative development and with vision, hearing, speech impairments and musculoskeletal disorder. Students with developmental disabilities experienced forecasting difficulties, associated with decreasing sustainability of voluntary attention and its distribution in the course of the activity. The perception of norms by schoolchildren with developmental disorders often depended on random, brightly coloured emotional events or objects. The norms were differentiated more successfully in a situation of communication, than in educational activity. **Discussion and Conclusions:** the obtained data are consistent with the results of the studies by national and foreign scientists, who note that children with health limitations lack understanding of the need to comply with social norms. They follow irrational strategies for forecasting and assessing their own actions and the behaviour of people around them. However, these studies are fragmentary; not all types of deficiency development have been studied. The aspects of forecasting normative behaviour of schoolchildren with health limitations in the situations of social interaction revealed in the study can be useful in the development of diagnostic tools that make it possible to evaluate the prognostic ability of a child with developmental disorders and to assess the risks of socialisation disorders.

<http://dx.doi.org/10.15507/1991-9468.088.021.201703.489-504>

---

## Keywords

Forecasting, Hearing impairment, Junior schoolchildren, Musculoskeletal disorders, Norm perception, Normative development, Speech impairment, Vision impairment

## References

- [1] Killen M., Rutland A., Abrams D., Mulvey K. L., Hitti A. Development of intra- and intergroup judgments in the context of moral and social-conventional norms. *Child Development*. 2013;84:1063-1080. DOI: 10.1111/cdev.12011
- [2] Artemyeva T. V. Normative behavior of adolescents with intellectual disabilities: A qualitative study. *International Journal of Environmental & Science Education*. 2016;11(7):1551-1558. DOI: 10.12973/ijese.2016.358a
- [3] Skvortsova M. A. The problem of pedagogical methods in creating a situation of success in the educational environment of a junior schoolchild. *Integratsiya obrazovaniya = Integration of Education*. 2015;19(4):23-27. DOI: 10.15507/1991.9468.081.019.201504.023 (In Russ.)
- [4] Kharkovskaya E. V., Tutayeva G. N., Miroshnichenko E. V. The formation of a tolerant culture of junior school children by means of artistic and creative activity. *Integratsiya obrazovaniya = Integration of Education*. 2015;19(3):115-121. DOI: 10.15507/Inted.080.019.201503.115 (In Russ.)
- [5] Artemyeva T. V. Child concept of comic content analysis. *The Social Sciences*. 2015;10(5):610-614. DOI: 10.3923/sscience.2015.610.619
- [6] Baykova A. D., Akhmetzyanova A. I., Artemyeva T. V. The Relationship between tendency to deviant behaviour and level of subjective control and anticipational consistency in schoolchildren. *Journal of Organizational Culture, Communications and Conflict*. 2016;20(S3):7-12. Available at: <http://www.questia.com/library/journal/1P3-4274439341/the-relationship-between-tendency-to-deviant-behaviour> (accessed 20.02.2017).
- [7] Kleiberg Yu. A. Deviant behavior as a reaction to personal ambiguity. *Psikhologiya. Istoriko-kriticheskie obzory i sovremennye issledovaniya = Psychology. Historical and Critical Reviews and Modern Research*. 2015;3:52-61. Available at: <http://publishing-vak.ru/file/archive-psychology-2015-3/2-kleiberg.pdf> (accessed 20.02.2017). (In Russ.)
- [8] Kleiberg Yu. A. Deviantogenic mentality of the developing personality. *Psikhologiya obucheniya = Psychology of Learning*. 2016;3:41-46. Available at: <http://ost101.narod.ru/2016-PsyhObuch-3.pdf> (accessed 20.02.2017). (In Russ.)
- [9] Bayanova L. F., Tsvil'skaya E. A. Characteristics of the rules in the normative situation of junior schoolchildren. *Obrazovaniye i samorazvitiye = Education and self-development*. 2014;3(4):73-78. Available at: <http://kpfu.ru/staff-files/F33449452/Statya-Bayanova-.Civilskaya.VAK.pdf> (accessed 20.02.2017). (In Russ.)
- [10] Bayanova L. F., Mustafin T. Factors of compliance of a child with rules in a Russian cultural context. *European Early Childhood Education Research Journal*. 2016;24(3):357-364. DOI: 10.1080/1350293X.2016.1164394
- [11] Bayanova L. F., Tsvil'skaya E. A., Bayramyan R. M., Chulyukin K. S. A cultural congruence test for primary school students. *Psychology in Russia: State of the Art*. 2016;9(4):94-105. DOI: 10.11621/pir.2016.0408
- [12] Veraksa N. E. Modern trends in early childhood education development in the natural cultural paradigm. *European Early Childhood Education Research Journal*. 2014;4:1-5. DOI: 10.1080/1350293X.2014.969081
- [13] Mills A. C., Grant D. M. M., Judah M. R., Lechner W. V. Consequences of anticipatory processing on cognitive symptoms of social anxiety. *Anxiety, Stress and Coping*. 2014;27:394-409. DOI: 10.1080/10615806.2013.866229
- [14] Nielsen M., Kapitany R., Elkins R. The perpetuation of ritualistic actions as revealed by young children's transmission of normative behavior. *Evolution and Human Behavior*. 2015;36(3):191-198. DOI: 10.1016/j.evolhumbehav.2014.11.002
- [15] Sheeran P., Harris P.R., Epton T. Does heightening risk appraisals change people's intentions and behavior? A meta-analysis of experimental studies. *Psychological Bulletin*. 2014;140:511-543. DOI: 10.1037/a0033065
- [16] Andronov V. P., Ionova M. S. The importance of prognostic abilities for professional self-determination of senior pupils. *Integratsiya obrazovaniya = Integration of Education*. 2015;19(1):118-123. DOI: 10.15507/Inted.078.019.201501.118 (In Russ.)
- [17] Regush L.A. Possibilities to prevent crises in the educational environment. *Sotsialnye i gumanitarnye nauki na Dalnem Vostoke = Social and Human Sciences in the Far East*. 2015;3(47):11-14. Available at: <http://www.eastjournal.ru/journalm.htm> (accessed 20.02.2017). (In Russ.)
- [18] Lindsay W. R., Hogue T.E., Taylor J. L., Steptoe L. Mooney P, O'Brien G., Johnston S., Smith A. H.W. Risk assessment in offenders with intellectual disability. *International Journal of Offender Therapy and Comparative Criminology*. 2008. 52:90-111. DOI: 10.1177/0306624X07308111
- [19] Akhmetzyanova A. I. Anticipation and prediction interrelation neuropsychological mechanisms at youthful age. *The Social Sciences*. 2015;10(4):399-401. Available at: <http://docsdrive.com/pdfs/medwelljournals/sscience/2015/399-401.pdf> (accessed 20.02.2017).
- [20] Akhmetzyanova A. I. Spatial and temporal elements of anticipation consistency of children with general speech retardation. *American Journal of Applied Sciences*. 2014;11:1031-1035. DOI: 10.3844/ajassp.2014.1031.1035

- [21] Akhmetzyanova A. I. Anticipatory competence and ability to probabilistic forecasting in adolescents: research results. *International Journal of Environmental and Science Education*. 2016;11(8):1923-1932. DOI: 10.12973/ijese.2016.566a
- [22] Akhmetzyanova A. I. The theoretical analysis of views on anticipatory function of mental reflection development. *International Journal of Environmental and Science Education*. 2016;11(7):1559-1570. DOI: 10.12973/ijese.2016.359a
- [23] Mendeleevich V. D., Bakhtiyarov F. I. Anticipation by a person of their own emotional experiences in norm and in mental pathology. *Nevrologicheskiy vestnik = Neurological Bulletin*. 2014;46(2):31-38. Available at: <http://psychiatr.ru/news/278> (accessed 20.02.2017). (In Russ.)
- [24] Minullina A. F. Research of anticipation consistency in the families of drug addicts. *Middle-East Journal of Scientific Research*. 2014;19:1099-1103. DOI: 10.5829/idosi.mejsr.2014.19.8.21042
- [25] Pashchenko A. K. The development of normativity in childhood and physical development. *Philology and Culture*. 2015; 3: 338-345. Available at: <http://cyberleninka.ru/article/n/razvitie-normativnosti-vdetskom-vozraste-i-fizicheskoe-razvitie> (accessed 20.02.2017). (In Russ.)
- [26] Ulyanova V. P. The methodology of diagnosing the ability to anticipate the outcome of a situation with a violation of the norm. *Psikhologiya obucheniya = Psychology of Learning*. 2013;12:154-161. Available at: <http://www.edit.muh.ru/content/mag/jour3.php?link=po122013> (accessed 20.02.2017). (In Russ.)
- [27] Denisova O. A., Lehanova OL. Threats to the social development of children with health limitations in preschool, junior school and adolescence. *Vestnik Cherepovetskogo gosudarstvennogo universiteta = Cherepovets State University Bulletin*. 2012;1(1):98-102. Available at: <http://elibrary.ru/item.asp?id=17911010> (accessed 20.02.2017). (In Russ.)
- [28] Tvardovskaya A.A. Comparative study of mental activity of primary school students with different clinical forms of cerebral palsy. *The Social Sciences*. 2015;10:615-619. DOI: 10.3923/sscience.2015.615.619
- [29] Korn C. W., Sharot T., Walter H, Heekere H. R., Dolan R. J. Depression is related to an absence of optimistically biased belief updating about future life events. *Psychological Medicine*. 2014;44:579-592. DOI: 10.1017/S0033291713001074
- [30] Chernya N., Kushnir T. The self as a moral agent: Preschoolers behave morally but believe in the freedom to do otherwise. *Journal of Cognition and Development*. 2014;15(3) 453-464. DOI: 10.1080/15248372.2013.777843
- [31] Plato M. J., Grace D. M., Wilson N., Burton D., Wilson A. Psychological group memberships as outcomes of resource distributions. *European Journal of Social Psychology*. 2008;38(5):836-851. DOI: 10.1002/ejsp.489