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Socialization and Predictive Capability at a Preschool Age: Correlation Points

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Abstract

The article presents an overview of studies concerning the issue of socialization of preschoolers with developmental disorders and analyzes the role of predictive capability in this process. The search for the sources was conducted using E-library, Scopus, Web of Science, Google Scholar electronic databases (from 2000 to the present moment) until January 31, 2019. The selected studies allowed to outline the areas of relationships that are most significant for socialization of preschoolers, as well as to determine the main approaches to the study of the emotional and cognitive components of a preschooler's predictive competence. The study showed the necessity of developing integrative ideas about forecasting which would be relevant to the socialization space of a preschooler.

Keywords: socialization, social competence, predictive capability, emotional anticipation, preschool age, children with developmental disorders.

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Introduction

Active assimilation of social norms, rules of behavior and principles of social interaction is one of the important stages of a preschool age, which contributes to further successful socialization. Numerous psychological and pedagogical studies show that children with impaired development become the risk group in terms of socialization disorders. Typical difficulties of socialization include violations in parent-child relationships; difficulties in building relationships with other significant adults and peers; lack of understanding and adherence to social rules and norms, etc. The available experimental data show that the symbiotic affection of children with disabilities for their mothers, siblings, their unwillingness to communicate with people who are not related to them in combination with reduced cognitive activity and the specifics of mental activity impede socialization and proper development of personalities of these children. The integral nature of forecasting, including cognitive and emotional-personal components, allows us to consider it as an indicator of the level of orientation in social reality. Intensive development of prognostic capability in the preschool age makes it an important resource for the positive socialization of children. This is especially important for children with

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disabilities; their lack of predictive capability is associated with the difficulties in organizing their activities, problems with self-identification and low variability of adequate behaviors in significant life situations, as well as with the inability to assess the consequences of their actions and the behavior of other people. However, there is no systemic literature review about psychological aspects of forecasting that would cover the whole range of significant relationships of a preschooler.

The purpose and objectives of this study

This research is a comparative analysis of the phenomenon of socialization at a preschool age and the role of forecasting in this process.

Methodology

The study involved a systematic review of research on the issue of socialization and predictive capability of children aged 4–6 years with normal development and developmental disorders. The search for the sources was conducted using E-library, Scopus, Web of Science, Google Scholar electronic databases starting from 2000 to January 31, 2019 inclusive. We decided to use broad search terms to cover a representative range of literature sources. The following search terms were used: "socialization", "social competence", "positive socialization", "socialization space"; "Prediction", "anticipation", "emotional anticipation capability"; "Preschooler"; "Developmental disorders". In addition, we have conducted extensive searches for the lists of scientific publications, reviews, and research websites.

Findings

In the conducted studies, the issue of socialization represented as a subject of complex analysis and is being studied using various methodological approaches to understanding the mechanism of transforming the social into the mental (cultural, institutional, interactional, interiorizational, intraindividual, and behavioral). With regard to the preschool age, the following aspects of socialization were revealed: the assimilation of rules by a preschooler; the formation of the child's personality in the social space and the role of other people; interaction of child with culture; the role of an adult in the transmission of cultural norms; the development of cultural congruence in a preschooler (Bayanova, 2017; Veraksa, 1980; Pashchenko, 2010); knowledge of the rules and understanding of their moral meaning and moral value; self-regulation of actions with a focus on moral rules and emotional states of peers in 5-6 years old children; development of social and emotional intelligence (Kiyanchenko, 1999; Pronina, 2010; L.F. Fatikhova, 2017; Schetinina, 2014).

Social competence develops continuously and depends on a number of key factors including social opportunities, contexts in which social interactions take place, as well as characteristics of peers, family members and culture (Brown & Conroy, 2011; Guralnick, 2010; Odom et al., 2005).

Socialization in the family space and in the domestic education environment acts as one of the key areas of research based on the systems method (Avdulova, 2013; Veraksa, 1980; Mudrik, 2004; Tolmachyova, 2016; Feldstein, 2016). Numerous foreign studies (Hill, Degnan, Calkins & Keane, 2006; Pearl, French, Dumas, Moreland & Prinz, 2014; Spinrad et al., 2007) stress out the correlation between the emotional-oriented reactions of parents (in particular, mothers) and the development of children's social competence. (Lagattuta & Hansen, 2014; Redshaw & Suddendorf, 2013; Suddendorf & Redshaw, 2013).) Inability to regulate emotions is one of the most significant factors affecting children's behavior and the appearance of aggressiveness, anxiety (Hill et al., 2006; Lagattuta & Hansen, 2014). In their study, Newland and Crnic (2011) revealed an issue of the correlation between negative affective behavior of mother and negative emotional expression of preschool children with or without early developmental risk, as well as predictions of subsequent behavioral problems. In terms of parent-child relationship, the expressions of different emotions of children present unique goals that can affect differently the processes of socialization, which, in turn, affect the competences of children. Teaching the right expression of emotions is an important factor of development associated with subsequent emotional and social competence, as well as with the issues of mastering social norms and rules of behavior (Odom et al., 2005).

The influence of parents' reactions on the expression of emotions by their children is a significant mechanism of socialization that shows children how appropriate their negative emotional manifestations are. Children learn to understand their emotions and emotions of people around them and also, learn to regulate negative feelings and express

themselves according to their age. According to Kalyuzhin and Sirotkina (2014), the development mechanism of preschoolers' emotional anticipation has a number of objective prerequisites. First, preschoolers are included in a variety of complex activities, where the organization of the activity involves keeping the mental image of the desired result. Secondly, preschoolers actively develop figurative thinking. Thirdly, the entire life of a preschooler goes side by side with adults and under their control, it involves certain authorizing impacts from adults, prompting the child to anticipate them in order to avoid negative consequences or to obtain positive results (Kalyuzhin & Sirotkina, 2014).

Thus, one of the significant spheres of socialization is emphasized which is parent-child dyadic relations. In this context the ability to predict acts as an emerging function to successful emotional relationships.

Another important aspect has to do with the studies on socialization in the context of leading activity – the game, which helps the child to gradually incorporate into the common living space, interiorize knowledge about the world and ways of learning, and assimilate the norms of communication and values. (Zaporozhets, 1974; Novoselova, 2003; Rzayeva, 1996; Smirnova & Kholmogorova 2003; Elkonin, 1989; Elkoninova, 1987). In relation to the socialization of children with different types of dysonogenesis, the researchers point out the specific features of the assimilation and reproduction of social connections and relationships. For example, it is very difficult for visually impaired children to establish good interaction with sighted peers, since there are certain limitations in their behavior caused by difficulties in obtaining information through vision. Studies have shown that during gaming activities children with visual impairments demonstrate the kind of behavior which has primarily individually-search nature. In other words, they don't seek to engage in team games (Guralnick, 2010).

The studies emphasize the value of friendly relations between children of preschool age; they act as the basis for the formation of attitudes and ideas about the rules of relationships and for finding adequate ways of expressing attitudes towards peers, which, under certain conditions of upbringing, develop into actual acting motives and encourage children to show socially valuable behavior towards others. During the process of socialization peers transfer formal and informal social, emotional and cultural rules and regulations that differ from those of parents (Zaporozhets & Neverovich, 1974; Smirnova & Kholmogorova 2003; Corsaro, 1993; Denham, 2007; Mirabile, Oertwig, & Halberstadt, 2018).

These relations act as the second sphere of socialization, where the ability to anticipate events is necessary for stable and long-term (strategies) social relations.

For children of a preschool age, the teacher in a kindergarten is a key figure in stimulating the development of social competence in a child with special needs. Mikas & Roudi (2012) emphasize that the assistance of teachers in socialization of a child is primarily associated with the development of social competence.

Scientists consider the development of the ability to anticipate as one of the key areas of the socialization process. As Suddendorf & Moore (2011, p. 296) suppose, "The ability to predict that a certain event will lead to a future state — emotional, mental, physiological, and others — is one of the most adaptive aspects of human cognition".

At a preschool age, children gradually learn to imagine future events and mentally model future situations (Atance & Jackson, 2009; McCormack & Atance, 2011; Redshaw & Suddendorf, 2013; Suddendorf & Moore, 2011). Self-awareness and understanding of one's own mental states and states of other people, which are being formed at this age, also contribute to the development of future thinking (Payne, Taylor, Hayne, & Scarf, 2015); Suddendorf & Redshaw, 2013) It is important to take into account the specifics of forecasting as a special form of future thinking, which is different from planning and self-control (Suddendorf & Moore, 2011).

The traditional theory of mind basically studied how children used such mental phenomena such as beliefs and desires to explain and predict other people's behavior; Relevant mind theory research have turned to the ability of children to imagine future "Me" (Suddendorf & Moore, 2011). Researchers study how preschoolers predict individual, private aspects of their future: their physiological needs (Mahy, 2016; Suddendorf & Moore, 2011; Wilson & Gilbert, 2005); intensity of one's own emotions in anticipated future situations (Gautam, Bulley, Hippel, & Suddendorf, 2017).

Within the theory of mind, researchers study such mechanisms of the development of prognostic skills in preschoolers as the emergence and development of causal explanatory knowledge about the links between various types of mental states – memories of past experience and expectations (Morewedge, Gilbert & Wilson, 2005). It has been shown that preschoolers begin to extrapolate negative experiences associated with similar situations in the past to future situations earlier than it happens with positive emotions; in case of emotional heterogeneity of the experience, recent negative events of the past more often determine negative expectations than recent positive events determine positive expectations. There are also individual differences in how preschoolers associate forecasts about the experiences and

behavior of people with information taken from past experience. (Lagattuta, 2014) Thus, establishing links between past, present, and future — sometimes called as mental time travel — is considered a prerequisite for adaptive social functioning (Suddendorf & Corballis, 2007).

The features of forecasting skills in children with various developmental disabilities are much less studied; the conclusions of various authors often contradict each other. For example, Lind & Bowler (2010) and Terrett et al (2013) note that children and adults with an autism spectrum disorders have a lack of cognitive aspects of thinking about the future. In contrast, Angus, Rosnay, Lunenburg, Terwogt, & Begeer (2014) did not reveal significant differences in the characteristics of the expected behavior of another person between intellectually intact children with ASD and children with normal development. Children with autism spectrum disorders were inferior only in their ability to predict their own response to the questions from adults.

The main aspects of psychological study of the predictive capability in children develop within the framework of the cognitive approach; needs and emotional components are studied in terms of internal forecasting mechanisms. The basic frame of such research is forecasting as a thought process ("future thinking"); the main method is an experiment, and the subject of study is associated with more private mechanisms for generating a forecast and its development in ontogenesis. Integral characteristics of forecasting associated with the success of socialization in the preschool years have not been identified; there are no relevant diagnostic tools for that.

At the same time, when it comes to older age periods, we can clearly see the interrelation of forecasting deficiencies with socialization problems. The study of prognostic competence (anticipation consistency) in the personality structure of deviant adolescents and neurosisogenesis mechanisms in normal and impaired development showed that forecasting deficiencies are directly related to various forms of psychosocial maladjustment, deviant behavior, and act as one of the mechanisms of neurosisogenesis (Mendelevich, 2005; Akhmetzyanova, 2016).

For primary school age, we have proposed a productive approach to the study of forecasting in social situations. This approach considers the predictive capability as a resource of socialization, or an indicator of the risk of socialization errors. A number of integral forecasting characteristics significant for assessing socialization have been revealed: reflection of prosocial or asocial attitudes in the images of future events; pessimistic or optimistic expectations of a child. It is shown that the forecast reflects child's readiness for mature or infantile behavioral strategies in a social situation. It reveals whether the child is directly connected with one's own activity or whether he is passive and expects the activity of other participants in social interaction. A number of cognitive and speech communicative features important for socialization are evaluated as well. The diagnostic method reflects the most significant relationships for the socialization of the younger schoolchild – the relationships in the family, in school, with peers, with "strangers", in virtual communication, and also in attitude to one's own health (Akhmetzyanova, Artemyeva, Kurbanov, Nigmatullina, & Tvardovskaya, 2018; Kurbanova & Tvardovskaya, 2018).

Conclusion

Despite close attention to the issue, the analysis of current literature reveals the absence of the generalized ideas about predictive capability of preschoolers, about its structural and functional characteristics in children with normal and impaired mental development, about mechanisms of correlation between the forecasting quality of a child and socialization success. In our review, we distinguish the differences in the positions of Russian and foreign scientists on the terminological field, methodological approaches to explaining and understanding the phenomenon of socialization and the role of forecasting in this process. On the other hand, there are three key areas of socialization of preschoolers, including those with developmental disabilities - family, gaming relationships with peers, relationships with other adults, and to a greater extent with the teacher of a preschool organization. In our understanding, this can be a single space of socialization in normogenesis and dysontogenesis which has the following objective: to study the degree of correlation in each of the areas of the capability to predict future situations.

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References

Akhmetzyanova, A. I., Artemyeva, T. V., Kurbanov, A. T., Nigmatullina, I. A., & Tvardovskaya, A. A. (2018).

- Prognostic competence of a younger schoolchild with deficit development. Kazan: Kazan publishing house.
- Akhmetzyanova, A. I. (2016). The theoretical analysis of views on anticipatory function of mental reflection development. *International Journal of Environmental and Science Education*, 11(7), 1559-1570. DOI: 10.12973/ijese.2016.359a
- Angus, D. J., Rosnay, M., Lunenburg, P., Terwogt, M. M. & Sander, B. (2014). Limitations in social anticipation are independent of imaginative and Theory of Mind abilities in children with Autism but not in Typically Developing children. *Autism*, 19(5), 604-612. DOI: 10.1177/1362361314537911
- Atance, C. M., & Jackson, L. K. (2009). The Development and Coherence of Future-Oriented Behaviors During the Preschool Years. *Journal of Experimental Child Psychology*, 2(4), 379-391. DOI: 10.1016/j.jecp.2009.01.001
- Avdulova, T. P. (2013). Child socialization in a family space. Psychological Studies, 6 (31), 9.
- Bayanova, L. F. (2017). Psychology of a preschooler in a normative situation. Kazan: Kazan publishing house.
- Brown, W. H., & Conroy, M. A. (2011). Social-Emotional Competence in Young Children With Developmental Delays:

 Our Reflection and Vision for the Future. *Journal of Early Intervention*, 33(4), 310–320. https://doi.org/10.1177/1053815111429969
- Corsaro, W.A. (1993). Interpretive reproduction in the «Scuola Materna». *European Journal of Psychology of Education*, 8, 357–374. DOI:10.1007/BF03172694
- Denham, S. A. (2007). Dealing with feelings: How children negotiate the worlds of emotions and social relationships. *Cognition, Brain, Behavior, 11*(1), 1–48.
- Elkonin, D. B. (1989). The development of the personality of a preschooler. Moscow, Russia.
- Elkoninova, L. I. (1985, June 31). Features of the prediction of changes in objects and phenomena in preschoolers. *Questions of Psychology*. Retrieved April 16, 2019, from http://www.voppsy.ru/issues/1987/872/872033.htm
- Fatikhova, L. F. (2017). Social and emotional intelligence of children with intellectual disabilities: approaches to the study and correction: Monograph. Ufa: Bashkir State University publishing house.
- Feldstein, D. I. (2006). *Socialization and individualization the content of the social growth process* (3rd ed.). Moscow: Publishing House of the Moscow Psychological and Social Institute.
- Gautam, S., Bulley, A., von Hippel, W., Suddendorf, T. (2017). Affective forecasting bias in preschool children. *Journal of Experimental Child Psychology*, *159*, 175-184. DOI: 10.1016/j.jecp.2017.02.005.
- Grum, D. K., Kakizawa, T., Celeste M. (2014). Assessment of play behaviours and social interactions of two blind girls: Case studies in Japan. *Anthropological notebooks*, 20(2), 61-76.
- Guralnick, M. J. (2010). Early intervention approaches to enhance the peer-related social competence of young children with developmental delays: A historical perspective. *Infants & Young Children*, 23, 73-83.
- Hill, A. L., Degnan, K. A., Calkins, S. D., & Keane, S. P. (2006). Profiles of externalizing behavior problems for boys and girls across preschool: The roles of emotion regulation and inattention. *Developmental Psychology*, 42(5), 913–928. https://doi.org/10.1037/0012-1649.42.5.913
- Kalyuzhin, P.V., Sirotkina, T.Y. (2014, April). *Psychological and pedagogical features of the development of the mechanism of emotional anticipation of the result in preschool children.* Paper presented at the III International Scientific and Practical Conference: Methodology, theory and practice in modern pedagogy, psychology, philosophy, Novosibirsk, Russia.
- Kiyanchenko, E. A. (1999). Raising awareness of the rules of behavior in 5-6 year. (Doctoral dissertation, Moscow State Pedagogical University, Russia). Retrieved from http://www.dslib.net/doshkoln-obrazovanie/vospitanie-osoznannogo-otnoshenija-k-pravilam-povedenija-u-detej-5-6-let.html
- Kurbanova, A.T., Tvardovskaya, A.A. (2018). Specificity of deficiency of prognostic competence in younger schoolchildren with disabilities and the risks of socialization violations. In D.V. Zhuina (Eds.), *Proceedings of the scientific-practical conference "Integration of science and education in the XXI century: psychology, pedagogy, defectology"* (pp. 462-470). Saransk, Russia: Mordovia state pedagogical institute.
- Lagattuta, K. H., & Kristin, H. (2014). Linking Past, Present, and Future: Children's Ability to Connect Mental States and Emotions Across Time. *Child Development Perspectives*, 8(2), 90-95.
- Lind, S. E. & Bowler, D. M. (2010). Episodic memory and episodic future thinking in adults with autism. *Journal of Abnormal Psychology*, 119, 896-905.
- Mahy, C.E. (2016) Young children have difficulty predicting future preferences in the presence of a conflicting

- physiological state. Infant and Child Development, 25, 325-338.
- McCormack, T., & Atance, C. M. (2011). Planning in young children: A review and synthesis. *Developmental Review*, 31(1), 1-31. DOI: 10.1016/j.dr.2011.02.002
- Mendelevich, V. D. (2005). Psychology of deviant behavior. Training manual. SPb.: Ryech. 2005.
- Mikas, D, Roudi, B. (2012) Socialization of children with disabilities in preschool institutions. *Paediatria croatica*, 56(1), 207-214. DOI: 10.3389/fpsyg.2013.00404
- Mirabile, S. P., Oertwig, D., Halberstadt, A. G. (2018). Parent emotion socialization and children's socioemotional adjustment: when is supportiveness no longer supportive? *Social Development*, 27, 466–481. https://doi.org/10.1111/sode.12226
- Morewedge, C. K., Gilbert, D. T., & Wilson, T. D. (2005). The least likely of times: How remembering the past biases forecasts of the future. *Psychological Science*, *16*, 626–630. DOI:10.1111/j. 1467-9280.2005.01585.x
- Mudrik, A. V. (2004). *Human socialization*. Moscow: Academy Publishing House.
- Newland, R. P., & Crnic, K. A. (2011). Mother–child affect and emotion socialization processes across the late preschool period: predictions of emerging behaviour problems. *Infant Child Development*, 20, 371-388. DOI:10.1002/icd.729
- Novoselova, S. L. (2003). The game: definition, origin, history, modernity. Kindergarten from A to Z, 6, 4-13.
- Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. H., Thompson, B., & Harris, K. R. (2005). Research in special education: Scientific methods and evidence-based practices. *Exceptional Children*, 71, 137-148.
- Payne, T., Taylor, R., Hayne, H. & Scarf, D. (2015). Mental time travel for self and other in three- and four-year-old children. *Memory*, 23(5), 675-682. DOI: 10.1080/09658211.2014.921310
- Pashchenko, A. K. (2010). Features of the organization of students' regulatory space. *Psychological Science and Education*, 1, 48-54.
- Pearl, A. M., French, B. F., Dumas, J. E., Moreland, A. D., & Prinz, R. (2014). Bidirectional effects of parenting quality and child externalizing behavior in predominantly single parent, under resourced African American families. *Journal of Child and Family Studies*, 23(2), 177–188. https://doi.org/10.1007/s10826-012-9692-z
- Pronina, A.N. (2010). The phenomenon of experience as a mechanism of interrelation of socialization-individualization processes in a person. *Bulletin of the Nizhny Novgorod University named after N.I. Lobachevsky. Series: Social Sciences*, 4, 176-182.
- Redshaw, J., & Suddendorf, T. (2013). Foresight beyond the very next event: Four-year-olds can link past and deferred future episodes. *Frontiers in Psychology 4*, 404.
- Rzayeva, G. N. (1996). Formation of humanity in the primary school age. Ulan-Ude: BSU Publishing House.
- Schetinina, A. M. (2004). *Socialization and individualization in childhood: Textbook*. Veliky Novgorod: NovSU named after Yaroslav the Wise.
- Smirnova, E. O., Kholmogorova, V. M. (2003). *Interpersonal relations of preschoolers: diagnostics, problems, correction.* Moscow: VLADOS.
- Spinrad, T. L., Eisenberg, N., Gaertner, B., Popp, T., Smith, C. L., Kupfer, A., & Hofer, C. (2007). Relations of maternal socialization and toddlers' effortful control to children's adjustment and social competence. *Developmental Psychology*, 43, 1170–1186. https://doi.org/110.1037/0012-1649.43.5.1170
- Suddendorf, T., & Redshaw, J. (2013). The development of mental scenario building and episodic foresight. *Annals of the New York Academy of Sciences*, 1296, 135-153. DOI: 10.1111/nyas.12189
- Suddendorf, T., & Corballis, M. C. (2007). Mental time travel across the disciplines: The future looks bright. *Behavioral and Brain Sciences*, *30*, 335–351. DOI: 10.1017/S0140525X0700221X
- Suddendorf, T., & Moore, C. (2011). Introduction to the special issue: The development of episodic foresight. *Cognitive Psychology* 26, 295-298 DOI: 10.1016/j.cogdev.2011.09.001
- Terrett, G., Rendell, P., Raponi-Saunders, S., Henry, J., Bailey, P., & Altgassen, M. (2013). Episodic future thinking in children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 43(11), 2558-2568.
- Tolmachyova, A. A. (2006). Socialization of preschoolers in home education environment. (Doctoral dissertation, Chelyabinsk State Institute of Culture and Arts, Russia). Retrieved from http://www.dslib.net/doshkoln-obrazovanie/socializacija-detej-doshkolnogo-vozrasta-v-uslovijah-domashnego-vospitanija.html
- Veraksa, N. E. (1980). On two ways of anticipating changes in situation in children. In I.L. Baskakova (Eds.), Issues of

- psychology of cognitive activity: Collection of scientific works (pp. 93-2014). Moscow: MGPI.
- Wilson, T. D., & Gilbert, D. T. (2005). Affective forecasting: Knowing what to want. *Current Directions in psychological Sciens*, 14, 131-134.
- Zaporozhets, A. V., Neverovich, Y. Z. (1974). On the issue of genesis, function and structure of emotional processes in a child. *Questions of psychology*, *6*, 59-73.