

## GANDBOLDA FUNKTSIONAL HARAKAT TAHLILI.

Yarasheva Dilnoza

Buxoro Davlat Universiteti

Sport Faoliyati va Pedagogika fakulteti

Sport faoliyati kafedrasи

Tayanch Doktorant (Phd)

Email: [d.i.yarasheva@buxdu.uz](mailto:d.i.yarasheva@buxdu.uz)

<https://doi.org/10.5281/zenodo.10992359>

**Annotatsiya.** Sportchining sport turi bilan shug'ullanish ularga yaxshi natijalarga erishishga yordam beradi va jarohatlarni kamaytirish uchun zarur bo'lgan keng ko'lamlari tadbirlar tayyorlanishi kerak. Shu sababli sportdagi funksional harakatlar tahlili faollikdan oldingi skriningga kiritilishi kerak. Funktsional harakatni tahlil qilish u muhim harakatlarni bajarish uchun zarur qobiliyatga egami yoki yo'qmi. aniqlash maqsadida zarur.

**Kalit so'zlar:** Sport fizioterapiysi, FMS kinetik zanjir, mushaklarning sinergiyasi va motorli o'rGANISH usullarini, Funktsional harakat, Deep Squat testi. FMS -Funksional harakat ekrani.

## FUNCTIONAL MOVEMENT ANALYSIS IN HANDBALL.

**Abstract.** An athlete's participation in their sport will help them achieve better results, and a wide range of activities should be prepared to minimize injuries. Therefore, functional movement analysis in sports should be included in pre-activity screening. A functional movement analysis is whether or not he has the necessary ability to perform essential movements. necessary for identification purposes.

**Key words:** Sports physiotherapy, FMS kinetic chain, muscle synergy and motor learning methods, Functional movement, Deep Squat test. FMS - Functional Movement Screen.

## ФУНКЦИОНАЛЬНЫЙ АНАЛИЗ ДВИЖЕНИЙ В ГАНДБОЛЕ.

**Аннотация.** Занятия спортом помогут им добиться лучших результатов, и для снижения травматизма следует подготовить широкий спектр мероприятий. Таким образом, функциональный анализ движений в спорте должен быть включен в предварительный скрининг. Функциональный анализ движений позволяет определить, есть ли у него необходимая способность выполнять важные движения. необходимо для целей идентификации.

**Ключевые слова:** спортивная физиотерапия, кинетическая цепочка ФМС, методы мышечной синергии и двигательного обучения, функциональные движения, тест глубоких приседаний. FMS – Экран функциональных движений.

### Kirish

Ko'p hollarda Sportchilar salomatligi va bo'g'inlar va mushaklar uchun ishlash sohasida ishlaydigan mutaxassislar Ixtisoslashgan, izolyatsiya qilingan testni ishlab chiqish masalasi ikkinchi planga o'tkazildi. sport ko'rsatkichlari va birinchi funksional harakatni baholamasdan, maxsus qobiliyatlarni baholash. amalga oshirdi. Sportchilar salomatligi va ishlashi sohasida ishlaydiganlar turli tadbirlarga tayyorgarlik ko'rish uchun asosiy harakatlarni baholash. U nima

qilish kerakligini bilishi kerak. An'anaviy sport tibbiyoti modelida ishtirok etishdan oldin tekshiruvlar baholash bilan davom etadi. Ushbu tizimli jarayon ishtirokchini o'z ichiga oladi.

Faoliyatga tayyor yoki yo'qligini aniqlashning o'zi etarli emas. Umuman, ekspertlar orasida asosiy harakatning asosi va ishtirokchilarning faollik darajasi. Ularni qanday yo'naltirish mumkinligi haqida umumiy fikr bo'lishi kerak. Qo'shilishdan oldin Skrining yoki ishslash skrinining asosiy maqsadi shikastlanishlarni kamaytirishdir, samaradorlikni oshirish va hayot sifatini yaxshilash. Funktsional harakat tahlili ushbu ehtiyojlar uchun yaratilgan. FMS 7 ta asosiy harakatdan iborat. Ushbu harakatlar muvozanat va barqarorlik o'rtasidagi uyg'unlikni talab qiladi.

Ushbu harakat maqshlari tufayli oddiy lokomotor, manipulyativ va barqarorlashtiruvchi.

Harakatlarning bajarilishi bo'yicha kuzatiladigan natijalarga erishish mumkin. Ko'p Sinov tajribasi shuni ko'rsatdiki, hatto yuqori darajadagi sportchilar ham Ular oddiy harakatlarni bajarishda qiynalardi. Bu sportchilar yuqori saviyada Faoliyatda muvaffaqiyatga erishish uchun samarali va qiyin harakatlar, oddiyroq harakatlar amalga oshirish uchun qurbanlik qiladi.

Kompensatsiyalar davom etsa, zaif harakat maqshlari, zaif biomexanik xususiyatlar, bu esa o'z navbatida potentsial mikroga olib keladi yoki makro-travmatik jarohatlarga olib keladi. FMS testlari asosiy proprioceptiv va kinestetik xabardorlik tamoyillariga asoslanadi. rivojlangan. Har bir test tananing kinetik zanjir tizimi uchun zarur bo'lgan funktsiyani o'z ichiga oladi. Oldingi jarohatlar natijasida davolanmagan yoki to'liq davolanmagan jarohatlar muammolar proprioceptiv kirishning pasayishiga olib keladi, bu esa harakatchanlikka olib keladi va barqarorlik, assimetriya va oxir-oqibat kompensatsion harakatlarning pasayishiga olib keladi. yuzaga kelishiga sabab bo'ladi. FMS kinetik zanjirning qaysi nuqtasida ishtirokchilar kompensatsiya qilishlarini aniqlaydi. Ular nima qilayotganlarini, o'ng va chap tarafdagи nomutanosibliklarni ochib berishni maqsad qilgan, Bu harakatchanlik va barqarorlik muammolarini tekshiradigan tizim. FMS ning 7 parametri tananing harakat qilish qobiliyatini ochib beradi. Kinetik Zanjirning bu harakati tananing harakat shakllarini yanada samaraliroq ochib beradi. Uni olib tashlashga imkon beradi

### FMS reytingi

FMS reytingi to'rt xil imkoniyatdan iborat. 0-3 ball oralig'ida 3 eng yaxshi ball hisoblanadi.

Agar ishtirokchi test paytida istalgan vaqtida og'riqni his qilsa, 0 ball beriladi. Og'riqli joy qayd etiladi. Agar ishtirokchi harakatni bajara olmasa yoki Agar o'yinchi kerak Biroq, agar u buni tovon bilan qilgan bo'lsa, 2 ball beriladi. Agar ishtirokchi harakatni to'liq, to'xtovsiz bajargan bo'lsa, 3 ball beriladi. Maxsus Agar sharhlar bo'lsa, ular qayd etiladi. FMS testlarining 5 tasi o'ng va chap tomon uchun alohida bo'lib, ikkala tomonni ham sinab ko'rish muhimdir. Ikki tomon o'rtasidagi past ball bu harakatni anglatadi. U umumiyl ball sifatida qayd etiladi. Uchta sinov;

Bundan tashqari, u kliring testlarini o'z ichiga oladi. Ushbu testlar og'riqli; Agar og'riq bo'lsa, ijobjiy (+), og'riq bo'lmasa, salbiy (-) deb yoziladi. Bu Tozalash testlari tegishli bo'limning balliga ta'sir qiladi. Agar test ijobjiy bo'lsa, tegishli Epizodning bahosi ham 0 sifatida qayd etilgan. Barcha sinovlar Maksimal ball - 21. natijasida mavjud kerakli pozitsiyani topa olmasa, bitta ochko beriladi. Inson harakatni amalga osh

### 1. Deep Squat

Deep Squat testining maqsadi

Squats ko'plab harakatlar, ayniqsa pastki ekstremitalarni o'z ichiga olgan harakatlar uchun amal qiladigan harakatdir. Ushbu harakat son, tizza va to'piqning ikki tomonlama,

nosimmetrik va funktsional harakatchanligini baholaydi. O'lchov tayoqchasi boshning tepasida ushlab turiladi. Yelka va torakal Bu orqa miya harakatchanligi haqida tushuncha beradi

#### Deep Squat testi tushuntirildi

Tekshiriladigan odam boshlang'ich pozitsiyasini oyoqlari elkalarining kengligida bir-biridan ajratib turadi va sagittal tekislikda o'rnatiladi. Boshdagi o'lchov tayoqchasi. Sekin-asta ko'tarilgan holatda cho'kadi. Bu holatda poshnalar yerda qoladi. Ko'krak va yuz bir-biriga qaragan bo'lishi kerak va yog'och tayoq to'g'ridan-to'g'ri boshga qo'yilishi kerak uzaytirilishi kerak. Maksimal uch marta takrorlash mumkin. 3 ball uchun talablar bo'lsa Agar buning iloji bo'lmasa, ishtirokchidan tovonlari ostidagi  $2 \times 6$  dyuymli blok bilan bir xil harakatni bajarishini so'rang. Takrorlash talab qilinadi. Agar ballga shubha tug'ilsa, pastroq ball qo'yilishi kerak.

#### Deep Squat testining klinik ta'siri

Bu harakatni to'g'ri bajara olish yopiq kinetik zanjirda mumkin. Oyoq bilagi zo'r egilishi, tizza va son egilishi, ko'krak umurtqasining kengayishi, Bu elka bo'g'imining fleksyon va o'g'irlanishini talab qiladi. Agar bu test muvaffaqiyatli bo'lmasa, Buning sababi bo'g'imlarning harakatchanligi muammosi bo'lishi mumkin. Agar ishtirokchi 3 dan kam ball bo'lsa, bu bo'g'inlarni qo'shimcha ravishda tekshirish kerak.

#### Xulosa

Chaqqonlik ko'plab sport turlari kabi gandbolda ham muhim mahoratdir. Bu sport muvaffaqiyatiga bevosita ta'sir ko'rsatadigan xususiyatlardan biridir. keskin o'zgarishlarga Javob berish qobiliyati sifatida baholanishi mumkin bo'lgan reaktsiya vaqt ham Bu chaqqonlik testi natijalari bilan bog'liq bo'lgan tadqiqotlar mavjud (82). Shuning uchun FMSning past balli sport muvaffaqiyatiga ham ta'sir qilishi mumkin bo'lgan holat. Khorasani va boshqalar (83) Illinoys chaqqonlik testini futbolchilar vao'rtacha qiymat 14,90 sek, Hachana va boshqalar (66) 105 sportchida o'tkazilgan tadqiqotda. Ushbu testning o'rtacha balli 16,30 soniyani tashkil etdi. sifatida xabar berdilar. Hachana va boshqalar. (68) Illinoys shtatidagi futbol, regbi va gandbolchilarining chaqqonlik testi natijalari Bizning tadqiqotimizda topilgan chaqqonlik natijalari ularning tadqiqotidagi natijalar bilan solishtirganda qiymatlardan yaxshiroqdir. Bu natijalar mamlakatimiz gandbolchilarining sport mahoratini namoyon etadi. Bu parametrlar bo'yicha yaxshilanishga ochiq ekanligini ko'rsatadi. Bizning tadqiqotimizda FMS ballari va chaqqonlik o'rtasidagi bog'liqlik tekshirilganda, Statistik jihatdan muhim ijobiy munosabat aniqlandi. Chaqqonlik testi, to'satdan tezlashish va Ushbu harakatlar yo'nalishni keskin o'zgartirishni talab qilganligi sababli, to'g'ri ishlaydigan kinetik zanjir talab qilinadi. Bu og'riqsiz va funktsional harakatni talab qiladi. FMS balli past bo'lgan odam Sportchining epchillik ko'rsatkichining pasayishini shunday izohlash mumkin.

#### REFERENCES

1. Yarasheva, D. (2024). TYPES AND EFFECTIVENESS OF FITNESS TRAINING. Modern Science and Research, 3(1), 299–307. Retrieved from <https://inlibrary.uz/index.php/science-research/article/view/28041>
2. Yarasheva, D. (2024). SUBJECTIVE AND SPORT. Modern Science and Research, 3(1). Retrieved from <https://inlibrary.uz/index.php/science-research/article/view/28960>

3. Yarasheva, D. (2024). SPONSORSHIP RELATIONSHIPS IN SPORTS MARKETING. Modern Science and Research, 3(2), 337–345. Retrieved from <https://inlibrary.uz/index.php/science-research/article/view/29029>
4. Dilnoza, Y. (2023). SUB'YEKTIV VA SPORT.
5. Dilnoza, Y. (2024). SOG'LOMLASHTIRUVCHI MASHG'ULOTLARNING TURLARI VA SAMARADORLIGI.
6. Yarasheva Dilnoza. (2023). SPORTS PEDAGOGY BASED ON PSYCHOMOTOR AND DEVELOPMENT THEORIES. American Journal Of Social Sciences And Humanity Research, 3(12), 26–41. <https://doi.org/10.37547/ajsshr/Volume03Issue12-05>
7. Yarasheva Dilnoza. (2023). PHYSIOLOGICAL REACTIONS TO INTERNAL LOAD STUDY. American Journal Of Social Sciences And Humanity Research, 3(12), 47–56. <https://doi.org/10.37547/ajsshr/Volume03Issue12-07>
8. Yarasheva Dilnoza. (2023). SPORTS, CULTURE AND SOCIETY. American Journal Of Social Sciences And Humanity Research, 3(11), 152–163. <https://doi.org/10.37547/ajsshr/Volume03Issue11-17>
9. Yarasheva, D. (2024). IN HANDBALL GYMS: SAFE PHYSICAL EXERCISES AND INJURY PREVENTION. Modern Science and Research, 3(2), 23–32. Retrieved from <https://inlibrary.uz/index.php/science-research/article/view/30639>
10. Yarasheva, D. (2024). USE OF HANDBALL INDUSTRY AND TECHNOLOGY. Modern Science and Research, 3(2), 9–Retrieved from <https://inlibrary.uz/index.php/science-research/article/view/30575>
11. Yarasheva, D. (2024). THE IMPORTANCE OF ENDURANCE IN HANDBALL. International Bulletin of Engineering and Technology, 4(3), 73–77. Retrieved from <https://internationalbulletins.com/intjour/index.php/ibet/article/view/1406>
12. Dilnoza, Y. (2023). GANDBOL MURABBIYLARINING FIKRIGA KO'RA, SPORTCHILARNING KO'RSATKICHALARIGA PSIXOLOGIK TA'SIR ETUVCHI OMILLAR. Research and Publications, 1(1), 86-100.
13. Dilnoza, Y. (2023). FOCUS ON AEROBIC (LI) TYPE OF MOTOR ACTIVITY BASED ON FITNESS PROGRAMS. American Journal Of Social Sciences And Humanity Research, 3(11), 81-90.
14. Yarasheva Dilnoza. (2023). METHODS OF ORGANIZING NON-TRADITIONAL FITNESS CLASSES. American Journal Of Social Sciences And Humanity Research, 3(11), 61–72. <https://doi.org/10.37547/ajsshr/Volume03Issue11-09>
15. Yarashova, D. (2023). THE IMPACT OF PLAYING SPORTS IN EARLY CHILDHOOD ON SOCIAL DEVELOPMENT. Modern Science and Research, 2(10), 230–234. Retrieved from <https://inlibrary.uz/index.php/science-research/article/view/24325>
16. Ярашева, Д. (2023). СТИЛИ ОРГАНИЗАЦИИ НЕТРАДИЦИОННЫХ ОЗДОРОВИТЕЛЬНЫХ ЗАНЯТИЙ. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 19(5), 6-10.
17. Дильноза Ярашева. (2023). ФИТНЕС КАК ОЗДОРОВИТЕЛЬНАЯ ДЕЯТЕЛЬНОСТЬ. Proceedings of International Conference on Modern Science and Scientific Studies, 2(283). Retrieved from <https://econferenceseries.com/index.php/icmsss/article/view/1777>
18. Yarasheva, D. (2022). BOLALARDA MASHQ QILISHNING AHAMIYATI. PEDAGOGS jurnalı, 19(1), 139-142.

19. Yarashova, D. (2023). STRENGTH TRAINING AND STRENGTH TRAINING IN CHILDREN. Modern Science and Research, 2(9), 211–215. Retrieved from <https://inlibrary.uz/index.php/science-research/article/view/24177>
20. Yarasheva Dilnoza Ismail Qizi. (2023). TECHNICAL AND TACTICAL SKILLS IN SPORTS. American Journal Of Social Sciences And Humanity Research, 3(10), 105–116. <https://doi.org/10.37547/ajsshr/Volume03Issue10-16>
21. Nuriddinov, A. (2023). Sport sotsiologiyasi: uning o'tmishdan hozirgi kungacha rivojlanishi va kelajakka umidlari. Research and Publications, 1(1), 74-85.
22. Nuriddinov, A. (2024). IMPACT OF GLOBALIZATION AND SPORTS. International Bulletin of Engineering and Technology, 4(3), 78-83.
23. Nuriddinov, A. (2024). A COMPILATION STUDY OF INNOVATION IN SPORT. Modern Science and Research, 3(2), 346-352.
24. Nuriddinov, A. (2024). KARL MARX AND THE THOUGHTS OF CLASS THEORY ON SPORTS CULTURE. Modern Science and Research, 3(1).
25. Nuriddinov, A. (2024). THE CONNECTION BETWEEN SPORT AND PHILOSOPHY. Modern Science and Research, 3(1), 308-317.
26. Nuriddinov, A. (2023). MANAGING THE PROCESS OF TALENT DEVELOPMENT IN SPORTS ANATASIA. American Journal Of Social Sciences And Humanity Research, 3(11), 121-132.
27. Nuriddinov, A. (2023). PHYSICAL ACTIVITY, HEALTH AND ENVIRONMENT. American Journal Of Social Sciences And Humanity Research, 3(12), 189-200.
28. Nuriddinov, A. (2023). Use Of Digital Sports Technologies in Sports Television. American Journal Of Social Sciences And Humanity Research, 3(11), 208-219.
29. Nuriddinov, A. (2023). A STUDY OF THE AGGRESSIVE STATUS OF FOOTBALL FANS. American Journal Of Social Sciences And Humanity Research, 3(11), 73-80.
30. Nuriddinov, A. (2023). THE ROLE OF FAIR PLAY IN PHYSICAL EDUCATION. Modern Science and Research, 2(10), 244-250.
31. Nuriddinov, A., Sayfiyev, H., & Sirojev, S. (2023). WHY FOOTBALL IS THE FIRST SPORT THAT COMES TO MIND TODAY. Modern Science and Research, 2(9), 200-203.
32. Sirojev, S., Nuriddinov, A., & Sayfiyev, H. (2023). THE CONCEPT AND IMPORTANCE OF SHOOTING SPEED IN VOLLEYBALL. Modern Science and Research, 2(9), 187-191.
33. Bahodir o'g'li, N. A. (2023). YEVRÖPA MAMLAKLARIDA YUQORI MALAKALI FUTBOLCHI VA MURABBIYLARNI TEXNIK TAKTIK HARAKATLARINI TADBIQ QILISH METODIKASI. THEORY AND ANALYTICAL ASPECTS OF RECENT RESEARCH, 2(14), 187-189.
34. Sirojev Shoxrux. (2023). BEHAVIORAL CHARACTERISTICS, PRINCIPLES AND WORKING METHODS OF COACHES. American Journal Of Social Sciences And Humanity Research, 3(11), 50–60.
35. Shoxrux, S. (2023). VOLEYBOLDA OTISH TEZLIGI TUSHUNCHASI VA AHAMIYATI. Новости образования: исследование в XXI веке, 1(11), 913-917.
36. Sirojev, S. (2023). THE CONCEPT AND IMPORTANCE OF SHOOTING SPEED IN VOLLEYBALL. Modern Science and Research, 2(9), 187-191.

37. Sirojev Shoxrux. (2023). THE CONNECTION BETWEEN SPORTS AND LOGIC. American Journal Of Social Sciences And Humanity Research, 3(11), 97–106.
38. Sirojev Shoxrux. (2023). APPLICATIONS OF SPORT PSYCHOLOGY IN THE WORLD. American Journal Of Social Sciences And Humanity Research, 3(11), 107–120.
39. Sirojev, S. (2023). TEACHING ACTIVITIES AND PHILOSOPHY IN PHYSICAL EDUCATION AND SPORTS. Modern Science and Research, 2(10), 235–243.
40. Sirojev Shoxrux. (2023). THE IMPORTANCE OF MUTUAL RESPECT AND KINDNESS IN SPORTS. American Journal Of Social Sciences And Humanity Research, 3(12), 215–225.
41. Sirojev, S. (2024). EFFECTS OF SOCIAL PHOBIA ON SPORTS. Modern Science and Research, 3(1), 318–326.
42. Sirojev Shoxrux. (2023). STUDYING SPORTS PSYCHOLOGY. American Journal Of Social Sciences And Humanity Research, 3(12), 176–188.
43. Sirojev, S. (2024). EFFECTS OF WARM-UP AND STRETCHING EXERCISES ON PROPRIOCEPTION AND BALANCE. Modern Science and Research, 3(2), 353–361.
44. Fayzullo o'g'li, S. S. (2023). YEVROPA ITTIFOQI VA SPORT. International journal of scientific researchers, 2(2), 7-16.
45. Sirojev, S. (2024). SPORTS MASSAGE. International Bulletin of Engineering and Technology, 4(3), 84-88.
46. Azamat Orunbayev. (2023). PANDEMIYA DAVRIDA MOBIL SOG'LIQNI SAQLASH VA FITNES DASTURLARI (PROGRAM). Research Focus International Scientific Journal, 2(7), 37–42. Retrieved from <https://refocus.uz/index.php/1/article/view/414>
47. Azamat Orunbayev. (2023). APPROACHES, BEHAVIORAL CHARACTERISTICS, PRINCIPLES AND METHODS OF WORK OF COACHES AND MANAGERS IN SPORTS. American Journal Of Social Sciences And Humanity Research, 3(11), 133–151. <https://doi.org/10.37547/ajsshr/Volume03Issue11-16>
48. Azamat Orunbayev. (2023). GLOBALIZATION AND SPORTS INDUSTRY. American Journal Of Social Sciences And Humanity Research, 3(11), 164–182.
49. Azamat Orunbayev. (2023). SOCIAL SPORTS MARKETING. American Journal Of Social Sciences And Humanity Research, 3(12), 121–134. <https://doi.org/10.37547/ajsshr/Volume03Issue12-17>
50. Azamat Orunbayev. (2023). RECOVERY STRATEGY IN SPORTS. American Journal Of Social Sciences And Humanity Research, 3(12), 135–147. <https://doi.org/10.37547/ajsshr/Volume03Issue12-18>