

Date: 21stDecember-2024

BOLALARDA INDIVIDUAL RIVOJLANISHNING NEVROLOGIK ASOSLARI.

Shukurova Madina O'ktamovna

Osiyo xalqaro universiteti o'qituvchisi

Annotatsiya: Mazkur maqola bolalarda individual rivojlanishning nevrologik asoslarini o'rganishga bag'ishlangan. Unda bolalarning miya tuzilmasi va funksiyalarining rivojlanishi, nerv tizimi faoliyatining bola shaxsiyati va qobiliyatlariga ta'siri tahlil qilinadi. Maqolada nevrologik rivojlanish jarayonlari va ular bilan bog'liq omillar, jumladan genetika, muhit va tajriba asosida shakllangan natijalar ko'rib chiqiladi.

Kalit so'zlar: nevrologik rivojlanish, bola miya tuzilmasi, nerv tizimi, individual rivojlanish, genetik omillar, nevroplastiklik, kognitiv rivojlanish.

Kirish

Bolalarda individual rivojlanishning fiziologik asoslari ko'p jihatdan ularning nerv tizimining shakllanishi va rivojlanishiga bog'liq. Miya va nerv tizimi bola hayotining dastlabki bosqichlarida ayniqsa faol rivojlanadi va bu jarayon bola o'zlashtiradigan bilim, ko'nikma va hissiy tajribalarni shakllantiradi. Ushbu maqolada nevrologik rivojlanishning asosiy mexanizmlari, ularning individual farqlarga ta'siri va ushbu jarayonlarga ta'sir qiluvchi omillar yoritiladi.

Asosiy qism

Miya va nerv tizimining rivojlanishi

Bolalarda miya rivojlanishi hayotning birinchi yillarida juda faol bo'ladi. Dastlab, yangi tug'ilgan chaqaloqlarning miyasida asab hujayralarining (neyronlar) ko'p sonli tarmog'i mavjud bo'lsa-da, ular o'rtasidagi bog'lanishlar hali to'liq shakllanmagan bo'ladi. Quyida miya rivojlanishining asosiy bosqichlari bayon etiladi:

1. **Sinaptogenez:** Tug'ilgandan keyin neyronlar orasida sinapslar (bog'lanishlar) shakllana boshlaydi. Bu jarayon bola hayoti davomida davom etadi, ammo dastlabki yillarda ayniqsa intensiv kechadi.

2. **Miyelinatsiya:** Neyronlarning aksonlari atrofida miyelin qoplamasi hosil bo'lishi nerv impulslarining tezligini oshiradi. Bu jarayon bolaning motorika va kognitiv rivojlanishiga katta ta'sir qiladi.

3. **Neuroplastiklik:** Bolalarning miyasida yangi tajribalarga moslashish va ularga javob berish qobiliyati yuqori bo'ladi. Bu jarayon orqali bola o'z muhitiga moslashadi va yangi ko'nikmalarni o'zlashtiradi.

Nevrologik rivojlanishga ta'sir qiluvchi omillar

1. **Genetik omillar:**

Bola rivojlanishining ko'plab jihatlari, jumladan, asab tizimi tuzilishi va funksiyasi, genetik omillarga bog'liq. Masalan, genetik mutatsiyalar yoki irsiy kasalliklar bolalarda nerv tizimining faoliyatiga ta'sir qilishi mumkin.

2. **Muhit ta'siri:**



Date: 21stDecember-2024

Atrof-muhit omillari, jumladan, ota-onalar bilan muloqot, ta'lim, o'yinlar va ijtimoiy tajriba bolalarning miya rivojlanishini rag'batlantiradi.

Stress, ovqatlanish yetishmovchiligi yoki travmatik tajribalar kabi salbiy omillar esa miya rivojlanishiga salbiy ta'sir ko'rsatishi mumkin.

3. Erta bolalik tajribalari:

Dastlabki yillarda bolaning atrof-muhit bilan o'zaro ta'siri uning nevrologik rivojlanishiga hal qiluvchi ta'sir ko'rsatadi. Masalan, yaxshi rivojlangan o'quv muhitlari bolalarda kognitiv qobiliyatlarni rivojlantiradi.

4. Sog'liq va parvarish:

Bola rivojlanishida to'g'ri ovqatlanish va tibbiy parvarish muhim o'rin tutadi. Masalan, ona suti tarkibidagi oziq moddalar miyaning dastlabki rivojlanishini qo'llab-quvvatlaydi.

Nevrologik rivojlanishning individual xususiyatlari

Har bir bolaning nevrologik rivojlanishi individual xususiyatlarga ega. Ushbu xususiyatlar quyidagi omillar orqali shakllanadi:

1. **Temperament:** Tug'ma temperament bolaning shaxsiyati va xatti-harakatlariga ta'sir ko'rsatadi.

2. **Jinsiy farqlar:** O'g'il va qiz bolalarning miya tuzilishidagi farqlar ularning rivojlanish jarayoniga ta'sir qiladi.

3. **O'rganish qobiliyati:** Ba'zi bolalarda nevrologik jarayonlar ancha tezroq kechadi, bu esa ularning ta'lim jarayonida yutuqlarini ta'minlaydi.

Amaliy tavsiyalar

- Bolalarning nevrologik rivojlanishini qo'llab-quvvatlash uchun ularni intellektual va jismoniy faoliyatga jalb qilish muhim.
- Stress va boshqa salbiy omillardan himoya qilish uchun ijobiy oilaviy muhit yaratish lozim.
- Dastlabki bolalik davrida sifatli ta'lim resurslarini taqdim etish zarur.

Xulosa

Bolalarda individual rivojlanishning nevrologik asoslari ularning shaxsiyati, qobiliyatlari va atrof-muhitga moslashuv jarayonini belgilaydi. Miya rivojlanishi va nerv tizimining funksiyalari bola hayotining dastlabki yillarida juda muhim ahamiyat kasb etadi. Genetik va muhit omillari, shuningdek, dastlabki tajribalar nevrologik rivojlanishni shakllantirishda hal qiluvchi rol o'ynaydi. Shu sababli, bolalar rivojlanishini qo'llab-quvvatlash uchun ijobiy shart-sharoit yaratish va ularning nevrologik ehtiyojlariga e'tibor qaratish lozim.

ADABIYOTLAR:

1. O'ktam qizi Shukurova, M. (2023). Speech grow up in training using interactive methods. *American Journal of Public Diplomacy and International Studies* (2993-2157), 1(10), 357-360.



Date: 21stDecember-2024

2. O'ktam qizi Buxoro, S. M. (2022). BOLANING NUTQINI RIVOJLANTIRUVCHI O 'YINLAR. *PEDAGOGS jurnali*, 1(1), 484-486.
3. Oktam's, S. M. (2023). Methods and Tools of Speech Development of Small Group Children in Preschool Education Organization. *American Journal of Public Diplomacy and International Studies (2993-2157)*, 1(9), 104-108.
4. O'ktam qizi Shukurova, M. (2023). The importance of genres of folklore in the education of preschool children. *TECHNICAL SCIENCE RESEARCH IN UZBEKISTAN*, 1(5), 96-99.
5. Shukurova, M. (2023). METHODS AND METHODS OF INCREASING CHILDREN'S SPEECH IN A PRESCHOOL ORGANIZATION. *Modern Science and Research*, 2(10), 477-480.
6. Shukurova, M. O. K. (2024). Growing children's speech in the process of introducing them to the environment and nature. *Multidisciplinary Journal of Science and Technology*, 4(3), 130-135.
7. Shukurova, M. (2024). OILADA FARZAND TARBIYASIDA OTANING ROLI. *ZAMONAVIY TARAQQIYOTDA ILM-FAN VA MADANIYATNING O 'RNI*, 3(2), 162-167.
8. O'ktamovna, S. M. (2024). MAKTABGACHA TA'LIMDA TABIAT BURCHAGINI TAYYORLASH. *Multidisciplinary Journal of Science and Technology*, 4(3), 661-667.
9. O'ktamovna, S. M. (2024). EXTRACURRICULAR ACTIVITIES IN PRIMARY GRADES. *Multidisciplinary Journal of Science and Technology*, 4(3), 654-660.
10. O'ktamovna, S. M. (2024). PREPARATION OF THE NATURE CORNER IN PRESCHOOL EDUCATION. *Multidisciplinary Journal of Science and Technology*, 4(3), 675-681.
11. SHUKUROVA, M. (2024). NEUROPEDAGOGY AS A FOUNDATION FOR INCREASING THE EFFECTIVENESS OF THE EDUCATIONAL PROCESS. *Mental Enlightenment Scientific-Methodological Journal*, 5(07), 1-8.
12. O'ktamovna, S. M. (2024). BOLALAR NUTQINING TOVUSH MADANIYATINI SHAKLLANTIRISH. *PEDAGOG*, 7(5), 48-55.
13. [ПОДГОТОВКА УГОЛОКА ПРИРОДЫ В ДОШКОЛЬНОМ ОБРАЗОВАНИИ](#) МУ Шукурова - *Multidisciplinary Journal of Science and Technology*, 2024
14. Sobirovna, S. Y. (2023). O 'YIN ORQALI BOLA TAFAKKURI VA NUTQINI OSTIRISH. *SAMARALI TA'LIM VA BARQAROR INNOVATSIYALAR*, 1(3), 93-99.
15. Yulduz, S. (2023). KREATIV YONDASHUVLAR ASOSIDA BOLALAR NUTQI VA TAFAKKURINI RIVOJLANTIRISH. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 23(2), 87-92.
16. Yulduz, S. (2023). MAKTABGACHA YOSHDAGI BOLALARDA EKOLOGIK TA'LIM BERISHNING O'ZIGA XOSLIGI. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 21(3), 124-129.
17. Sobirovna, S. Y. (2022). PEDAGOGNING KREATIVLIGI BOLALAR IJODIY RIVOJLANISHINING ZARUR SHARTI. *PEDAGOGS jurnali*, 1(1), 219-220.
18. Sobirovna, S. Y. (2022). KICHIK MAKTAB YOSHDAGI O 'QUVCHILAR BILISH FAOLIYATINI RIVOJLANTIRISHNING PEDAGOGIK PSIXOLOGIK XUSUSIYATLARI. *PEDAGOGS jurnali*, 1(1), 158-160.



Date: 21stDecember-2024

19. Sobirovna, Y. S. (2023). Methods and Tools of Economic Education in Preschool Children. *American Journal of Public Diplomacy and International Studies* (2993-2157), 1(9), 109-115.
20. Sobirovna, S. Y. (2023). METODIST FAOLIYATI ASOSLARI. SAMARALI TA'LIM VA BARQAROR INNOVATSIYALAR, 1(5), 108-114.
21. Sobirovna, S. Y. (2023). Creativity in the work of an educator. *American Journal of Public Diplomacy and International Studies* (2993-2157), 1(10), 361-367.
22. Sobirovna, S. Y. (2024). MAKTABGACHA TA'LIMDA NUTQ, MULOQOT OQISH VA YOZISH MALAKALARINING SOHALARI. *TECHNICAL SCIENCE RESEARCH IN UZBEKISTAN*, 2(1), 52-62.
23. Yulduz, S. (2024). SYUJETLI-ROLI OYINLARNING BOLA FAOLIYATIDAGI AHAMIYATI. *TECHNICAL SCIENCE RESEARCH IN UZBEKISTAN*, 2(1), 44-51.
24. Sobirovna, S. Y. (2024). AESTHETIC EDUCATION AS A TOOL TO LEAD CHILDREN TO PERFECTION. *МЕДИЦИНА, ПЕДАГОГИКА И ТЕХНОЛОГИЯ: ТЕОРИЯ И ПРАКТИКА*, 2(2), 354-367.
25. Yulduz, S. (2024). Estetik tarbiya bolalarni komillikka yetaklovchi vosita sifatida. *TECHNICAL SCIENCE RESEARCH IN UZBEKISTAN*, 2(2), 95-106.
26. G'aniyevna, P. R. F. (2022, June). MAKTABGA TAYYORLOV GURUHLARI UCHUN SAVODXONLIKKA O'RGATISH MASHG'ULOTLARIDA, A'HARF-TOVUSHINI O'RGATISH METODIKASI. In *E Conference Zone* (pp. 38-41).
27. Tojiddinovna, I. F. A. (2024). Tarbiya turlari va ularning shaxs kamolotiga ta'siri. *Multidisciplinary Journal of Science and Technology*, 4(2), 429-435.
28. Tajiddinovna, I. F. (2024). Types of education and their impact on personality development. *Multidisciplinary Journal of Science and Technology*, 4(2), 469-475.
29. Tajiddinovna, I. F. A. (2024). THE ISSUE OF EDUCATION IN PRIMARY EDUCATION. *Multidisciplinary Journal of Science and Technology*, 4(3), 615-620.
30. Исомова, Ф. Т. (2024). Виды образования и их влияние на развитие личности. *Multidisciplinary Journal of Science and Technology*, 4(2), 461-468.
31. Tajiddinovna, I. F. A. (2024). FIRST STEP PROGRAM IN PRESCHOOL EDUCATION. *Multidisciplinary Journal of Science and Technology*, 4(3), 609-614.
32. Tojiddinovna, I. F. A. (2024). MAKTABGACHA TA'LIM JARAYONIDA BOLALARNING IJTIMOIIY MOSLASHUVI. *Multidisciplinary Journal of Science and Technology*, 4(3), 590-595.
33. Tojiddinovna, I. F. A. (2024). MAKTABGACHA TA'LIMDA "ILK QADAM" DASTURI. *Multidisciplinary Journal of Science and Technology*, 4(3), 603-608.
34. Isomova, F. A. T. Q. (2022). MAKTABGACHA TALIM TASHKILOTLARIDA BOLALARNI MAKTAB TA'LIMIGA TAYYORLASHDA NUTQ O'STIRISH MASHG'ULOTLARINING AHAMIYATI. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(1), 947-949.
35. Akbarovna, I. S. (2023). YOSHLARDA DESTRUKTIV G'OYALARGA QARSHI IMMUNITET HOSIL QILISH OMILLARI.
36. Akbarovna, I. S. (2023). TALABA YOSHLARDA MAFKURA TUSHUNCHASI VA MAFKURAVIY IMMUNITETNI SHAKLLANTIRISH.



Date: 21stDecember-2024

37. Ikromova, S. A. (2023). Cognitive processes and their description in psychology. TECHNICAL SCIENCE RESEARCH IN UZBEKISTAN, 1(5), 115-133.
38. Akbarovna, I. S. (2024, April). BOSHLANG'ICH SINFLARDA SINFDAN TASHQARI MASHG 'ULOTLAR. In International conference on multidisciplinary science (Vol. 2, No. 4, pp. 27-32).
39. Akbarovna, I. S. (2024, April). BOSHLANG'ICH TA'LIMDA TA'LIM MASALASI. In International conference on multidisciplinary science (Vol. 2, No. 4, pp. 21-26).
40. Ikromova, S. A. (2023). FACTORS IN THE DEVELOPMENT OF IMMUNITY TO DESTRUCTIVE IDEAS IN ADOLESCENTS. Innovation in Science, Education and Technology.
41. Ikromova, S. (2023). Formation of ideological immunity to destructive information in teenagers. Modern science and research, 2(5), 1009-1014.
42. Ikromova, S. (2023). CONCEPT OF IDEOLOGY AND FORMATION OF IDEOLOGICAL IMMUNITY IN YOUTH STUDENTS. Modern Science and Research, 2(6), 1223-1226.
43. Ikromova, S. (2024). PEDAGOGIK TEXNOLOGIYA SHAKLLARI VA MAZMUNI. Multidisciplinary Journal of Science and Technology, 4(3), 918-924.
44. Akbarovna, I. S. (2023). Formation of Ideological Immunity to Destructive Information in Adolescents. American Journal of Public Diplomacy and International Studies (2993-2157), 1(10), 119-122.
45. Akbarovna, I. S. (2024). THE IMPORTANCE OF COMPARATIVE PEDAGOGY IN PRESCHOOL EDUCATION. MASTERS, 2(8), 22-27.
46. Akbarovna, I. S. (2024). O'QITUVCHINING KASBIY MALAKALARI. MASTERS, 2(8), 15-21.
47. Akbarovna, I. S. (2024). ЗНАЧЕНИЕ СРАВНИТЕЛЬНОЙ ПЕДАГОГИКИ В ДОШКОЛЬНОМ ОБРАЗОВАНИИ. PSIXOLOGIYA VA SOTSIOLOGIYA ILMIY JURNALI, 2(7), 14-20.
48. Akbarovna, I. S. (2024). ПРОФЕССИОНАЛЬНЫЕ НАВЫКИ УЧИТЕЛЯ. PSIXOLOGIYA VA SOTSIOLOGIYA ILMIY JURNALI, 2(7), 7-13.
49. Akbarovna, I. S. (2024). PROFESSIONAL SKILLS OF THE TEACHER. WORLD OF SCIENCE, 7(8), 1-7.
50. Akbarovna, I. S. (2024). МАКТАБГАЧА ТА'LIMDA Qiyosiy PEDAGOGIKANING AHAMIYATI. WORLD OF SCIENCE, 7(8), 8-13.
51. Akbarovna, I. S. (2024). SPORT O 'YINLARI REJASI ORQALI SOG 'LOM TURMUSH TARZINI SHAKLLANTIRISHNING PSIXOLOGIK OMILLAR. MASTERS, 2(5), 91-97.
52. Akbarovna, I. S. (2024). A HEALTHY FAMILY ENVIRONMENT AS A SOCIAL FACTOR IN PREPARING YOUNG PEOPLE FOR FAMILY LIFE. WORLD OF SCIENCE, 7(5), 529-535.
53. Akbarovna, I. S. (2024). ЗДОРОВАЯ СЕМЕЙНАЯ СРЕДА КАК СОЦИАЛЬНЫЙ ФАКТОР ПОДГОТОВКИ МОЛОДЕЖИ К СЕМЕЙНОЙ ЖИЗНИ. MASTERS, 2(5), 98-104.
54. Ikromova, S. (2024). FORMS AND CONTENT OF PEDAGOGICAL TECHNOLOGY. Multidisciplinary Journal of Science and Technology, 4(3), 933-939.



Date: 21stDecember-2024

55. Akbarovna, I. S. (2024). MASTERING THE BASICS OF PEDAGOGICAL SKILLS. Multidisciplinary Journal of Science and Technology, 4(3), 882-887.
56. Akbarovna, I. S. (2024). ПСИХОЛОГИЧЕСКИЕ ФАКТОРЫ ФОРМИРОВАНИЯ ЗДОРОВОГО ОБРАЗА ЖИЗНИ ЧЕРЕЗ ПЛАН СПОРТИВНЫХ ИГР. WORLD OF SCIENCE, 7(5), 521-528.
57. Akbarovna, I. S. (2024). SPORTCHILAR FAOLIYATINI O'RGANISHNING UMUMIY PSIXOLOGIK USULLARI. WORLD OF SCIENCE, 7(5), 536-543.
58. Akbarovna, I. S. (2024). PROCEDURE FOR CREATING PSYCHOLOGICAL TEST PROGRAMS. PEDAGOG, 7(6), 153-159.
59. Икромова, С. (2024). ФОРМЫ И СОДЕРЖАНИЕ ПЕДАГОГИЧЕСКОЙ ТЕХНОЛОГИИ. Multidisciplinary Journal of Science and Technology, 4(3), 925-932.
60. Икромова, С. А. (2024). ОСВОЕНИЕ ОСНОВ ПЕДАГОГИЧЕСКИХ НАВЫКОВ. Multidisciplinary Journal of Science and Technology, 4(3), 894-899.
61. Икромова, С. А. (2024). ВАЖНОСТЬ ФОРМИРОВАНИЯ МАТЕМАТИЧЕСКИХ ПОНЯТИЙ. Multidisciplinary Journal of Science and Technology, 4(3), 906-911.
62. Икромова, С. А. (2023). O'SMIRLARDA DESTRUKTIV AXBOROTLARGA NISBATAN MAFKURAVIY IMMUNITET HOSIL BO'LISHINING O'ZIGA XOS PSIXOLOGIK XUSUSIYATLARI: Ikromova Sitora Akbarovna Osiyo xalqaro universiteti assistenti. Образование и инновационные исследования международный научно-методический журнал, (10), 333-336.
63. Ikromova, S., & Ziyodullayeva, M. (2024). DEVIANT XULQ-ATVOR. Modern Science and Research, 3(11), 576-579.
64. Икромова, С., & Джумаева, Ф. (2024). ОРИЕНТИРЫ ОБРАЗОВАНИЯ В УЗБЕКИСТАНЕ И В ДРУГИХ СТРАНАХ. Modern Science and Research, 3(11), 540-546.
65. Икромова, С. А. (2024). ОСНОВЫ ПСИХОЛОГИЧЕСКОЙ СЛУЖБЫ. PSIXOLOGIYA VA SOTSIOLOGIYA ILMIY JURNALI, 2(4), 47-53.

