

## Parental Beliefs as a Factor in the Cognitive and Socio-Emotional Development of the Child<sup>▯</sup>

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### ABSTRACT

**Background.** Modern psychology of parenting offers various phenomena for study, including parental relations, parental attitudes, and parenting practices. The study of parental attitudes enables us to describe the cognitive aspect of the family environment in which the child develops. Previous studies have found an important association between some parental attitudes and the cognitive and socio-emotional development of children; however, their results are ambiguous and require further clarification.

**Objective.** To analyze the connection between parental attitudes regarding structuring the environment or spontaneity and playful activity, and indicators of the child's cognitive and socio-emotional development. The study also examines confrontations over upbringing between parents and other family members.

**Design.** The main sample of the study consisted of 338 women, parents of preschool children, aged from 23 to 65 years ( $M = 36.63$ ,  $SD = 5.004$ ), and their children aged from 53 to 81 months ( $M = 70.36$ ,  $SD = 4.198$ ). We developed three groups of statements to identify parental attitudes: 1) statements about the organization of the child's life; 2) statements about play activities; 3) statements about confrontational attitudes within the family. Indicators of children's cognitive development were identified using J. Raven's Colored Progressive Matrices and subtests of the NEPSY-II method. Social-emotional features were identified with the "Test of Emotion Comprehension".

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**Results.** Most of the parents consider a structured environment to be more important for the well-being of their child than spontaneity and play. Research has shown that attitudes towards the positive impact of a structured environment are a strong predictor of a child's nonverbal intelligence. Similarly, attitudes towards the importance of spontaneous activity are predictors of a low ability to switch tasks efficiently. Parental attitudes did not show any associations with the socio-emotional development of children.

**Conclusions.** Parental attitudes may play a significant role in child development. A belief in the need to structure the child's environment may have positive effects on the child's cognitive development, but it does not affect social-emotional development. On the other hand, belief in the need for spontaneity is more likely than belief in the need for structure to be associated with lower levels of executive functioning in the child.

**Keywords:** Parental attitudes; structured environment; spontaneous activity; cognitive development; social-emotional development

**Highlights:**

- The majority of the parents believe that a structured environment is more important than spontaneous activity for the well-being of children.
- Parental beliefs about organized everyday life are positive significant predictors of children's non-verbal intelligence and inhibition.
- Parental beliefs about spontaneous everyday life are negative significant predictors of a low level of inhibition.
- Family disagreements over parenting issues make a negative contribution to the indicator of inhibition.

**АННОТАЦИЯ**

**Актуальность.** Современная психология родительства предлагает для изучения различные феномены — родительское отношение, родительские убеждения, установки и практики. Изучение родительских убеждений позволяет описать когнитивный компонент семейной среды, в которой развивается ребенок. Предыдущие исследования обнаружили значимую связь некоторых родительских установок с когнитивным и социально-эмоциональным развитием детей, однако они выполнены на зарубежных выборках, а их результаты неоднозначны.

**Цель.** Выявить особенности связи родительских убеждений о роли структурированности, спонтанности и игровой деятельности, а также наличия противоречий в семье относительно особенностей воспитания с показателями когнитивного и социально-эмоционального развития ребенка.

**Организация исследования.** Выборка. Основную выборку исследования составили 338 женщин в возрасте от 23 до 65 лет ( $M = 36,63$ ;  $SD = 5,004$ ) и их дети дошкольного возраста в возрасте от 53 до 81 месяцев ( $M = 70,36$ ,  $SD = 4,198$ ), из них 48% — мальчики, 52% — девочки. Методы. Для выявления родительских убеждений был разработан ряд утверждений, которые можно сгруппировать в три блока: 1) организация жизни ребенка, 2) роль игровой деятельности, 3) воспитательная конфронтация в семье. Показатели когнитивного развития детей были выявлены при помощи Цветных прогрессивных матриц Дж. Равена и субтестов методики NEPSY-II, социально-эмоционального — при помощи методики «Тест на понимание эмоций».

**Результаты.** Выявлено, что большинство родителей считают структурированную среду более значимой для благополучия ребенка. Кроме того, обнаружено, что наличие у родителей таких убеждений является позитивным предиктором показателей невербального интеллекта ребенка, при этом убеждения о значимой роли спонтанности оказываются предикторами менее выраженных показателей боль-

шего времени, которое необходимо ребенку для переключения с одного задания на другое. Связей родительских установок с социально-эмоциональным развитием детей не обнаружено.

**Выводы.** Родительские убеждения могут играть существенную роль в развитии ребенка: убеждение в необходимости структурировать среду ребенка может приводить к позитивным эффектам для когнитивного развития ребенка и не влиять на социально-эмоциональное развитие, а убеждение в необходимости спонтанности скорее связано с более низкими показателями исполнительных функций у ребенка.

**Ключевые слова:** Родительские убеждения, структурированность, спонтанность, когнитивное развитие, социально-эмоциональное развитие

**Ключевые положения:**

- Большинство родителей считают, что для благополучия детей более важна структурированная среда, чем спонтанная активность.
- Представления родителей об организованной повседневной жизни являются положительными и значимыми факторами, влияющими на невербальный интеллект и торможение детей.
- Родительские убеждения о спонтанности повседневной жизни являются негативными значимыми предикторами низкого уровня торможения.
- Разногласия в семье по вопросам воспитания детей оказывают негативное влияние на показатель торможения.

**RESUMEN**

**Relevancia.** La psicología moderna de la paternidad ofrece diversos fenómenos para el estudio: relaciones parentales, creencias parentales, actitudes y prácticas. El estudio de las creencias de los padres permite describir el componente cognitivo del entorno familiar en el que se desarrolla el niño. Estudios previos han encontrado una asociación significativa de algunas actitudes de los padres con el desarrollo cognitivo y socioemocional de los niños, sin embargo, se realizan en muestras extranjeras y sus resultados son mixtos.

**El objetivo.** Identificar las características de la relación de las creencias de los padres sobre el papel de la estructuración, la espontaneidad y la actividad del juego, así como la presencia de contradicciones en la familia con respecto a las características de la crianza con indicadores del desarrollo cognitivo y socioemocional del niño.

**Métodos y muestra.** La muestra principal del estudio fue de 338 mujeres de 23 a 65 años ( $M = 36,63$ ;  $SD = 5,004$ ) y sus hijos en edad preescolar de 53 a 81 meses ( $M = 70,36$ ,  $SD = 4,198$ ), de los cuales el 48% eran niños y el 52% eran niñas. Para identificar las creencias de los padres, se han desarrollado una serie de afirmaciones que se pueden agrupar en tres bloques: 1) la organización de la vida del niño, 2) el papel de las actividades de juego, 3) la confrontación educativa en la familia. Los indicadores del desarrollo cognitivo de los niños se identificaron con la ayuda de Matrices progresivas de color de J. Raven y subpruebas de la técnica NEPSY-II, socioemocional — con la ayuda de la técnica «Prueba de comprensión de las emociones».

**Resultados.** Se ha identificado que la mayoría de los padres consideran que un entorno estructurado es más significativo para el bienestar del niño. Además, se encontró que la presencia de tales creencias en los padres es un predictor positivo de los indicadores de inteligencia no verbal del niño, y las creencias sobre el papel significativo de la espontaneidad son predictores de indicadores menos pronunciados de más tiempo que el niño necesita para cambiar de una tarea a otra. No se encontraron vínculos entre las actitudes de los padres y el desarrollo socioemocional de los niños.

**Conclusión.** Las creencias de los padres pueden desempeñar un papel importante en el desarrollo del niño: la creencia en la necesidad de estructurar el entorno del niño puede tener efectos positivos en el desarrollo cognitivo del niño y no afectar el desarrollo socioemocional, y la creencia en la necesidad de espontaneidad se asocia más bien con puntuaciones más bajas de las funciones ejecutivas del niño.

**Palabras clave:** Creencias parentales, estructuración, espontaneidad, desarrollo cognitivo, desarrollo socioemocional

**Disposiciones clave:**

- La mayoría de los padres creen que un entorno estructurado es más importante para el bienestar de los niños que la actividad espontánea.
- Las percepciones de los padres sobre la vida cotidiana organizada son factores positivos y significativos que afectan la inteligencia no verbal y los patrones de inhibición en los niños.
- Las creencias de los padres sobre la espontaneidad de la vida cotidiana son predictores negativos significativos de bajos niveles de inhibición.
- Los desacuerdos en la familia sobre la crianza de los hijos tienen un impacto negativo en la tasa de inhibición.

## RESUME

**Origines.** La psychologie moderne de la parentalité propose divers phénomènes à étudier — les attitudes parentales, les croyances, attitudes et pratiques parentales. L'étude des croyances parentales permet de décrire la composante cognitive de l'environnement familial dans lequel évolue l'enfant. Des études antérieures ont trouvé un lien significatif entre certaines attitudes parentales et le développement cognitif et socio-émotionnel des enfants, mais elles ont été réalisées sur des échantillons étrangers et leurs résultats sont ambigus.

**Objectif.** Le but de cet article est de révéler les traits spécifiques du lien entre les croyances parentales sur le rôle de la structure, de la spontanéité et de l'activité ludique, ainsi que la présence de contradictions dans la famille concernant les caractéristiques de l'éducation avec des indicateurs du développement cognitif et socio-émotionnel de l'enfant.

**Méthodes et échantillonnage.** L'échantillon principal de l'étude était composé de 338 femmes âgées de 23 à 65 ans ( $M = 36,63$  ;  $SD = 5,004$ ) et de leurs enfants d'âge préscolaire âgés de 53 à 81 mois ( $M = 70,36$ ,  $SD = 4,198$ ), dont 48 % sont de garçons, 52 % sont des filles. Pour identifier les croyances parentales, un certain nombre d'énoncés ont été élaborés qui peuvent être regroupés en trois blocs : 1) l'organisation de la vie de l'enfant, 2) le rôle des activités ludiques, 3) la confrontation éducative au sein de la famille. Les indicateurs du développement cognitif des enfants ont été identifiés à l'aide des matrices progressives colorées de J. Raven et des sous-tests de la méthode NEPSY-II, socio-émotionnelle — en utilisant la méthode « Test de compréhension des émotions ».

**Résultats.** Il a été constaté que la majorité des parents considèrent qu'un environnement structuré est plus important pour le bien-être de l'enfant. En outre, il a été constaté que la présence de telles croyances chez les parents est un prédicteur positif des indicateurs de l'intelligence non verbale d'un enfant, tandis que les croyances sur le rôle important de la spontanéité s'avèrent être des prédicteurs d'indicateurs moins prononcés de temps dont un enfant a besoin pour passer d'une tâche à une autre. Aucun lien entre les attitudes parentales et le développement socio-émotionnel des enfants n'a été trouvé.

**Conclusions.** Les croyances parentales peuvent jouer un rôle important dans le développement de l'enfant : la croyance dans la nécessité de structurer l'environnement de l'enfant peut avoir des effets positifs sur le développement cognitif de l'enfant et n'affecter

pas son développement socio-émotionnel, et la croyance dans la nécessité de spontanéité est plus susceptible d'être associée à des niveaux inférieurs de fonctionnement exécutif chez l'enfant.

**Mots-clés:** Croyances parentales, structure, spontanéité, développement cognitif, développement socio-émotionnel

**Points principaux:**

- La plupart des parents croient qu'un environnement structuré est plus important pour le bien-être de leurs enfants qu'une activité spontanée.
- Les idées des parents sur la vie quotidienne organisée sont des facteurs positifs et significatifs qui influencent l'intelligence non verbale et les caractéristiques d'inhibition chez les enfants.
- Les croyances parentales concernant la spontanéité de la vie quotidienne sont des prédicteurs négativement significatifs d'une inhibition.
- Les désaccords au sein de la famille concernant les questions d'éducation des enfants ont un impact négatif sur l'indicateur d'inhibition.

## **Introduction**

### ***Parental Beliefs***

Modern study of the psychology of parenting covers many concepts that characterize the parental relationship and interaction with the child. However, parental beliefs and attitudes have not received sufficient attention from psychologists (Troshikhina & Danilova, 2023).

Parental beliefs or parental attitudes (this term is more often used in Russian psychological studies) can be defined as a combination of the widest possible range of opinions, judgments, and ideas about children's upbringing and development (Krailyuk, 2015; Miller, 1988). Despite its similarity to the concepts of "parental attitude", "interaction", and "parental practices", the term "parental beliefs" describes other psychological phenomena; while beliefs and behavior influence each other, there may be some inconsistency between them. It is also worth noting that attitudes make it possible to maintain a permanent self-image in a situation where actual behavior contradicts attitudes.

Researchers consider parental beliefs in connection with the influence of various factors on child development, parental expectations of the child's development, the role of mother and father in raising children (Bornstein & Lansford, 2019), or the child's age (Ridao et al., 2021).

### ***Parental Beliefs and Child Development***

Parental beliefs are positively associated with their children's cognitive and socio-emotional development (Sobkin & Kalashnikova, 2023; Wang et al., 2022) and can have influence both directly (for example, on the children's intellectual abilities [Golovey et al., 2016]), and indirectly (through various parental practices: e.g., emotional ones or stimulating the child's cognitive development [Correa et al., 2019]). For example,

parents may be convinced of the importance of play activities and strive to create conditions for these, including by getting involved in the game. It has been found that children whose parents play with their children demonstrate higher developmental levels of executive, cognitive, and social skills (Bukhalenkova et al., 2021; Gavrilova et al., 2023). In this regard, it is crucial to determine whether there is an association between parental beliefs about the role of play at preschool age and the child's cognitive and socio-emotional development. The relevance of the study of parental beliefs regarding the role of play at preschool age (Yudina, 2022) and the organization of the child's daily life is due to the parents' focus on accelerating the children's development and intensively preparing them for school, which sometimes happens as a result of the devaluation of play activities (Golovey et al., 2016; Parmar et al., 2004; Veraksa, 2022).

Despite the large number of studies devoted to parental beliefs regarding the role of the educational environment (Golzitskaya et al., 2018), little attention has been paid to parental beliefs about external factors related to structure and spontaneity in the child's daily life. Previous investigations indicate the significant positive role of a structured environment for the child's development (for example, Balabanova, 2015; Balandin et al., 2022; Sidneva et al., 2022; Soldatova & Rasskazova, 2022). However, some recent studies have shown that a structured environment (Morozyuk et al., 2022; Tarasova, 2023) and corresponding parenting style can reduce executive function skills (e.g., Liu et al., 2020), while excessive structure deprives children of the opportunity to exercise independence (Smirnova, 2019).

Belief in the need to adhere to rules and parental demands, regardless of the situation, helps maintain an environment of stability and predictability for the child (Sledens et al., 2014). However, the parental attitudes may conflict with those of other family members (Kornienko, 2016; Markovskaya, 2005) who take part in the child's upbringing, and this should be taken into account in the investigations.

Data on the parental beliefs under consideration are limited in Russian samples, so this study is exploratory in nature, allowing us to formulate the following research question: how are parental beliefs related to indicators of the child's cognitive and socio-emotional development? Based on the available data, it can be assumed that belief in the positive role of a structured environment in a child's daily life and disagreements in the family regarding methods of upbringing may be negatively associated with the child's cognitive and socio-emotional development.

## **Methods**

### ***Participants***

The main sample of this study consisted of 338 mothers of preschool children, aged 23 to 65 ( $M = 36.63$ ,  $SD = 5.004$ ). Of these, 5% are under 30 years old, 65% are under 40, and the rest are over 41. The age of the children at the time of the study ranged from 53 to 81 months ( $M = 70.36$ ,  $SD = 4.198$ ); 48% of the children were male, 52% female.

## **Procedure**

The study of the children's development indicators was organized in an individual format at preschools within the framework of the all-Russian research project "Growing Together". Data collection from parents was carried out online; the survey completion time was up to 20 minutes.

## **Materials**

Since there has been no toolkit for identifying the parental beliefs under consideration, a number of statements were developed that can be grouped into three blocks.

The first block is aimed at identifying parental beliefs about the organization of the child's daily life (structured environment or flexibility). This block includes two questions: 1) According to your beliefs, in order to raise happy and healthy children, is it important for daily life to be structured and organized? 2) According to your beliefs, in order to raise happy and healthy children, is it important for daily life to be flexible and spontaneous? The questions were rated on a Likert scale from "1" ("Strongly disagree") to "4" ("Strongly agree").

The second block is aimed at identifying beliefs regarding the significance of play activity. The first statement is focused on discovering the parent's preference for cognitive development activity (such as reading) over play: "I believe that it is better to spend time reading to a child than playing together". The second statement reveals the parent's belief about the role of play as an activity that prepares a preschooler for school: "I believe that free play at home will help my child prepare for school". The third statement allows us to assess the emotional attitude towards playing with a child: "Participating in my child's play (when he/she sets its course) is one of my favorite things to do". Statements were rated by parents on a Likert scale from "1" ("Strongly disagree") to "4" ("Strongly agree").

The third block is represented by a question assessing disagreements in the family on issues of upbringing and educational practices: "Are there disagreements in your family on issues of child-rearing that lead to serious conflicts and which cannot be resolved for a long time?" Answer options: "0 - No disagreements"; "1 — There are disagreements with the senior generation of relatives (grandparents)"; "2 — There are disagreements with the child's other parent".

The children's nonverbal intelligence development level was identified via the J. Raven's Colored Progressive Matrices test (Raven et al., 2002).

The children's executive functions were studied using subtests of the NEPSY-II complex (Gavrilova & Chichinina, 2023; Korkman et al., 2007). The level of auditory-verbal working memory development was identified via the "Sentences Repetition" subtest, and the visual working memory development level was identified via the "Memory for Designs" subtest. Cognitive flexibility was studied by three series of tasks of the "Dimensional Change Card Sort" subtest, and inhibition by the "Inhibition" subtest. Time to complete the task was used to assess both indicators. The technique's subtests are described in more detail in the work by O. Almazova and colleagues (Almazova et al., 2019).

The children's socio-emotional development features were identified via the "Test of Emotion Comprehension" (Veraksa et al., 2021), and a generalized indicator of understanding emotions was used for analysis.

Data processing using frequency, comparative, correlation, and regression analyses was carried out in the Jamovi program.

## Results

### *Preliminary Analysis of Indicators of Parental Beliefs*

Descriptive statistics analysis revealed that the indicator of parental beliefs that good structure and organization is more likely to contribute to a child's happiness and health ( $M = 2.44$ ;  $SD = 1.06$ ) is higher than the indicator of parental belief in the positive role of spontaneity and flexibility ( $M = 2.30$ ;  $SD = 0.58$ ). At the same time, 61% of parents agreed or completely agreed with the statement about the significant role of structure, and only 34% agree with the statement about the role of spontaneity. Analysis of parental beliefs about play showed that belief in the positive role of free play had a higher score ( $M = 2.65$ ;  $SD = 0.79$ ) than belief about the role of the parent's participation in the child's play ( $M = 2.55$ ;  $SD = 0.79$ ); the lowest indicator was scored by the belief that reading is more useful for a child's development than playing ( $M = 2.02$ ;  $SD = 0.74$ ). Fifty-nine percent and 54% of respondents, respectively, agree or strongly agree that free and joint play has a positive role, while only 21% think that reading has a more important role than play. Of the total sample, 88% of the mothers indicated that there are no disagreements in their family on upbringing issues, 7% responded that there are disagreements with senior relatives, and 5% noted that they have disagreements with the child's other parent.

### *Analysis of the Association Between Parental Beliefs and Indicators of the Cognitive and Social-Emotional Development of Children*

Spearman's correlation analysis, as well as indicators of confidence interval with 1,000 bootstrap samples, made it possible to identify the association between parental beliefs and the indicators of child development used. In particular, belief in the positive role of a structured environment showed a positive association with belief in the positive role of spontaneity ( $r = 0.16$ ,  $p = 0.004$ ;  $CI [0.054, 0.252]$ ), nonverbal intelligence ( $r = 0.14$ ,  $p = 0.011$ ;  $CI [0.035, 0.245]$ ); and a negative association with cognitive flexibility ( $r = -0.12$ ,  $p = 0.035$ ;  $CI [-0.216, -0.017]$ ), inhibition ( $r = -0.13$ ,  $p = 0.020$ ;  $CI [-0.232, -0.024]$ ) and the family's socio-economic status ( $r = -0.12$ ,  $p = 0.035$ ;  $CI [-0.221, -0.003]$ ). The presence of disagreements in the family is associated only with a generalized indicator of the child's understanding of emotions ( $r = -0.14$ ,  $p = 0.013$ ;  $CI [-0.239, -0.038]$ ). Indicators of beliefs about the role of spontaneity and play did not reveal significant relationships.

It is important to clarify that correlational associations are considered significant in cases where the  $p$ -level is close to 0.05 only when the  $r$ -index is not less than 0.5 (Krichevets et al., 2019). Despite this, our results can still be accepted as significant and interpreted in the future. This is supported by both classical and modern ideas



about conducting and interpreting correlation analysis, in which, on a sample of 300 respondents and a significance level  $p$  approaching 0.05, it is permissible to accept the results and interpret them with a correlation coefficient of 0.113 (Nasledov, 2007; Schober, et al., 2018). Moreover, the identified correlations' significance is confirmed by the confidence intervals.

To analyze the joint contribution of sociodemographic characteristics and parental beliefs to child development indicators, a linear regression analysis was conducted, in which indicators of sociodemographic characteristics and parental beliefs about spontaneity and structure were treated as quasi-intervals (see Table 1).

Table 1  
*Results of Regression Analysis of Contribution of Social-Demographic Characteristics and Parental Beliefs to Indicators of Cognitive Development of Children*

Variable	Nonverbal intelligence		Inhibition (time)	
	$R^2 = 0.07$ $F(7, 304) = 3.299$ $p = 0.002$		$R^2 = 0.08$ $F(7, 299) = 3.93$ $p < 0.001$	
	Beta	$t$	Beta	$t$
(Constant)		0.68		7.29***
Age of parent	-0.07	-1.23	-0.04	-0.79
Socio-economic status of family	-0.04	-0.70	-0.07	-1.21
Education level of parent	0.17	2.98**	-0.06	-0.99
Parental beliefs about organized everyday life	0.16	2.77**	-0.20	-3.56***
Parental beliefs about spontaneous everyday life	-0.04	-0.70	0.12	2.14*
Family disagreements over parenting issues	-0.06	-1.01	0.16	2.91**
Parental beliefs about play activities of children	0.03	0.51	-0.06	-1.16

Note. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

According to the results obtained, significant positive predictors of nonverbal intelligence were the parent's belief in the positive role of the structured environment and the parent's educational level. A negative contribution to the inhibition indicator was demonstrated by the belief about a structured environment, and a positive contribution was shown by the belief about spontaneity, as well as disagreements in the family regarding upbringing. No significant contribution of the considered indicators to the child's understanding of emotions was discovered.

## **Discussion**

Our research demonstrates that the majority of the mothers assessed are convinced of structured environment's positive role in a child's daily life for his/her well-being, which is positively associated with the development of certain cognitive abilities. The positive association between the parental belief in the significant role of a structured environment and the child's nonverbal intelligence, as well as the negative, albeit weak, association between this parental belief and the time required for completion for cognitive flexibility and inhibition tasks may, to some extent, indicate that parents who believe that the child's life should be well organized create a carefully structured and predictable environment, where it is easier for children to navigate and inhibit their impulses, which allows them to develop non-verbal intelligence and some executive functions (in particular, inhibition).

A significantly smaller proportion of parents are convinced of the positive role of flexibility and spontaneity in organizing the child's daily life, and this may be due to the negative contribution of these beliefs to the children's cognitive development, namely, to inhibitory control (inhibition). However, the data obtained in this study require additional verification.

Beliefs about the positive role of play activities at preschool age and the presence of disagreements in the family regarding upbringing did not show a significant contribution to cognitive development indicators, and no predictors of the studied characteristics of socio-emotional development were found among the considered parental beliefs.

The results have some differences from existing data. For example, in a Chinese sample, it was found that children of parents who are convinced of the significant role of play activities and, in general, the need for cognitive stimulation of children, demonstrate higher rates of socio-emotional development; however, no effect was found for cognitive development (Wang et al., 2022). Such a discrepancy in data may indicate an ambiguous, more complex picture of the relationships between parental beliefs and child development indicators — mediated, for example, by parental practices, parental attitudes, or individual characteristics of both the parent and the child.

## **Conclusion**

This research demonstrates that parental beliefs can play a significant role in child development, along with parenting attitudes and practices. In particular, the belief in the need to structure a child's environment may lead to positive effects on the child's cognitive development (namely, nonverbal intelligence and executive functions), but not affect the child's understanding of emotions. Beliefs about the role of play, as well as disagreements in the family regarding upbringing, were least associated with the children's cognitive and socio-emotional development.

## **Limitations**

The study has a number of limitations. The correlation and regression analyses showed extremely low indicators. Although the correlation coefficient  $r$  does not exceed 0.2 with a significance level approaching 0.05, and the proportion of explained variance

according to the regression analysis results is low, with a sample size of 300 people or more, the results can be interpreted, albeit with great caution.

The next limitation is due to the fact that the statements in the questionnaire used to identify parental beliefs are highly generalized, which could cause difficulties in understanding them, although none of the respondents asked for clarification (an opportunity for this was provided). Nevertheless, future research may be associated with greater detail in the questions. Another limitation is related to the lack of data on parents' implementation of their beliefs in practice, which makes our assumptions about the association mechanism between parental beliefs and children's cognitive development indicators less reliable. Future studies may be related to data collection on the frequency and characteristics of joint play activities and the actual organization of the child's daily life.

### **Ethics Statement**

All research procedures followed the ethical standards of the Russian Psychological Society.

### **Conflict of Interest**

The authors declare no conflict of interest.

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### **References**

- Almazova, O.V., Bukhalenkova, D.A., & Veraksa, A.N. (2019). Diagnostika urovnia razvitiia reguliatsionnykh funktsii v starshem doshkol'nom vozraste [Assessment of the level of development of executive functions in older preschoolers]. *Pskhologiya. Zhurnal Vysshei Shkoly Ekonomiki* [Psychology. Journal of the Higher School of Economics], 2(16), 302–317. <https://doi.org/10.17323/1813-8918-2019-2-302-317>
- Balabanova, G.A. (2015). Formirovanie celostnogo miroponimaniia starshego doshkol'nika [Formation of a holistic worldview in the older preschooler]. *Obuchenie i Vospitanie: Metodiki i Praktika* [Training and Education: Methods and Practice], 24, 158–162.
- Balandin, D.L., Komarova, I.I., & Smirnova, I.N. (2022). Monitoring individual'nogo razvitiia rebenka (ot rozhdeniia do shkoly) [Monitoring of a child's individual development (from birth to school)]. *Sovremennoe Doshkol'noe Obrazovanie* [Preschool Education Today], 2(16), 40–51.
- Bornstein, M.H., & Lansford, J.E. (2019). Culture and family functioning. In B.H. Fiese, M. Celano, K. Deater-Deckard, E.N. Jouriles, & M.A. Whisman (Eds.), *APA handbook of contemporary family psychology: Applications and broad impact of family psychology*. Vol. 2. (pp. 417–436). Washington: American Psychological Association. <https://doi.org/10.1037/0000100-026>
- Bukhalenkova, D.A., Sukhikh, V.L., & Yakupova, V.A. (2021). Razvitie samoreguliacii v igre: vo chto i kak igrat' s doshkol'nikami? [Development of self-regulation in play: What and how to play with preschoolers?]. *Sovremennoe Doshkol'noe Obrazovanie* [Preschool Education Today], 1(15), 8–16. [https://doi.org/10.24411/1997-9657-2021-10\\_091](https://doi.org/10.24411/1997-9657-2021-10_091)

- Correa, W., Minetto, M., Cappellaro-Kobren, R., & Kruszielski, L. (2019). Parental beliefs on child development of children with developmental delays. *Paidéia* [Ribeirão Preto], 29. <https://doi.org/10.1590/1982-4327e2928>
- Gavrilova, M.N., & Chichinina, E.A. (2023). Dinamika razvitiia rabochej pamiaty u detej v vozraste s 5 do 7 let v period social'noj izoliacii: rol' ekrannogo vremeni i kolichestva detej v sem'e [Working memory development dynamics in children aged 5 to 7 in a period of social isolation: The role of screen time and the number of children in the family]. *Vestnik Sankt-Peterburgskogo Universiteta. Psikhologiya* [Saint Petersburg University Bulletin. Psychology], 13(3), 396–410. <https://doi.org/10.21638/spbu16.2023.307>
- Gavrilova, M.N., Sukhikh, V.L., & Veresov, N.N. (2023). Toy preferences among 3-to-4-year-old children: The impact of socio-demographic factors and developmental characteristics. *Psychology in Russia: State of the Art*, 16(2), 72–84. <https://doi.org/10.11621/pir.2023.0206>
- Golovey, L.A., Savenysheva, S.S., & Engelgardt, E.E. (2016). Struktura sem'i i roditel'skoe vospitanie kak faktory intellektual'nogo razvitiia doshkol'nikov [Family structure and upbringing as factors of intellectual development of preschool children]. *Sotsial'naya Psikhologiya i Obshchestvo* [Social Psychology and Society], 7(3), 18–32. <https://doi.org/10.17759/sps.2016070302>
- Golzitskaya, A.A., Kisel'nikova, N.V., & Markova, S.V. (2018). Oprosnik PARI kak metodika issledovaniia roditel'skikh ustanovok [The PARI Questionnaire as a research technique for the parental attitudes]. *Voprosy Psichologii* [Issues of Psychology], 3, 147–157.
- Korkman, M., Kirk, U., & Kemp, S.L. (2007). *NEPSYII. Administrative manual*. San Antonio: Psychological Corporation.
- Kornienko, D.S. (2016). Child temperament and mother's personality as predictors of maternal relation to child. *Procedia-Social and Behavioral Sciences*, 233, 343–347. <https://doi.org/10.1016/j.sbspro.2016.10.148>
- Krailiuk, A.I. (2015). Roditel'skie ustanovki: teoreticheskie aspekty [Paternal beliefs: Theoretical aspects]. *Vestnik KGU im. N.A. Nekrasova. Seriya: Pedagogika, Psikhologiya* [N.A. Nekrasov KGU Bulletin. Series. Pedagogy, Psychology], 21(3), 78–82.
- Krichevets, A.N., Korneev, A.A., & Rasskazova, E.I. (2019). *Osnovy statistiki dlia psikhologov* [Fundamentals of statistics for psychologists]. Moscow: Acropolis.
- Liu, P., Kryski, K., Smith, H., Joannise, M., & Hayden, E. (2020). Transactional relations between early child temperament, structured parenting, and child outcomes: A three-wave longitudinal study. *Development and Psychopathology*, 32(3), 923–933. <https://doi.org/10.1017/S0954579419000841>
- Markovskaya, I.M. (2005). *Trening vzaimodejstviia roditelej s det'mi* [Parent-child interaction training]. St. Petersburg: Rech.
- Miller, S.A. (1988). Parents' beliefs about children's cognitive development. *Child Development*, 59(2), 259–285. <https://doi.org/10.2307/1130311>
- Morozyuk, S.N., Morozyuk, Yu.V., & Kuznetsova, E.S. (2022). Algoritm konsul'tativnoj raboty s materiami so stilem roditel'skogo otnosheniia «Strogost' sankcij» [The algorithm of consultative work with mothers with the style of parental attitude "severity of sanctions"]. *Sovremennoe Doshkol'noe Obrazovanie* [Preschool Education Today], 4(16), 62–68.
- Nasledov, A.D. (2007). *Matematicheskie metody psikhologicheskogo issledovaniia. Analiz i interpretaciia dannykh* [Mathematical methods of psychological research. Analysis and interpretation of data]. St. Petersburg: Rech.
- Parmar, P., Harkness, S., & Super, C.M. (2004). Asian and Euro-American parents' ethnotheories of play and learning: Effects on preschool children's home routines and school behaviour. *International Journal of Behavioral Development*, 28(2), 97–104. <https://doi.org/10.1080/01650250344000307>
- Raven, J.K., Kort, J., & Raven, J. (2002). *Rukovodstvo dlia Progressivnykh Matric Ravena i Slovarnykh SHkal: Razdel 2: Cvetnye Progressivnye Matricy (vklyuchaia Parallelnye versii Testa)* [Manual for Raven's Progressive Matrices and Vocabulary Scales: Section 2: Colored Progressive Matrices (including Parallel Test versions)]. Moscow: Cogito-Center.
- Ridao, P., López-Verdugo, I., & Reina-Flores, C. (2021). Parental beliefs about childhood and adolescence from a longitudinal perspective. *International Journal of Environmental Research and Public Health*, 18(4), 1760. <https://doi.org/10.3390/ijerph18041760>

- Schober, P., Boer, C., & Schwarte, L.A. (2018). Correlation coefficients: Appropriate use and interpretation. *Anesthesia and Analgesia*, 126(5), 1763–1768. <https://doi.org/10.1213/ANE.0000000000002864>
- Sidneva, A.N., Aslanova, M.S., & Bukhalenkova, D.A. (2022). Osobennosti razvitiia matematicheskikh sposobnostej pervoklassnikov, obuchayushchikhsia po raznym obrazovatel'nym programmam [Features of the development of mathematical skills of first-graders in different educational programs]. *Lomonosov Psychology Journal*, 45(3), 119–144. <https://doi.org/10.11621/vsp.2022.03.07>
- Sleddens, E.F., O'Connor, T.M., Watson, K.B., Hughes, S.O., Power, T.G., Thijs, C., De Vries, N.K., & Kremers, S.P. (2014). Development of the Comprehensive General Parenting Questionnaire for caregivers of 5–13-year-olds. *International Journal of Behavioral Nutrition and Physical Activity*, 11(15), 1–14. <https://doi.org/10.1186/1479-5868-11-15>
- Smirnova, E.O. (2019). Specifika sovremennogo doshkol'nogo detstva [Specific features of modern preschool childhood]. *National Psychological Journal*, 2(34), 33–40. <https://doi.org/10.11621/npj.2019.0207>
- Sobkin, V.S., & Kalashnikova, E.A. (2023). Zhiznennaiia pozitsiia materej i otcov uchashchikhsia nachal'noj, osnovnoj i starshej shkoly [Life position of mothers and fathers of primary, secondary, and high school students]. *Theoretical and Experimental Psychology*, 16(2), 50–71. <https://doi.org/10.11621/TEP-23-12>
- Soldatova, G.U., & Rasskazova, E.I. (2022). Multitasking as a personal choice of the mode of activity in Russian children and adolescents: Its relationship to experimental multitasking and its effectiveness. *Psychology in Russia: State of the Art*, 15(2), 113–123. <https://doi.org/10.11621/pir.2022.0208>
- Tarasova, S.Yu. (2023). Psikhologicheskie riski podrostkov, obuchayushchikhsia v usloviakh povyshennoj uchebnoj nagruzki [Psychological risks of adolescents studying under conditions of increased academic load]. *Lomonosov Psychology Journal*, 1(46), 280–302. <https://doi.org/10.11621/vsp.2023.01.12>
- Troshikhina, E.G., & Danilova, M.V. (2023). Mat' i doch': vzaimosviaz' psikhologicheskogo blagopoluchii i roditel'skikh ustanovok v raznye periody vzroslosti [Mother and adult daughter: The connection between their psychological well-being and the mother's parental attitudes]. *Vestnik Sankt-Peterburgskogo Universiteta. Psihologiya* [Bulletin of Saint Petersburg University. Psychology], 13(2), 199–213. <https://doi.org/10.21638/spbu16.2023.205>
- Veraksa, N.E. (2022). Dialekticheskaiia struktura igry doshkol'nika [Dialectical structure of preschool play]. *National Psychological Journal*, 47(3), 4–12. <https://doi.org/10.11621/npj.2022.0302>
- Veraksa, N.E., Veraksa, A.N., Gavrilo, M.N., Bukhalenkova, D.A., & Tarasova, K.S. (2021). Test na ponimanie emocij: adaptaciia rusскоязыchnoj versii na rossijskoj vyborke detej doshkol'nogo vozrasta [The Russian version of the Test of Emotion Comprehension: Adaptation and validation for use in preschool children]. *Psikhologiya. Zhurnal Vyshei Shkoly Ekonomiki* [Psychology. Journal of the Higher School of Economics], 18(1), 56–70. <https://doi.org/10.17323/1813-8918-2021-1-56-70>
- Wang, L., Yang, C., Jiang, D., Zhang, S., Jiang, Q., & Rozelle, S. (2022). Impact of parental beliefs on child developmental outcomes: A quasi-experiment in rural China. *International Journal of Environmental Research and Public Health*, 19(12), 7240. <https://doi.org/10.3390/ijerph19127240>
- Yudina, E.G. (2022). Detskaia igra kak territoriiia svobody [Pretend play as the territory of freedom]. *Natsionalny Psikhologicheskyy Zhurnal* [National Psychological Journal], 3, 13–25. <https://doi.org/10.11621/npj.2022.0303>

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