



Kaunas, Lithuania
24th of May 2024

International workshop
SCIENCE & LEISURE
BUILD BRIDGES TOGETHER
2nd Edition



Funded by
the European Union

ERASMUS BLENDED
INTENSIVE PROGRAM

EDITORS

ANGEL-ALEX HĀISAN	ESTEFANÍA CASTILLO VIERA
VÂNIA BRANDÃO LOUREIRO	IZABELA GÓRSKA
KRISTINA MEJERYTĖ-NARKEVIČIENĖ	DOMENICO MONACIS
DARIO COLELLA	CARLOS HERVÁS-GÓMEZ

BOOK OF ABSTRACTS

International workshop

SCIENCE AND LEISURE BUILD BRIDGES TOGETHER

2nd Edition

Venue:

Lithuanian Sports University, Kaunas

Official opening 09:00 AM (Kaunas time), 24th of May 2024

Partial or complete reproduction, by any means, without prior written consent of the authors and the publishing house is strictly prohibited.

ISSN 3045-2783
ISSN-L 3045-2783

© Authors, 2024, All rights reserved

Printing done at
„1 Decembrie 1918” University of Alba Iulia Printing House

„1 Decembrie 1918” University of Alba Iulia
Aeternitas Publishing House
13 Unirii Street
RO 510009 Alba Iulia
Tel: 0258811412, ext.122
E-mail: editura_aeternitas@yahoo.com
www.editura-aeternitas.ro

BOOK OF ABSTRACTS

International workshop

SCIENCE AND LEISURE BUILD BRIDGES TOGETHER

2nd Edition

Venue:

Lithuanian Sports University, Kaunas

Official opening 09:00 AM (Kaunas time), 24th of May 2024

Editors

Angel-Alex Häisan

Estefanía Castillo Viera

Vânia Brandão Loureiro

Izabela Górska

Kristina Mejerytė-Narkevičienė

Domenico Monacis

Dario Colella

Carlos Hervás-Gómez

AETERNITAS PUBLISHING HOUSE

ALBA IULIA

2024

CONTENTS

SCIENTIFIC COMMITTEE	9
ORGANIZING COMMITTEE	11
PROGRAM	13
ABSTRACTS	17
PHYSICAL EDUCATION CLASSES, A WORK FRAME FOR PREVENTION OF CHILD SEXUAL ABUSE	
TOSCANO Jesus, MONTES Carmen, PEREZ Marco, CASTILLO Estefanía	19
PHYSICAL EXERCISE INTERVENTION IN HOME CARE SERVICE. THE CUID@R + PROJECT	
SANTANA Andreia, RIBEIRO Alexandra, MIRANDA Daniela, GOMES Margarida, BENTO Pedro, PAIXÃO Paulo, LOUREIRO Vânia	21
NATURE SPORTS PRACTITIONERS – ANALYSIS OF THE IMPACT IN BEJA DISTRICT	
GONÇALVES Stefano, AMBRÓSIO José, MURTA Luís, BENTO Pedro ..	23
RESISTANCE TRAINING PROTOCOL: DESIGN A PROGRAM FOR UP AGAIN SENIOR OLDER ADULTS BASED ON CERT	
MARTINS Ricardo, BENTO André, RODRIGUES Diogo, LOUREIRO Nuno, GOMES Margarida, LOUREIRO Vânia.....	25
RELIABILITY OF THE OBSERVATION AND ANALYSIS OF THE BARANI LEAP AND BACKFLIP IN GYMNASTICS	
ANTUNES Catarina, SILVA Gonçalo, BENTO Débora, PITA Inês, PAIXÃO Paulo.....	27
IMPORTANCE OF USER-GENERATED CONTENT IN CHOOSING LEISURE SERVICES	
LATVYS Aurimas, MEJERYTĖ-NARKEVIČIENĖ Kristina.....	29
USER PRIORITIES CHOOSING BETWEEN BASKETBALL ORGANIZATION WEBSITES AND SOCIAL MEDIA	
KUZMINSKIS Lukas, ŪSAS Antanas	31

THE IMPACT OF PHYSICAL ACTIVITIES ON PSYCHOLOGICAL WELL-BEING

WAŁGA Hanna 33

CONTEMPORARY PROBLEMS OF PHYSICAL EDUCATION

RADOSŁAW Chaładaj..... 35

MOVEMENT REEDUCATION AS A PREVENTION METHOD FOR SHOULDER INJURIES IN OVERHEAD SPORTS

AUGUSTYN Michał 37

FATIGUE NOWADAYS

DZIGA Ewa..... 39

THE IMPACT OF MASSAGE THERAPY ON ENHANCING MOBILITY IN PROFESSIONAL FOOTBALL PLAYERS

BARRON Yann..... 41

INFLUENCE OF EXERCISES ON VIBRATION PLATFORMS ON CAVUS FOOT

BERINDEI Alexandra-Maria..... 43

THE IMPORTANCE OF MOVEMENT GAMES AND UTILITARIAN-APPLICATIVE PATHS FOR THE IMPROVEMENT OF MOTOR SKILLS OF PRIMARY SCHOOL CHILDREN

BOTA Denisa..... 45

INCREASING TRAINING EFFICIENCY OF A MINI BASKETBALL TEAM IN PRIMARY SCHOOLS

FODOR Darius Florin 47

IMPROVING BALANCE OF ELDERLY TO PREVENT FALLS

HORVATH Daniel..... 49

THE PREOPERATIVE PERIOD OF SCOLIOSIS

LODROMAN Adrian-Cristian 51

SHOULDER RECOVERY AFTER ANTERIOR CHEST TRAUMA

MAN Maria-Andra..... 53

POSTURAL ASSESSMENT OF FITNESS PRACTITIONERS

PALADI Elisei, NICOLESU-ȘEUȘAN Nicoleta, NICOLESCU-ȘEUȘAN Lucian..... 55

MASSAGE AND PHYSIOTHERAPY IN LUMBAR DISCOPATHY

RADU Vlad-Nicodim..... 57

IMPROVING KNEE PAIN THROUGH KINESIOTHERAPY

TODEA Claudia-Ioana 59

KNEE RECOVERY IN CHONDROPATHY

VARVARA Alexandra-Adina..... 61

STREETBALL, A MULTIFACETED SPORT

VINȚAN Robert-Denis..... 63

IMPROVING MOBILITY IN PARKINSON'S DISEASE

SCROBOTĂ Robert..... 65

IMPORTANCE OF THE PSYCHOLOGICAL FACTOR IN THE KINESIOTHERAPEUTIC RECOVERY

LUNGU Maxim..... 67

SCIENTIFIC COMMITTEE

ANGEL-ALEX Hăisan, Assoc. Prof., Ph.D., "1 Decembrie 1918" University of Alba Iulia, Romania

ESTEFANÍA Castillo, Prof., Ph.D., University of Huelva, Spain

JESÚS Sáez, Assoc. Prof., Ph.D., University of Huelva, Spain

VÂNIA Loureiro, Assoc. Prof., Ph.D., Polytechnic University of Beja, Portugal

PAULO Paixão, Assoc. Prof., Ph.D., Polytechnic University of Beja, Portugal

NUNO Loureiro, Assoc. Prof., Ph.D., Polytechnic University of Beja, Portugal

PEDRO Bento, Assoc. Prof., Ph.D., Polytechnic University of Beja, Portugal

IZABELA Górska, Lecturer, Ph.D., The Bronislaw Czech University School of Physical Education, Cracow, Poland

KRISTINA Mejeryté-Narkevičienė, Lecturer, Lithuanian Sports University, Kaunas, Lithuania

ANTANAS Ūsas, Lecturer, Ph.D., Lithuanian Sports University, Kaunas, Lithuania

DOMENICO Monacis, researcher, Ph.D., Pegaso Telematic University, Italy

DARIO Colella, Prof., University of Salento, Italy

LIANA CARMEN Nagy, Lecturer, Ph.D., Brunel University London, United Kingdom

SABINE Goeminne, Lecturer, VIVES University College, Belgium

CARLOS Hervás-Gómez, Prof., Ph.D., University of Seville, Spain

VLAD TEODOR Grosu, Assoc. Prof., Ph.D., Polytechnic University of Cluj-Napoca, Romania

EMILIA FLORINA Grosu, Prof., Ph.D., "Babeş-Bolyai" University of Cluj-Napoca, Romania

DAN Monea, Assoc. Prof., Ph.D., "Babeş-Bolyai" University of Cluj-Napoca, Romania

CODRUTA FLORINA Bulduş, Lecturer, Ph.D., "Babeş-Bolyai" University of Cluj-Napoca, Romania

SANTA Cristian, Assoc. Prof., Ph.D., "Babeş-Bolyai" University of Cluj-Napoca, Romania

ORGANIZING COMMITTEE

ANGEL-ALEX Hăisan, Assoc. Prof., Ph.D., “1 Decembrie 1918” University of Alba Iulia, Romania

CRISTINA MARIA Man, Assoc. Prof., Ph.D., “1 Decembrie 1918” University of Alba Iulia, Romania

MIRCEA-NICOLAE Ordean, Assoc. Prof., Ph.D., “1 Decembrie 1918” University of Alba Iulia, Romania

SORIN Şimon, Lecturer, Ph.D., “1 Decembrie 1918” University of Alba Iulia, Romania

CODRUŢA Negriu Tiuca, Lecturer, Ph.D., “1 Decembrie 1918” University of Alba Iulia, Romania

GABRIEL ALEXANDRU Petrovici, Lecturer, Ph.D., “1 Decembrie 1918” University of Alba Iulia, Romania

PETRONELA LACRAMIOARA Hăisan, Assist. Prof., Ph.D., “1 Decembrie 1918” University of Alba Iulia, Romania

NICOLETA ADINA Nicolescu-Seusan, Assist. Prof., Ph.D., “1 Decembrie 1918” University of Alba Iulia, Romania

ESTEFANÍA Castillo, Prof., Ph.D., University of Huelva, Spain

JESÚS Sáez, Assoc. Prof., Ph.D., University of Huelva, Spain

VÂNIA Loureiro, Assoc. Prof., Ph.D., Polytechnic University of Beja, Portugal

PAULO Paixão, Assoc. Prof., Ph.D., Polytechnic University of Beja, Portugal

IZABELA Górska, Lecturer, Ph.D., The Bronislaw Czech University School of Physical Education, Cracow, Poland

MAGDALENA Majer, Lecturer, Ph.D., The Bronislaw Czech University School of Physical Education, Cracow, Poland

DOMENICO Monacis, researcher, Ph.D., Pegaso Telematic University, Italy

KRISTINA Mejerytė-Narkevičienė, Lecturer, Lithuanian Sports University, Kaunas, Lithuania

ANTANAS Ūsas, Lecturer, Ph.D., Lithuanian Sports University, Kaunas, Lithuania

PROGRAM

24th of May 2024
(Lithuanian time zone)

09:00 – 09:10

Opening speech – GUEST SPEAKER

Prof. dr. EDMUNDAS Jasinskas

Vice-rector for Research, Lithuanian Sports University, Lithuania

CHAIRMAN

ANTANAS Ūsas

Lithuanian Sports University, Lithuania

09:10 – 09:20

**PHYSICAL EDUCATION CLASSES, A
WORK FRAME FOR PREVENTION OF
CHILD SEXUAL ABUSE**

*Toscano Jesus, Montes Carmen, Perez
Marco, Castillo Estefanía
University of Huelva, Spain*

09:20 – 09:30

**PHYSICAL EXERCISE INTERVENTION
IN HOME CARE SERVICE. THE CUID@R
+ PROJECT**

*Santana Andreia, Ribeiro Alexandra,
Miranda Daniela, Gomes Margarida,
Bento Pedro, Paixão Paulo, Loureiro
Vânia
Polytechnic University of Beja,
Portugal*

09:30 – 09:40

**NATURE SPORTS PRACTITIONERS –
ANALYSIS OF THE IMPACT IN BEJA
DISTRICT**

*Gonçalves Stefano, Ambrósio José,
Murta Luísa, Bento Pedro
Polytechnic University of Beja,*

Portugal

09:40 – 09:50

**RESISTANCE TRAINING PROTOCOL:
DESIGN A PROGRAM FOR UP AGAIN
SENIOR OLDER ADULTS BASED ON
CERT**

*Martins Ricardo, Bento André,
Rodrigues Diogo, Loureiro Nuno,
Gomes Margarida, Loureiro Vânia
Polytechnic University of Beja,
Portugal*

09:50 – 10:00

**RELIABILITY OF THE OBSERVATION
AND ANALYSIS OF THE BARANI LEAP
AND BACKFLIP IN GYMNASTICS**

*Antunes Catarina, Silva Gonçalo, Bento
Débora, Pita Inês, Paixão Paulo
Polytechnic University of Beja,
Portugal*

10:00 – 11:10

**IMPORTANCE OF USER-GENERATED
CONTENT IN CHOOSING LEISURE
SERVICES**

Latvys Aurimas, Mejerytė-Narkevičienė

Book of abstracts

International workshop - Science and Leisure build bridges together, 2nd Edition

24th of May 2024 – Kaunas, Lithuania

Kristina
Lithuanian Sports University,
Lithuania

11:10 – 11:20

*USER PRIORITIES CHOOSING
BETWEEN BASKETBALL
ORGANIZATION WEBSITES AND
SOCIAL MEDIA*

*Kuzminskis Lukas, Ūsas Antanas
Lithuanian Sports University,
Lithuania*

11:20 – 11:30

*THE IMPACT OF PHYSICAL ACTIVITIES
ON PSYCHOLOGICAL WELL-BEING*

*Wałga Hanna
The Bronislaw Czech University School
of Physical Education, Cracow, Poland*

11:30 – 11:40

*CONTEMPORARY PROBLEMS OF
PHYSICAL EDUCATION*

*Radostaw Chaładaj
The Bronislaw Czech University School
of Physical Education, Cracow, Poland*

11:40 – 11:50

*MOVEMENT REEDUCATION AS A
PREVENTION STRATEGY FOR
SHOULDER INJURIES IN OVERHEAD
SPORT*

*Augustyn Michał
The Bronislaw Czech University School*

of Physical Education, Cracow, Poland

11:50 – 12:00

FATIGUE NOWADAYS

*Dziga Ewa
The Bronislaw Czech University School
of Physical Education, Cracow, Poland*

12:00 – 12:10

*THE IMPACT OF MASSAGE THERAPY
ON ENHANCING MOBILITY IN
PROFESSIONAL FOOTBALL PLAYERS*

*Barron Yann
„1 Decembrie 1918” University of Alba
Iulia, Romania*

12:10 – 12:20

*INFLUENCE OF EXERCISES ON
VIBRATION PLATFORM ON CAVUS
FOOT*

*Berindei Alexandra-Maria
„1 Decembrie 1918” University of Alba
Iulia, Romania*

12:20 – 12:30

*THE IMPORTANCE OF MOVEMENT
GAMES AND UTILITARIAN-
APPLICATIVE PATHS FOR THE
IMPROVEMENT OF MOTOR SKILLS OF
PRIMARY SCHOOL CHILDREN*

*Bota Denisa
„1 Decembrie 1918” University of Alba
Iulia, Romania*

12:30 – 13:30

Lunch break

13:00 – 13:10

*INCREASING TRAINING EFFICIENCY
OF A MINI BASKETBALL TEAM IN*

PRIMARY SCHOOLS

*Fodor Darius Florin
„1 Decembrie 1918” University of Alba*

Iulia, Romania

13:10 – 13:20

IMPROVING BALANCE OF ELDERLY TO PREVENT FALLS

Horvath Daniel

„1 Decembrie 1918” University of Alba

Iulia, Romania

13:20 – 13:30

THE PREOPERATIVE PERIOD OF SCOLIOSIS

Lodroman Adrian-Cristian

„1 Decembrie 1918” University of Alba

Iulia, Romania

13:30 – 13:40

SHOULDER RECOVERY AFTER ANTERIOR CHEST TRAUMA

Man Maria-Andra

„1 Decembrie 1918” University of Alba

Iulia, Romania

13:40 – 13:50

POSTURE ASSESMENT OF FITNESS PRACTITIONERS

Paladi Elisei, Nicolescu-Şeuşan

Nicoleta, Nicolescu-Şeuşan Lucian

„1 Decembrie 1918” University of Alba

Iulia, Romania

13:50 – 14:00

MASSAGE AND PHYSIOTHERAPY IN LUMBAR DISCOPATHY

Radu Vlad-Nicodim

„1 Decembrie 1918” University of Alba

Iulia, Romania

14:00 – 14:10

IMPROVING KNEE PAIN THROUGH KINESIOTHERAPY

Todea Claudia-Ioana

„1 Decembrie 1918” University of Alba

Iulia, Romania

14:10 – 14:20

KNEE RECOVERY IN CHONDROPATHY

Varvara Alexandra-Adina

„1 Decembrie 1918” University of Alba

Iulia, Romania

14:20 – 14:30

STREETBALL, A MULTIFACETED SPORT

Vinţan Robert-Denis

„1 Decembrie 1918” University of Alba

Iulia, Romania

14:30 – 14:40

IMPROVING MOBILITY IN PARKINSON'S DISEASE

Scrobotă Robert

„1 Decembrie 1918” University of Alba

Iulia, Romania

14:40 – 14:50

IMPORTANCE OF THE PSYCHOLOGICAL FACTOR IN THE KINESIOTHERAPEUTIC RECOVERY

Lungu Maxim

„1 Decembrie 1918” University of Alba

Iulia, Romania

14:50 – 15:00

Closing speech

ANGEL-ALEX Häisan

Coordinator of the BIP “Science and leisure build bridges together”

„1 Decembrie 1918” University of Alba Iulia, Romania

ABSTRACTS

PHYSICAL EDUCATION CLASSES, A WORK FRAME FOR PREVENTION OF CHILD SEXUAL ABUSE

TOSCANO Jesus^a, **MONTES** Carmen^b, **PEREZ** Marco^a, **CASTILLO**
Estefanía^c

Abstract

The aim of this research was to adapt the “Guide for the Prevention of Child Sexual Abuse in Sport” for its application in the area of Physical Education in Secondary Education. For this purpose, a teaching intervention program for the prevention of Child Sexual Abuse has been designed and included activities for corporal expression. Total duration was 10 sessions and the program was aimed at children aged between 12 and 16 years old.

The contents of the intervention program were focused on two directions: child sexual abuse and corporal expression.

Regarding sexual abuse, the topics presented by the Superior Council of Sport (2018), in the guide for detection of Child Sexual Abuse in the field of sport have been analyzed. These are: 1. Your body is yours and you can say “NO”; 2. Sport should make you feel good; 3. There are secrets that hurt you; 4. It is not your fault; 5. Respect is the first rule; 6. Each person has their role; 7. Sexual abuse is an abuse of power; 8. Don’t stay isolated; 9. Ask for help; 10. Speak out and do not shut up.

Regarding corporal expression, the following aspects were taken into consideration: basic corporal expression (expressive dimension, communicative dimension) and dramatization technique (communicative dimension and creative dimension).

Keywords: *sexual abuse, children, physical education, corporal expression*

Author affiliation

^a4th year bachelor student, Physical Education and Sports specialization, University of Huelva

^b3rd year bachelor student, Physical Education and Sports specialization, University of Huelva

^cProf., Ph.D., University of Huelva, Spain

Selective bibliography

Consejo Superior de Deportes (CSD) (2018). Guía de actividades de prevención del abuso sexual infantil para entrenadores, entrenadoras y profesorado de educación física.

Fondo de las Naciones Unidas para la infancia (UNICEF). (2010). "Protecting Children from violence in sport: A review with a focus on industrialized countries".

Fondo de las Naciones Unidas para la infancia (UNICEF). (2017). "Abuso sexual contra niños, niñas y adolescentes: Una guía para tomar acciones y proteger sus derechos".

Save the Children. (Octubre de 2012). Violencia sexual contra los niños y las niñas.

PHYSICAL EXERCISE INTERVENTION IN HOME CARE SERVICE. THE CUID@R + PROJECT

SANTANA Andreia^a, RIBEIRO Alexandra^a, MIRANDA Daniela^a, GOMES Margarida^{a,b}, BENTO Pedro^{a,b}, PAIXÃO Paulo^{a,b}, LOUREIRO Vânia^b

Abstract

Physical exercise is cited as a strategy for maintaining physical condition (strength) and independence (Loureiro et al., 2024; Sánchez-Sánchez et al., 2022). Frailty, an age-related syndrome, is associated with the risk of disability, comorbidities, falls, hospitalization and death in the elderly (WHO, 2017). Also, frailty and sarcopenia are interrelated conditions. Sarcopenia, loss of muscle mass, contributes to frailty (Cesari et al., 2014). Muscle weakness, a criterion used to define frailty, can result from sarcopenia.

Aging in place responses require multidisciplinary actions adjusted to the care needs of the elderly. Cuid@ar+ is a project funded by the Calouste Gulbenkian Foundation, through the GULBENKIAN HOME CARE program, which aims to combat the inequalities in access to care for older people by developing new models of integrated health care and social support. The project is designed at the elderly population who benefit from Caritas' home care service and who are responsible for the implementation of the project. The exercise component is implemented through Up Again Senior IPBeja and consist in a multicomponent exercise program (aerobic component, strength, balance and flexibility), individually prescribed, carried out once a week with a total duration of 60 minutes per session and integrated into the home support service.

Longitudinal study. The evaluation is carried out every at the beginning and 12 weeks after intervention and includes sociodemographic and falls history questionnaires, anxiety and depression scale (HADS), quality-of-life scale (SF-12) and a resilience scale for the Portuguese adult population. Health assessments are then carried out (blood pressure, resting heart rate and body composition) and functional capacity is assessed using the Vivafrail protocol - Short Physical Performance Battery (Izquierdo et al., 2017). This project is based on improving the quality of life of the elderly and optimizing their functional capacities, as well as reducing the risk of falls. Through this intervention, it is expected to increase

Book of abstracts

International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania

strength, maintain/improve autonomy, and verify the relationship between physical function and resilience.

Keywords: training program, physical condition, body composition, health

Author affiliation

^aPolytechnic University of Beja, Higher Education School, Beja, Portugal.

^bSPRINT: Sport, Physical activity and health Research & INnovation cenTer, Beja, Portugal.

Selective bibliography

Cesari, M., Landi, F., Vellas, B., Bernabei, R., & Marzetti, E. (2014). Sarcopenia and physical frailty: two sides of the same coin. *Front Aging Neurosci*, 6, 192. <https://doi.org/10.3389/fnagi.2014.00192>

Izquierdo, M., Casas-Herrero, A., Zambom-Ferraresi, F., Martínez-Velilla, N., Alonso-Bouzón, C., & Rodríguez- Mañas, L. (2017). VIVIFRAIL. Multi-component physical exercise program to prevent weakness and the risk of falling. <https://vivifrail.com/wp-content/uploads/2019/11/VIVIFRAIL-ENG-Interactivo.pdf>

Loureiro, V., Castillo-Viera, E., Cachola, A., Rosa, T., & Loureiro, N. (2024). Calidad de vida, caídas y capacidad funcional de mayores portugueses, durante la pandemia de COVID 19. *Retos*, 52, 491-498. <https://doi.org/10.47197/retos.v52.95705>

Sánchez-Sánchez, J. L., Udina, C., Medina-Rincón, A., Esbrí-Victor, M., Bartolomé-Martín, I., Moral-Cuesta, D., Marín-Epelde, I., Ramon-Espinoza, F., Sánchez-Latorre, M., Idoate, F., Goñi-Sarriés, A., Martínez-Martínez, B., Bonet, R. E., Librero, J., & Casas-Herrero, A. (2022, Jul). Effect of a multicomponent exercise program and cognitive stimulation (VIVIFRAIL-COGN) on falls in frail community older persons with high risk of falls: study protocol for a randomized multicenter control trial. *Bmc Geriatrics*, 22(1), Article 612. <https://doi.org/10.1186/s12877-022-03214-0>

WHO. (2017). WHO Clinical Consortium on Healthy Ageing: Topic Focus: Frailty and Intrinsic Capacity: Report of Consortium Meeting, 1–2 December 2016 in Geneva, Switzerland. W. H. Organization.

NATURE SPORTS PRACTITIONERS – ANALYSIS OF THE IMPACT IN BEJA DISTRICT

**GONÇALVES Stefano^a, AMBRÓSIO José^a, MURTA Luís^a, BENTO
Pedro^{a, b}**

Abstract

The evaluation of Nature Sports and consumer behavior in places where they are practiced is increasingly emerging, given the different impacts that this type of practice can have on territories (Van Rheenen & Melo, 2021; Rosa et al., 2017). Nature sports practices have revealed some evidence of their impact on the territories (Rosa et al., 2017). However, it is not always clear to what extent and magnitude these effects are studied and framed in the dynamics of the places (Bento & Murta, 2021).

With a longitudinal, quantitative research methodology, data was collected in an online questionnaire survey, adapted (Melo, 2013) and applied between February and April 2024. The sample includes 125 replies from nature sports practitioners, with the following results: a) most practiced sport: mountain biking (45%), hiking (30%) and trail running (35%); b) complementary activities to nature sports in the territory: nature photography (45%), fauna and flora observation (40%) and picnics (15%); c) frequency: the majority practiced 3 to 6 days a week (29%), in an undifferentiated period of the year (49%), followed by summer (32%) and spring (19%). They also believe that nature sports have a positive economic (55%) and socio-cultural (30%) impact on the area. Only 15% say that practicing this type of sport has an environmental impact.

These findings can help characterize nature sports practitioner's profile and consumer behavior. Based on this information, we can discuss what to improve in the touristic scenarios to refine the experience in Beja district local and natural areas.

Keywords: *nature sports, local areas, consumer behavior*

Author affiliation

^a*Polytechnic University of Beja, Higher Education School, Beja, Portugal.*

^b*SPRINT: Sport, Physical activity and health Research & INnovation cenTer, Beja, Portugal.*

Selective bibliography

- Bento, P., & Murta, L. (2021). *Intervenção Pedagógica no Desporto de Natureza: Atividades em Tempos de Pandemia Covid19*. *Journal of Sport Pedagogy and Research*, 7(1), 45–52.
<https://doi.org/https://doi.org/10.47863/BKEF7103>
- Melo, R. (2013). *Desportos de Natureza e Desenvolvimento Local Sustentável: Análise dos Praticantes e das Organizações Promotoras dos Desportos de Natureza*. Tese de Doutoramento, Faculdade de Letras e Faculdade de Ciências do Desporto e Educação Física da Universidade de Coimbra, Coimbra, Portugal.
- Rosa, P. F., Carvalhinho, L. A. D., & Soares, J. A. P. (2017). *O Desporto De Natureza E O Desenvolvimento Sustentável: Perspetivas De Desenvolvimento E Governança*. *Movimento (ESEFID/UFRGS)*, 23(1), 419.
<https://doi.org/10.22456/1982-8918.60361>
- Rosa, P., Bento, P., & Teotónio, T. (2022). *The internal competitive advantage of adventure tourism operators: An exploratory approach*. *Journal of Outdoor Recreation and Tourism*, 39, 100555.
<https://doi.org/https://doi.org/10.1016/j.jort.2022.100555>
- Van Rheenen, D., & Melo, R. (2021). *Nature sports: Prospects for sustainability*. *Sustainability (Switzerland)*, 13(16), 1–14.
<https://doi.org/10.3390/su13168732>

RESISTANCE TRAINING PROTOCOL: DESIGN A PROGRAM FOR UP AGAIN SENIOR OLDER ADULTS BASED ON CERT

MARTINS Ricardo^a, **BENTO** André^{a,b}, **RODRIGUES** Diogo^a,
LOUREIRO Nuno^{a,b}, **GOMES** Margarida^{a,b}, **LOUREIRO** Vânia^{a,b}

Abstract

Ageing is a biological process that naturally reduces the physical function of older adults. Otherwise, resistance training (RT) improves physical function and health in this population. In older adult population, resistant training increases physical function and health.

Up Again Senior Project (UpAS), developed a resistance training (RT) protocol based on CERT. The participants are healthy and above 65 years old. They participate twice a week in a 12 week RT protocol. The RT is composed of two sets of 10 or 12 repetitions of seven exercises for the major muscle groups with 90% of passive rest between sets. The intensity is set between five and six on the rate of perception exertion scale (RPE) to adjust the external load. After six weeks, three sets of 8 to 10 repetitions with an RPE of seven to eight is performed. Bodyweight and free-weight exercises are used in a group-based format RT and adapted to individual features. Sessions are supervising and performed at the Polytechnic Institute of Beja. The RT protocol report follows CERT.

The main hypotheses of this study, based in prior research, are (i) improvements in physical function and balance (ii) a general positive affective response, (iii) a high adherence rate, and (iv) no differences in body composition.

Keywords: *balance, older adults, physical function, power, strength*

Author affiliation

^aPolytechnic University of Beja, Higher Education School, Beja, Portugal.

^bSPRINT: Sport, Physical activity and health Research & INnovation cenTer, Beja, Portugal.

Selective bibliography

Carrick-Ranson, G., Howden, E. J., & Levine, B. D. (2022). Exercise in Octogenarians: How Much Is Too Little? Annual review of medicine, 73, 377–391. <https://doi.org/10.1146/annurev-med-070119-115343>

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

- Khan, S. S., Singer, B. D., & Vaughan, D. E. (2017). *Molecular and physiological manifestations and measurement of aging in humans*. *Aging cell*, 16(4), 624–633. <https://doi.org/10.1111/acer.12601>
- Loureiro, V., Gomes, M., Vieira, E., Almazán, A., & Loureiro, N. (2022). *Up Again Senior - Projeto de Promoção de Saúde Sénior através da Atividade Física*. In P. Soares (Ed.), *Envelhecimento Ativo e Saudável II MADT T*.
- Mellow, M. L., Crozier, A. J., Dumuid, D., Wade, A. T., Goldsworthy, M. R., Dorrian, J., & Smith, A. E. (2022). *How are combinations of physical activity, sedentary behaviour and sleep related to cognitive function in older adults? A systematic review*. *Experimental Gerontology*, 159. <https://doi.org/10.1016/j.exger.2022.111698>
- Slade, S. C., Dionne, C. E., Underwood, M., & Buchbinder, R. (2016). *Consensus on Exercise Reporting Template (CERT): Explanation and Elaboration Statement*. *British journal of sports medicine*, 50(23), 1428–1437. <https://doi.org/10.1136/bjsports-2016-096651>
- Syed-Abdul M. M. (2021). *Benefits of Resistance Training in Older Adults*. *Current aging science*, 14(1), 5–9. <https://doi.org/10.2174/1874609813999201110192221>

RELIABILITY OF THE OBSERVATION AND ANALYSIS OF THE BARANI LEAP AND BACKFLIP IN GYMNASTICS

ANTUNES Catarina^a, **SILVA** Gonçalo^a, **BENTO** Débora^a, **PITA** Inês^a,
PAIXÃO Paulo^{a, b}

Abstract

According to the Portuguese Gymnastics Federation (2022), in double mini trampoline, the correct technical execution of the different phases of the movements determines the score given to the athlete. Knudson and Morrison's (2002) observation model is applied in four different sequential phases: preparation, observation, assessment/diagnosis and intervention. The aims of this study were to: compare the technical gesture barani leap and backflip, between a training athlete and an elite athlete, verifying inter and intra observer reliability.

To observe technical gestures, a checklist was created with a three-level scale. We analyzed the different phases of the gesture: impulsion, fundamental and reception, through video. To compare the training athlete technique with an elite athlete, we used the Kinovea program, to better identify errors. Subsequently, an inter and intra-observer assessment (3 observers) of the training athlete was carried out using a checklist. To analyze the results, the k test was used ($p \leq 0.05$).

According to the Inter-observer K -Test, the values given by the different observers are similar ($k=0.841$), with good reliability between the three observers. In the Intra-observer K -Test, we found good reliability with observer 1 ($k = 0.810$), moderate reliability with observer 2 ($k = 0.714$) and low reliability with observer 3 ($k = 0.323$).

It was possible to conclude that the tools used were effective in identifying errors and highlighting strengths, allowing for the formulation of corrective exercises and targeted feedback. The checklist used showed enough reliability in the intra- and inter-observer tests, making it a valid tool.

Keywords: reliability, observation, analysis, gymnastics, barani, backflip

Author affiliation

^aPolytechnic University of Beja, Higher Education School, Beja, Portugal.

^bSPRINT: Sport, Physical activity and health Research & INnovation cenTer, Beja, Portugal.

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

Selective bibliography

*Federação de Ginástica de Portugal. (2012). Ginástica de Trampolins
<https://www.ginastica.org/trampolins>*

*Knudson, V., & Morrison, S. (2002). Qualitative analysis of human movement.
Champaign, IL: Human Kinetics.*

*O'Donoghue, P. (2017). Reliability Issues in Performance Analysis. International
Journal of Performance Analysis in Sport.*

*Serena W.J. Khong, Pui W. Kong (2016). A Simple and Objective Method for
Analyzing a Gymnastics Skill. European Journal of Physical Education and
Sport, (12)2.*

*Simas, M., Lucas, S. (2013). Anexo II – Trampolins. P. Barata (Ed.), Curso de
Treinadores de Ginástica de Grau I (pp.2-87)*

IMPORTANCE OF USER-GENERATED CONTENT IN CHOOSING LEISURE SERVICES

LATVYS Aurimas^a, MEJERYTĖ-NARKEVIČIENĖ Kristina^b

Abstract

User-generated content (UGC) has become an important part in choosing leisure services, as consumers evaluate leisure services based on past reviews, during the information search stage. The five-stage model of the consumer buying process, involves five steps that consumers move through when buying a product or service (need recognition, information search, evaluation of alternatives, purchase, post-purchase behavior) (Stankevich, 2017).

UGC is defined as any kind of text, data or action performed by online digital systems users, published and disseminated by the same user through independent channels, that incur an expressive or communicative effect either on an individual manner or combined with other contributions from the same or other sources, (Santos, 2022).

Consumers use such content to assess the factors, associated with the purchase of goods and services, to find the information they need, while businesses use it to improve the understanding of potential customers and to create more targeted marketing campaigns. User-generated content is most important in the early stages of the decision making process, because other people's feedback has a significant impact on the consumer's decision in whether or not to purchase a product or service.

Keywords: *user-generated content, leisure services, consumer decision making process*

Author affiliation

^a*1st year bachelor student, Lithuanian Sports University, Kaunas*

^b*Lecturer, Lithuanian Sports University, Kaunas*

Selective bibliography

Ana, M. I., & Istudor, L. G. (2019). The role of social media and user-generated-content in millennials' travel behavior. Management dynamics in the knowledge economy, 7(1), 87-104.

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

- Kim, C., Jin, M. H., Kim, J., & Shin, N. (2012). User perception of the quality, value, and utility of user-generated content. Journal of Electronic Commerce Research, 13(4), 305.*
- Santos, M. L. B. D. (2022). The “so-called” UGC: an updated definition of user-generated content in the age of social media. Online Information Review, 46(1), 95-113.*
- Stankevich, A. (2017). Explaining the consumer decision-making process: Critical literature review. Journal of international business research and marketing, 2(6).*
- Ukpabi, D. C., & Karjaluoto, H. (2018). What drives travelers' adoption of user-generated content? A literature review. Tourism management perspectives, 28, 251-273.*

USER PRIORITIES CHOOSING BETWEEN BASKETBALL ORGANIZATION WEBSITES AND SOCIAL MEDIA

KUZMINSKIS Lukas^a, ŪSAS Antanas^b

Abstract

Consumer behavior on the Internet and in social space is changing, which can lead to difficulties in finding reliable information about their favorite sports team. To determine the priorities of users when choosing between a basketball organization's website and social networks, we've addressed the following tasks: 1. Review the links between the website and social media; 2. Reveal the research level of users' priorities when choosing between websites and social media; 3. Identify the priorities of the basketball website and social media.

The research methods used to accomplish the purpose of the research, were quantitative and a survey was chosen as data collecting method.

According to the data, social media shows better results than websites in several aspects, such as publishing news and building the image of the organization. However, websites are seen as a more reliable source of information and a more appropriate channel for providing comprehensive content. When analyzing the data by gender, slightly different trends are observed, with women more likely than men to choose social media as their preferred source of information about team news.

Websites and social media are important communication tools, especially in a business context. Businesses, including basketball organizations, often use both platforms to reach different consumer segments. The results of the study show that organizations invest more in social media than in websites. However, it is important to note the specific cases where websites are also important communication channels. Organizations should carefully assess the needs of their audience in order to choose the most appropriate communication strategy.

Keywords: *basketball, website, social media, communication*

Author affiliation

^a3rd year bachelor student, Lithuanian Sports University, Kaunas

^bLecturer, Lithuanian Sports University, Kaunas

Selective bibliography

- Braunstein-Minkove, J. R., Kim, A., & Abeza, G. (2023). Social Media as a Gateway to Sport Consumption: The Role of Virtual Parenting Communities on the Decision-Making Process of Sport Momsumers. Sports Innovation Journal, 4, 55-70.*
- Cibulskė, G., & Kavolius, R. (2022). Skaitmeninės reklamos matomumo ypatumai socialinėje erdvėje. Verslas, technologijos, biomedicina: inovacijų išvalgos 2022: straipsnių rinkinys, (1), 60-69.*
- Kiguolytė, M., Jotautis, V., & Liepinaitienė, A. (2023). Internetė rastos informacijos įtaka priimamiems sprendimams dėl sveikatos priežiūros. Medicina, 16, 90.*
- Zamauskė, J. (2022). Socialinių medijų įtaka naujienu gavimo procesui.*

THE IMPACT OF PHYSICAL ACTIVITIES ON PSYCHOLOGICAL WELL-BEING

WAŁGA Hanna^a

Abstract

This study delves into the symbiotic relationship between physical activity and psychological well-being, examining how engagement in various forms of exercise impacts mental health.

Drawing from a wealth of research, it highlights the multiple benefits of regular exercise on various aspects of psychological well-being, including mood regulation, stress resilience, cognitive function improvement, and self-esteem enhancement.

The paper also explores the underlying mechanisms through which physical activities have positive effects on mental health, such as the release of endorphins, and social interaction. Furthermore, it discusses the implications of these findings for promoting mental health and preventing psychological disorders through tailored exercise interventions.

The comprehensive review of the literature highlights the significance of integrating physical activities into holistic approaches to mental health promotion and treatment.

Keywords: *well-being, physical activities, mental health*

Author affiliation

^a2nd year bachelor student, The Bronislaw Czech University School of Physical Education, Cracow, Poland

Selective bibliography

Biddle, S. J. H., Mutrie, N., Gorely, T., & Faulkner, G. (2021). Psychology of Physical Activity: Determinants, Well-being and Interventions. (4th ed.) Taylor & Francis. <https://doi.org/10.4324/9781003127420>

Otto, M. W., & Smits, J. A. J. (2011). Exercise for mood and anxiety: Proven strategies for overcoming depression and enhancing well-being. Oxford University Press.

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

Ratey, J. J., & Hagerman, E. (Collaborator). (2008). Spark: The revolutionary new science of exercise and the brain. Little, Brown and Co.

*Weir, K. (2011, December 1). The exercise effect. Monitor on Psychology, 42(11).
<https://www.apa.org/monitor/2011/12/exercise>*

Wilson, D. R., & Wilson, W. A. (2016). Physical Activity and Mental Health. Activities, Adaptation & Aging, 40(3), 281–282.

CONTEMPORARY PROBLEMS OF PHYSICAL EDUCATION

RADOSŁAW Chaładaj^a

Abstract

Contemporary challenges in physical education pose a number of complex problems to teachers and educational institutions. In the context of changing social, technological and health trends, this work examines the main challenges that physical education currently faces.

These challenges include various aspects such as insufficient funding, limited resources, program constraints and societal attitudes towards physical activity. Furthermore, the emergence of a sedentary lifestyle among children, combined with the increase in the use of technology, poses significant obstacles to promoting active and healthy lifestyles through physical education programs. Moreover, disparities in access to high-quality physical education programs among different socioeconomic groups exacerbate inequalities in health outcomes and overall physical fitness levels.

Addressing these challenges requires a multifaceted approach involving policymakers, educators, parents, and communities to prioritize physical education, allocate sufficient resources, and develop comprehensive strategies to promote lifelong physical activity habits among students. Increasing public awareness of the importance of regular physical activity and its impact on health may contribute to greater support for physical education in curricula. In addition, investments in the development of sports infrastructure and teacher training can help improve the quality of teaching and increase students involvement in physical activity.

Keywords: *physical education, school, pedagogy, contemporary challenges*

Author affiliation

^a2nd year bachelor student, The Bronislaw Czech University School of Physical Education, Cracow, Poland

Selective bibliography

Bielski, J., (2012). Podstawowe problemy teorii wychowania fizycznego, Kraków. Oficyna Wydawnicza „Impuls” ISBN: 978-83-7587-952-0,

Book of abstracts

International workshop - Science and Leisure build bridges together, 2nd Edition

24th of May 2024 – Kaunas, Lithuania

Green, K., & Hardman, K. (2005). Physical education : essential issues. SAGE.

Hardman, K., & Green, K. (2011). Contemporary issues in physical education : international perspectives. Meyer & Meyer Sport.

Kirk, D. (2010). Physical Education Futures.

Węglarz, J., (2022). Szkice o przyszłości fizycznej edukacji, Kraków. Oficyna Nydawnicza „Impuls” ISBN: 978-83-8294-196-8

MOVEMENT REEDUCATION AS A PREVENTION METHOD FOR SHOULDER INJURIES IN OVERHEAD SPORTS

AUGUSTYN Michał^a

Abstract

A lot of research has been carried out in relation with shoulder injuries. Most of them were focused on strengthening or stretching the muscle, but very few on the effect of movement reeducation, which in our opinion represents an area worthwhile to be researched.

In this particular case, the term movement reeducation refers to teaching how the shoulder should move correctly while training for a particular sport. The subjects chosen for this study were athletes, which suffered or not shoulder injuries in the past. We've divided the subjects into four groups: in the first two groups were included athletes who have not had any shoulder injuries, one of the groups benefited from movement reeducation, while the other one not; in the last two groups were included athletes who had shoulder injuries, one of the groups benefited from movement reeducation, while the other one not.

The evaluation was realized monthly for a period of three months and included a functional and visual assessment of the way the shoulder moves and a questionnaire to identify how the participants assessed their subjective feelings.

The results confirmed the fact that movement reeducation is essential in preventing injuries. Subjects felt a decreased fear of occurrence or reoccurrence of injury and in consequence improved their results.

Keywords: *movement reeducation, injury prevention, overhead sports*

Author affiliation

^a2nd year bachelor student, The Bronislaw Czech University School of Physical Education, Cracow, Poland

Selective bibliography

Asker M, Brooke HL, Waldén M, Tranaeus U, Johansson F, Skillgate E, Holm LW. Risk factors for, and prevention of, shoulder injuries in overhead sports: a systematic review with best-evidence synthesis. (2018). Br J Sports Med. 52(20):1312-1319. Doi: 10.1136/bjsports-2017-098254.

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

- Clarsen B, Bahr R, Andersson SH, Munk R, Myklebust G. *Reduced glenohumeral rotation, external rotation weakness and scapular dyskinesis are risk factors for shoulder injuries among elite male handball players: a prospective cohort study.* (2014). *Br J Sports Med.* 48(17):1327-33. Doi: 10.1136/bjsports-2014-093702.
- Cools AM, Maenhout AG, Vanderstukken F, Declève P, Johansson FR, Borms D. *The challenge of the sporting shoulder: From injury prevention through sport-specific rehabilitation toward return to play.* (2021). *Ann Phys Rehabil Med.* 64(4):101384. Doi: 10.1016/j.rehab.2020.03.009.
- Hoppe MW, Brochhagen J, Tischer T, Beitzel K, Seil R, Grim C. *Risk factors and prevention strategies for shoulder injuries in overhead sports: an updated systematic review.* (2022). *J Exp Orthop.* 16;9(1):78. Doi: 10.1186/s40634-022-00493-9.
- Tooth C, Gofflot A, Schwartz C, Croisier JL, Beaudart C, Bruyère O, Forthomme B. *Risk Factors of Overuse Shoulder Injuries in Overhead Athletes: A Systematic Review.* (2020). *Sports Health.* 12(5):478-487. Doi: 10.1177/1941738120931764.

FATIGUE NOWADAYS

DZIGA Ewa^a

Abstract

Fatigue is a common state that affects the human body. It is defined as a lessened possibility to get through any activity, causing a decrease in the effectiveness of the job that's being done. Although it is experienced as a psychological phenomenon, it has deeper implications and poses a serious problem with a negative impact on our physical health also. Fatigue has more dimensions, but only several of them can be revealed at the same time.

This research review concentrates on where fatigue originates and which are the effects given. Fatigue carries a biological aspect also, its influence on muscle activity and ability of nervous system to maintain the effort.

Fatigue may occur as a result of lack of sleep or too much work. Also, there's a biochemical and molecular mechanisms of fatigue, where cytokines play an important role. When it is present for more than a few days, we can say that we are experiencing a chronic fatigue. Chronic fatigue is a state that gives symptoms like weakness, dizziness, headache or even memory problems. In this situations special treatment should be seek.

Keywords: *fatigue, chronic*

Author affiliation

^a2nd year bachelor student, The Bronislaw Czech University School of Physical Education, Cracow, Poland

Selective bibliography

Abd-Elfattah HM, Abdelazeim FH, Elshennawy S. (2015). Physical and cognitive consequences of fatigue: A review. *J Adv Res.* 6(3):351-8. Doi: 10.1016/j.jare.2015.01.011.

Dotan R, Woods S, Contessa P. On the reliability and validity of central fatigue determination. (2021). *Eur J Appl Physiol.* 121(9):2393-2411. Doi: 10.1007/s00421-021-04700-w.

Norheim KB, Jonsson G, Omdal R. Biological mechanisms of chronic fatigue. (2011). *Rheumatology (Oxford).* 50(6):1009-18. Doi: 10.1093/rheumatology/keq454.

Book of abstracts

International workshop - Science and Leisure build bridges together, 2nd Edition

24th of May 2024 – Kaunas, Lithuania

*Raizen DM, Mullington J, Anaclet C, Clarke G, Critchley H, Dantzer R, Davis R, Drew KL, Fessel J, Fuller PM, Gibson EM, Harrington M, Ian Lipkin W, Klerman EB, Klimas N, Komaroff AL, Koroshetz W, Krupp L, Kuppuswamy A, Lasselin J, Lewis LD, Magistretti PJ, Matos HY, Miaskowski C, Miller AH, Nath A, Nedergaard M, Opp MR, Ritchie MD, Rogulja D, Rolls A, Salamone JD, Saper C, Whittemore V, Wylie G, Younger J, Zee PC, Craig Heller H. Beyond the symptom: the biology of fatigue. (2023). *Sleep*. 8;46(9). Doi: 10.1093/sleep/zsad069.*

THE IMPACT OF MASSAGE THERAPY ON ENHANCING MOBILITY IN PROFESSIONAL FOOTBALL PLAYERS

BARRON Yann^a

Abstract

Regular massage therapy offers numerous advantages in improving athletic performance and preventing injuries among professional football players. This study explores the efficacy of massage therapy interventions in enhancing mobility among elite football athletes. The intervention, designed specifically for professional footballers, aims to optimize physical performance and prevent injuries through targeted massage techniques. The program incorporates a combination of deep tissue massage, myofascial release, and stretching exercises tailored to address specific mobility issues common among football players.

The evaluation protocol includes pre- and post-intervention assessments of mobility, flexibility, and muscle strength. Additionally, subjective feedback from the athletes regarding their perceived improvements in mobility and overall performance is collected. The study emphasizes the importance of individualized massage therapy interventions based on the unique needs and physical demands of professional footballers.

Keywords: *massage therapy, mobility enhancement, professional football*

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

*Best, T. M., Hunter, R., Wilcox, A., & Haq, F. (2008). Effectiveness of sports massage for recovery of skeletal muscle from strenuous exercise. *Clinical Journal of Sport Medicine*, 18(5), 446-460.*

<https://doi.org/10.1097/JSM.0b013e31818837a4>

*Dawson, K. A., & Bocarro, J. N. (2016). The effects of massage on perceived recovery and performance among soccer players. *Journal of Strength and Conditioning Research*, 30(5), 1563-1569.*

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

<https://doi.org/10.1519/JSC.0000000000001235>

Dupont, G., Nedelec, M., McCall, A., McCormack, D., Berthoin, S., & Wisløff, U. (2010). *Effect of 2 soccer matches in a week on physical performance and injury rate. The American Journal of Sports Medicine, 38(9), 1752-1758.*

<https://doi.org/10.1177/0363546510361236>

Hemmings, B., & Smith, M. (2001). *The effects of massage and proprioceptive neuromuscular facilitation techniques on knee proprioception. Physiotherapy, 87(6), 308-316.* [https://doi.org/10.1016/S0031-9406\(05\)60709-4](https://doi.org/10.1016/S0031-9406(05)60709-4)

Moraska, A., Pollini, R. A., Boulanger, K., Brooks, M. Z., & Teitlebaum, L. (2008). *Physiological adjustments to stress measures following massage therapy: a review of the literature. Evidence-Based Complementary and Alternative Medicine, 7(4), 409-418.* <https://doi.org/10.1093/ecam/nem053>

INFLUENCE OF EXERCISES ON VIBRATION PLATFORMS ON CAVUS FOOT

BERINDEI Alexandra-Maria^a

Abstract

Exercise on vibration platforms can be an effective solution for toning and strengthening the foot muscles, helping alleviate symptoms associated with cavus foot.

Cavus foot, also known as pes cavus, is an orthopedic condition characterized by the elevation of the longitudinal arch of the foot and other associated deformities, such as plantar flexion, forefoot pronation, and heel varus.

Cavus foot can be classified into two main types: forefoot-driven and hindfoot-driven. The first is often associated with neurological diseases, such as hereditary motor-sensory neuropathies, while the latter is linked to traumas, such as pilon fractures or chronic instability of the ankle and subtalar joint.

The affected musculature varies depending on the type of deformity and may include the peroneus longus, peroneus brevis, anterior tibialis, and posterior tibialis muscles.

By using a vibration platform, we can achieve an efficient and practical solution for toning and strengthening the muscles of the foot. The vibrations generated by this platform can stimulate blood flow and intensify muscle contractions, allowing for deep work on the cavus foot area. Additionally, exercises performed on the vibration platform can help strengthen bones and ligaments, contributing to better support of the foot.

Specialized studies have shown that training on a vibration platform can lead to improvement in cavus foot symptoms, including reduction of foot concavity and increased stability. Therefore, engaging in a regular exercise program on such a platform can be a promising option for individuals affected by this condition.

Keywords: *pes cavus, vibration platform*

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Book of abstracts

International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania

Selective bibliography

Eleswarapu AS, Yamini B, Bielski RJ. Evaluating the Cavus Foot. (2016). *Pediatr Ann.* 45(6):e218-22. doi: 10.3928/00904481-20160426-01.

Krähenbühl N, Weinberg MW. Anatomy and Biomechanics of Cavovarus Deformity. (2019). *Foot Ankle Clin.* 24(2):173-181. doi: 10.1016/j.fcl.2019.02.001.

Osher L, Shook JE. Imaging of the Pes Cavus Deformity. (2021). *Clin Podiatr Med Surg.* 38(3):303-321. doi: 10.1016/j.cpm.2021.03.004.

Seaman TJ, Ball TA. Pes Cavus. (2023). In: *StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing;*

Qin B, Wu S, Zhang H. Evaluation and Management of Cavus Foot in Adults: A Narrative Review. (2022). *Journal of Clinical Medicine.*; 11(13):3679. <https://doi.org/10.3390/jcm11133679>

THE IMPORTANCE OF MOVEMENT GAMES AND UTILITARIAN-APPLICATIVE PATHS FOR THE IMPROVEMENT OF MOTOR SKILLS OF PRIMARY SCHOOL CHILDREN

BOTA Denisa^a

Abstract

Movement games constitute activities through which teachers manage to capture children's attention easier and more effectively than through other means and at the same time to bring a good mood to them. Movement games have a very good influence on children from multiple point of views: psychological through development of creativity; discipline through educating the group of students, responsibility, socialization; emotional through human personality traits development, children become braver, more empathetic, more persistent.

At the same time, games ensure normal growth and development of children, contribute to the development of the muscular system and cardiovascular system, favoring a harmonious physical development. In general, children's lives cannot be conceived without play. Moreover, in the didactic activity it was found that a technical procedure is acquired easier with the help of movement games, but also with utilitarian-applicative paths. Through play a lot of rational elements disappear and children are much more prone to learn through these dynamic activities than regular physical education class exercises. The games are fun, arise interest and from a physical point of view, favor development of motor skills.

Another activity that children love, are utilitarian-applicative paths, which resemble games and have a positive impact on the motor development of children but can also contribute to improving coordination and balance. These can include various challenges such as jumping, running, balancing and many others that put the students in difficulty. Precisely because of this, they are encouraged to explore and develop their maximum potential, especially if they are performed in the form of a competition.

Keywords: *movement games, motor skills, development*

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

Author affiliation

*^a3rd year bachelor student, Physical Education and Sports specialization,
Department of Physical Education & Sports, Faculty of Law and Social Sciences,
"1 Decembrie 1918" University of Alba Iulia, Romania*

Selective bibliography

Chelaru, A., & Popescu, V. (2020). Speed development in primary students through application. Sports. Olympism. Health: International Scientific Congress , 110-116.

Constantin, IL, & Chirazi, M. (2019). Learning the game of handball through movement games for students. Science of physical culture , 5-14.

Enache, s. (2008). Study on the contribution of applied courses to the formation of moral attitudes and behaviors in primary classes. Gymnasium; Bacau Vol. 9, Issue 12, , 246-252.

Rus, V. (2011). The use of applicative-utilitarian paths and paths, a way to increase efficiency in the physical education lesson at the high school. Palestrica of the Third Millennium Civilization & Sport , 54-59.

Todea, ST (2002). MOVEMENT GAMES. Tomorrow's Romania , 05-15

INCREASING TRAINING EFFICIENCY OF A MINI BASKETBALL TEAM IN PRIMARY SCHOOLS

FODOR Darius Florin^a

Abstract

The term Mini basketball is used to describe the entire youth level under the age of 12. The focus in this age group is to introduce children to basketball and help them develop fundamental skills such as dribbling, passing, shooting and teamwork in a fun, safe and age-appropriate environment (FLBB, 2024).

At this age group, training and development of motor abilities remain more important than specifics of basketball, fun being the dominant focus as the children start to learn the game (FIBA, 2024).

In the sports science literature, there is a wealth of research showing the utility of the psychological technique of "goal setting" with senior athletes. Goal setting is a tool that allows players to focus on specific components of the game. Most studies differentiate between three basic types of goals: results or outcome goal, performance goals, and process goals. Research shows that the most effective goal setting for both performance athletes and youth athletes is one that combines different goal types.

The present study aims to evaluate the impact of insertion of goal setting elements through games into the activity of younger players.

Keywords: *mini basketball, development, goal setting*

Author affiliation

^a3rd year bachelor student, Physical Education and Sports specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

Ibáñez SJ, Gantois P, Rico-González M, García-Rubio J, Ortega JP. Profile of Accelerations and Decelerations in Young Basketball Players. (2024). Applied Sciences.; 14(10):4120. <https://doi.org/10.3390/app14104120>

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

Ortega, E., Olmedilla, A., Palao, J. M., Sanz, M., & Bazaco, M. J. (2013). Goal setting and players' perception of their effectiveness in mini-basketball. Revista de Psicología del Deporte, 22(1), 253–256.

Olena Mitova, Grygoriy Griban, Dmytro Oleniev, Artem Yakovenko, Viola Onyshchenko, Oleksandr Mozolev, Bogdan Semeniv, Andrii Lytvynenko, Oksana Khurtenko, Svitlana Zamrozevuch-Shadrina, Larysa Kozibroda, Maryna Hres (2022). The Impact of Mini-Basketball Training Sessions on the 6-7-Year-Old Boys' Physical Fitness and Physical Development. International Journal of Human Movement and Sports Sciences, 10(4), 754 - 767. DOI: 10.13189/saj.2022.100416.

Steinberg, Gregg M., et al. (2000). The Benefits To Sport Achievement When a Multiple Goal Orientation is Emphasized. Journal of Sport Behavior, vol. 23, no. 4, p. 407. Gale Academic OneFile,

IMPROVING BALANCE OF ELDERLY TO PREVENT FALLS

HORVATH Daniel^a

Abstract

In an elderly person's daily activity, one of the most important aspects is to maintain their body's position against gravity, during movement but also at rest. During my interaction with elderly people from the Home for the Elderly in Alba Iulia, I realized that fear of falling, tripping influenced their capacity of doing physical exercises.

Falls are an increasing cause of death for a growing elderly population. The main factors in the risk of falling are postural control, including problems of the vestibular, visual, proprioceptive systems and the body's adaptive response to various perturbations. As a result of falls, various problems can occur in the upper or lower limbs, in the pelvis, trunk, head or in any other part of the body, spinal cord injuries, brain injuries, or injuries that may require surgical interventions. The vestibular system is responsible for orientation, spatial coordination and maintaining balance. Thus, we've conceived an exercise protocol to help the elderly strengthen their muscles, develop their coordination, improve their balance to reduce the number of falls.

We had two groups of five people each, ages between 80 and 90: the first group, the experimental one, worked the exercise protocol 3 times a week, one hour a day, while the second group, the control one, was only evaluated initially, intermediately and at the end, without doing the exercise protocol.

The result of the study was that working the exercise protocol slightly decreases the risk of falling and doing less to no work increased the risk of falling.

Keywords: *elderly, balance, falls, physical exercises*

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

- Brosel S, Strupp M. *The Vestibular System and Ageing*. (2019). *Subcell Biochem.* 91:195-225. doi: 10.1007/978-981-13-3681-2_8
- Dominguez L. *Postural control and perturbation response in aging populations: fall risk implications*. (2020). *J Neurophysiol.* 1;124(5):1309-1311. doi: 10.1152/jn.00767.2019.
- Faber MJ, Bosscher RJ, Chin A Paw MJ, van Wieringen PC. *Effects of exercise programs on falls and mobility in frail and pre-frail older adults: A multicenter randomized controlled trial*. (2006). *Arch Phys Med Rehabil.* 87(7):885-96. doi: 10.1016/j.apmr.2006.04.005
- James SL, Lucchesi LR, Bisignano C, Castle CD, Dingels ZV, Fox JT, Hamilton EB, Henry NJ, Krohn KJ, Liu Z, McCracken D, Nixon MR, Roberts NLS, Sylte DO, Adsuar JC, Arora A, Briggs AM, Collado-Mateo D, Cooper C, Dandona L, Dandona R, Ellingsen CL, Fereshtehnejad SM, Gill TK, Haagsma JA, Hendrie D, Jürisson M, Kumar GA, Lopez AD, Miazgowski T, Miller TR, Mini GK, Mirrakhimov EM, Mohamadi E, Olivares PR, Rahim F, Riera LS, Villafaina S, Yano Y, Hay SI, Lim SS, Mokdad AH, Naghavi M, Murray CJL. *The global burden of falls: global, regional and national estimates of morbidity and mortality from the Global Burden of Disease Study 2017*. (2020). *Inj Prev.* 26(Supp 1):i3-i11. doi: 10.1136/injuryprev-2019-043286.

THE PREOPERATIVE PERIOD OF SCOLIOSIS

LODROMAN Adrian-Cristian^a

Abstract

Between 0.05% -12% of the population has a form of scoliosis (University St. Augustine, 2021). Idiopathic scoliosis is a general spinal deformity found most frequently among adolescents of feminine sex. It's a deformity which affects the most important segment of the locomotor system, the spine and must be treated with uttermost priority. Scoliosis is measured using the Cobb angle. When the Cobb angle is over by 50 degrees, the patient will require surgical treatment.

Surgical intervention to correct scoliosis is a medical procedure that, in most cases, is performed from the posterior area of the trunk, by accessing the spine directly. The modern medical system uses several anchors to connect the affected vertebrae and the implanted rods, resulting in a maximum correction in all 3 planes and at the same time a lower failure rate.

Among the best practices to prepare the patient for this kind of intervention is the Schorth therapy, which is a rehabilitation technique that treats the spine three-dimensional, just as doctors will do in surgery. This therapy adopts corrective positions of the vertebral segment, in which the patient will have to support them and at the same time, use directed breathing in the area of the concavity of the spine. These exercises will improve rib cage mobility, reduce muscle imbalance, reduce pain, improve heart rate and decrease Cobb angle.

Keywords: *Schroth therapy, scoliosis, surgery treatment*

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

Bowker R, Morash K, Mishreky A, Yaszay B, Andras L, Sturm P, Sponseller PD, Thompson GH; Pediatric Spine Study Group; El-Hawary R. Scoliosis flexibility correlates with post-operative outcomes following growth friendly surgery. (2022). Spine Deform. 10(4):933-941. doi: 10.1007/s43390-022-00481-0

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

- Kerdoncuff A, Henry P, Compagnon R, Accadbled F, Sales de Gauzy J, Langlais T. *Feasibility, Safety and Reliability of Surgeon-Directed Transcranial Motor Evoked Potentials Monitoring in Scoliosis Surgery. (2023). Children (Basel). 10(9):1560. doi: 10.3390/children10091560*
- Sbenghe, T., *Prophylaxis in Kinesitherapy and Recovery, (1987). Medical Press, București.*
- Studer D, Hasler CC. *Diagnostic and therapeutic strategies in early onset scoliosis: A current concept review. (2024). J Child Orthop. 18(2):113-123. doi: 10.1177/18632521241228141*
- Weiss, Hans-Rudolf, Lehnert-Schroth, Christa, Moramarco, Marc, Moramarco, Kathryn (2022). *Schroth Therapy Advancements in Conservative Scoliosis Treatment 3rd edition Special Schroth Best Practice Academy Edition, ISBN 978-93-5547-343-1 (eBook) DOI: 10.9734/bpi/mono/978-93-5547-321-9*

SHOULDER RECOVERY AFTER ANTERIOR CHEST TRAUMA

MAN Maria-Andra^a

Abstract

Recovery of the shoulder after a pathology in the anterior chest can be a complex process and often involves a multidisciplinary approach. Mobility and functionality of the shoulder can be recovered through a personalized physiotherapy and kinesiotherapy program.

Shoulder recovery after mastectomy can be a delicate process and requires a careful and personalized approach for each patient. During a mastectomy, nerves, muscles and tissues around the shoulder can be affected, which can lead to loss of mobility and function of the shoulder.

Patients who have undergone coronary bypass surgery may experience some difficulties with shoulder recovery, especially in the immediate aftermath of surgery. This period of immobilization can lead to stiffness and decreased mobility of the shoulder.

Understanding the factors that led to the initial injury and taking appropriate steps to prevent relapses are important aspects of the recovery process. Education on proper lifting techniques, lifestyle changes, and other preventive measures can help maintain long-term shoulder health and mobility.

Keywords: *shoulder recovery, mastectomy, coronary bypass*

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

Celik D. Comparison of the outcomes of two different exercise programs on frozen shoulder. (2010). Acta Orthop Traumatol Turc. 44(4):285-92. doi: 10.3944/AOTT.2010.2367.

Field T. Massage therapy research review. (2016). Complement Ther Clin Pract. 24:19-31. doi: 10.1016/j.ctcp.2016.04.005

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

Hodgetts, C., & Walker, B. (2021). Epidemiology, common diagnoses, treatments and prognosis of shoulder pain: A narrative review. International Journal of Osteopathic Medicine, 42, 11–19.

<https://doi.org/10.1016/j.ijosm.2021.10.006>

Kim Y, Lee G. Immediate Effects of Angular Joint Mobilization (a New Concept of Joint Mobilization) on Pain, Range of Motion, and Disability in a Patient with Shoulder Adhesive Capsulitis: A Case Report. (2017). Am J Case Rep. 10;18:148-156. doi: 10.12659/ajcr.900858.

Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, Bray F. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. (2021). CA Cancer J Clin. 71(3):209-249. doi: 10.3322/caac.21660.

POSTURAL ASSESSMENT OF FITNESS PRACTITIONERS¹

PALADI Elisei^a, NICOLESU-ŞEUŞAN Nicoleta^{b,c}, NICOLESCU-ŞEUŞAN Lucian^c

Abstract

Many people have tried or practiced fitness as a recreational activity or as a rigorous sport at least once in their lives. In this context posture remains one of the least discussed subjects, most of the practitioners not fully understanding the importance of it.

The main purpose of this study was to identify the occurrence of postural deficiencies among fitness practitioners from Alba Iulia, Romania. Most training programs aren't created in synergy with the practitioner's body posture and this mistake can be easily translated into a poor result or even injuries.

Another purpose was to highlight the need of a close relationship between the kinesiotherapist and the personal trainer. A kinesiotherapist knows more about the biomechanics of exercises and the science behind this vast field. Therefore, teamwork is crucial to identify postural imbalances and possible postural deficiencies of the spine. Also, it is very important to acknowledge the need of an initial and periodical postural evaluation of the fitness practitioners, in order to achieve better results.

Keywords: posture, fitness, kinesiotherapy, postural imbalance

Aknoledgement

¹This study was carried out with the support of a scientific performance grant awarded by "1 Decembrie 1918" University of Alba Iulia

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

^bAssist. Prof., Ph.D., "1 Decembrie 1918" University of Alba Iulia, Romania

^cZen Gym Fitness Center, Alba Iulia, Romania

Selective bibliography

- Bonnilla, D.A., Cardozo, L.A., Vélez-Gutiérrez, J.M., Arévalo-Rodríguez, A., Vargas-Molina, S., Stout, J.R., Kreider, R.B., Petro, J.L.: *Exercise Selection and Common Injuries in Fitness Centers: A Systematic Integrative Review and Practical Recommendations.* (2022). *International Journal of Environmental Research and Public Health*, Vol.19(19), DOI: <https://doi.org/10.3390/ijerph191912710>
- Huang, Y., Zhai, M., Zhou, S., Jin, Y., Wen, L., Zhao, Y., Han, H.: *Influence of long-term participation in amateur sports on physical posture of teenagers.* (2022). *PeerJ, Sports Medicine And Rehabilitation* ,
- Kemler, E., Noteboom, L.: *Characteristics of Fitness-Related Injuries in The Netherlands: A Descriptive Epidemiological Study.* (2022). *Sports*, Vol.10(12), pag.187. DOI: <https://doi.org/10.3390/sports10120187>
- Molina- Garcia, P., Plaza-Florido, A., Mora-Gonzalez, J., Torres-Lopez, L.V., Vanrenterghem, J., Ortega, F.B.: *Role of physical fitness and functional movement in the body posture of children with overweight/obesity.* (2020). *Gate & Posture*, Vol. 80, pag.331-338. DOI: <https://doi.org/10.1016/j.gaitpost.2020.04.001>
- Mossad, D.M., Abdel-Aziem, A.A., Mohamed, G.I., Abd-Elaty, E.A., Mohammed, K.S.: *Effect of forward head and rounded shoulder posture on hand grip strength in asymptomatic young adults: a cross-sectional study.* (2020). *Bulletin of Faculty of Physical Therapy*, Vol.25(5), DOI: <https://doi.org/10.1186/s43161-020-00001-z>
- Pacheco, M.P., Carvalho, J.P., Cavalheiro, L., Sousa, F.M.: *Prevalence of Postural Changes and Musculoskeletal Disorders in Young Adults.* (2023). *International Journal of Environmental Research and Public Health*, Vol.20(24), DOI: <https://doi.org/10.3390/ijerph20247191>
- Trovato, B., Roggio, F., Sortino, M., Zanghì, M., Petrigna, L., Giuffrida, R., Musumeci, G.: *Postural Evaluation in Young Healthy Adults Through a Digital and Reproducible Method.* (2022). *Journal of Functional Morphology and Kinesiology*, Vol.7(4). DOI: <https://doi.org/10.3390/jfkm7040098>

MASSAGE AND PHYSIOTHERAPY IN LUMBAR DISCOPATHY

RADU Vlad-Nicodim^a

Abstract

Low back pain is classified into different stages based on the severity that can range from mild discomfort to intense pain, affecting the osteotendinous reflexes. In the clinical table we have pains that can be intense and occasional, with symptoms mainly lumbar and sacral. The main focus is on reducing pain and preventing exacerbation.

It is a common condition in adults, affecting more men than women in active life. Kinesiotherapy recovery in adults suffering from low back pain is a method of evident pain relief and improvement of life quality but combined with manual tension relief techniques can increase the chances of success.

The patient should respect the kinesiotherapy recovery program and not rely solely on massage, even if the pain is relieved and improved. It is recommended to continue the recovery sessions for as long as possible.

Keywords: *low back pain, kinesiotherapy, massage*

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

Charriere, L., Roy, L., (2020). La kinesitherapie dans le traitement des algies vertebrales, Edition Masson, Paris

Chou R, Qaseem A, Snow V, Casey D, Cross JT Jr, Shekelle P, Owens DK; Clinical Efficacy Assessment Subcommittee of the American College of Physicians; American College of Physicians; American Pain Society Low Back Pain Guidelines Panel. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. (2007). Ann Intern Med. 147(7):478-91. doi: 10.7326/0003-4819-147-7-200710020-00006.

Cordun, M., (2023). Kinetologie medicala, Editura Axa, Bucuresti.

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

- Cordun, M., (2015). *Masajul-Tehnici si aplicatii in sport*, Editura Tehnica, Bucuresti.
- Degeratu, C., Ivanescu, T., Moldoveanu, S., Baican, I., (2016). *Cura balneara indicatii si contraindicatii*, Editura Medicala, Bucuresti.
- Dumitru, D., (2014). *Reeducarea funcțională în afecțiunile coloanei vertebrale*, Ed. Sport – Turism, București.
- Knezevic NN, Candido KD, Vlaeyen JWS, Van Zundert J, Cohen SP. (2021). Low back pain. *Lancet*. 3;398(10294):78-92. doi: 10.1016/S0140-6736(21)00733-9.
- Patrick N, Emanski E, Knaub MA. Acute and chronic low back pain. (2014). *Med Clin North Am*. 98(4):777-89, xii. doi: 10.1016/j.mcna.2014.03.005.
- Urits I, Burshtein A, Sharma M, Testa L, Gold PA, Orhurhu V, Viswanath O, Jones MR, Sidransky MA, Spektor B, Kaye AD. Low Back Pain, a Comprehensive Review: Pathophysiology, Diagnosis, and Treatment. (2019). *Curr Pain Headache Rep*. 23(3):23. doi: 10.1007/s11916-019-0757-1.

IMPROVING KNEE PAIN THROUGH KINESIOTHERAPY

TODEA Claudia-Ioana^a

Abstract

Anterior knee pain is a common musculoskeletal problem that occurs in people of all ages and activity levels. Recent research shows that anterior knee pain is caused by a variety of biomechanical, neuromuscular, behavioral and psychological factors. Research supports that educational strategies help patients better understand their condition and manage their pain.

Kinesiotherapy is an essential component of recovery and involves the use of various exercises to strengthen the muscles around the knee joint, improve flexibility and mobility and correct muscle imbalances. For example: strengthening, stretching, balance and proprioception exercises, low impact aerobic exercise or manual therapy.

The assessment is made considering numerous variables, like: patient age, location, duration and level of pain, relevant medical or surgical history, anterior swelling, associated mechanical or systemic symptoms. Patients requiring urgent treatment usually present severe pain, swelling, instability, or inability to bear weight in combination with acute trauma. They may also have symptoms of joint infection, such as fever, swelling, erythema and limited movement.

In the kinesiotherapy for knee pain, complementary therapies can play an important role in managing discomfort and improving treatment outcomes. These include: therapeutic massage, acupuncture, cryotherapy, ultrasound therapy, nutritional supplements and herbs, laser therapy.

Keywords: *recovery, knee pain, physical exercises, kinesiotherapy*

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

Bunt CW, Jonas CE, Chang JG. Knee Pain in Adults and Adolescents: The Initial Evaluation. (2018). Am Fam Physician. 98(9):576-585.

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

- Calmbach WL, Hutchens M. Evaluation of patients presenting with knee pain: Part I. History, physical examination, radiographs, and laboratory tests. (2003). Am Fam Physician. 68(5):907-12.*
- Flandry F, Hommel G. Normal anatomy and biomechanics of the knee. (2011). Sports Med Arthrosc Rev. 19(2):82-92. doi: 10.1097/JSA.0b013e318210c0aa.*
- McClinton SM, Cobian DG, Heiderscheit BC. Physical Therapist Management of Anterior Knee Pain. (2020). Curr Rev Musculoskelet Med. 13(6):776-787. doi: 10.1007/s12178-020-09678-0.*

KNEE RECOVERY IN CHONDROPATHY

VARVARA Alexandra-Adina^a

Abstract

Chondropathy, also known as articular cartilage injury, is characterized by damage to the cartilage of the knee, manifested by pain, inflammation and limitations in movement.

The main goal of recovery is to reduce pain, restore joint function and improve the patient's quality of life. The recovery process begins with a detailed assessment of the condition of the knee to determine the degree of damage and establish a personalized treatment plan. Kinesiotherapy is an essential component of recovery, involving stretching exercises, muscle strengthening, and improving flexibility, with an emphasis on the muscles that support the knee joint. These exercises are designed to reduce pressure on damaged cartilage and improve joint stability. In addition to these, complementary modalities such as ice therapy and warm compresses are often used to reduce inflammation and relieve discomfort. Also, the use of assistive devices such as knee braces can be helpful to support the joint and protect the cartilage during daily activities and exercise. In severe cases or when other treatment methods have not worked successful, surgery may be necessary to repair or replace the damaged cartilage.

Recovery of the knee in chondropathy requires patience, commitment and collaboration between the patient and the therapist, in order to achieve the desired results and to prevent the recurrence of the condition. It is important for the patient to follow a personalized recovery program and follow the doctor's recommendations to ensure an effective and lasting recovery.

Keywords: *recovery, knee, chondropathy*

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

- Biggs PR, Whatling GM, Wilson C, Metcalfe AJ, Holt CA. Which osteoarthritic gait features recover following total knee replacement surgery? (2019). *PLoS One*. 14(1):e0203417. doi: 10.1371/journal.pone.0203417.
- Felicetti G, Maini M, Bazzini G, Marchioni M, Giustini A. Valutazione della ripresa funzionale nei pazienti sottoposti ad intervento di protesi totale di ginocchio, (2004). *G Ital Med Lav Ergon*. 26(2):156-61.
- Harato K, Morishige Y, Niki Y, Kobayashi S, Nagura T. Fatigue and recovery have different effects on knee biomechanics of drop vertical jump between female collegiate and recreational athletes. (2021). *J Orthop Surg Res*. 16(1):739. doi: 10.1186/s13018-021-02893-6.
- Moore A, Eccleston C, Goberman-Hill R. "It's Not My Knee": Understanding Ongoing Pain and Discomfort After Total Knee Replacement Through Re-Embodiment. (2022). *Arthritis Care Res (Hoboken)*. 74(6):975-981. doi: 10.1002/acr.24534.
- Thienpont E. Faster recovery after minimally invasive surgery in total knee arthroplasty. (2013). *Knee Surg Sports Traumatol Arthrosc*. 21(10):2412-7. doi: 10.1007/s00167-012-1978-6.

STREETBALL, A MULTIFACETED SPORT

VINȚAN Robert-Denis^a

Abstract

Streetball is a variant of basketball, usually played outside on public courts, school fields, etc. This sport does not put very strong emphasis on rules, but more on the expression of the player 's freedom through spectacular movements and impressive ball handling. Streetball has its origins in the US and was created by young African Americans who came from the poor neighborhoods. In 1946 the first streetball match was organized on a specially arranged court in Harlem, New York.

This sport is promising for young people because it helps to improve physical capacity and encourages positive emotions. Bringing streetball in schools represents an excellent way to make basketball accessible for all students, in an entertaining environment. This alternative to traditional basketball encourages students to develop technical skills and team spirit. Through streetball games, children can learn to communicate and to improve coordination and agility, as well as to promote competitive spirit and fair play.

Streetball bears also an important social component, being a fun way to spent time and to connect with friends or other players. All this is done in a relaxed environment, in open air.

Keywords: *streetball, social, collaboration*

Author affiliation

^a3rd year bachelor student, Physical Education and Sports specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

Cardoso, K. C., O basquete de rua na educação física escolar: um lance visando uma formação crítica. (2016). Trabalho de Conclusão de Curso (Graduação em Educação Física) - Instituto de Educação Física, Universidade Federal Fluminense.

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

- Nelson IA, Gastic B. *Street ball, swim team and the sour cream machine: a cluster analysis of out of school time participation portfolios.* (2009). *J Youth Adolesc.* 38(9):1172-86. doi: 10.1007/s10964-008-9372-x.
- Oates, T. P. (2016). *Selling streetball: racialized space, commercialized spectacle, and playground basketball.* *Critical Studies in Media Communication*, 34(1), 94–100. <https://doi.org/10.1080/15295036.2016.1266681>
- Shandra CL. (2011). *Life-Course Transitions Among Adolescents with and Without Disabilities: A Longitudinal Examination of Expectations and Outcomes.* *Int J Sociol.* 41(1):67-86. doi: 10.2753/IJS0020-7659410104
- Silva, B. das N., *The streetball bringing hip hop to school.* (2012). In *Proceedings of the 1st. Colóquio Internacional Culturas Jovens Afro-Brasil América: Encontros e Desencontros Anais do Primeiro, São Paulo*

IMPROVING MOBILITY IN PARKINSON'S DISEASE

SCROBOTĂ Robert^a

Abstract

Parkinson's disease is a progressive neurodegenerative disorder and it occurs through the loss of neuronal cells in the substantia nigra. With the loss of dopaminergic cells below normal levels, the symptoms of Parkinson's disease appear. Common and recognized symptoms of Parkinson's disease are bradykinesia combined with rigidity or resting tremor and in some cases both. Parkinson's is considered a movement disorder, but it is associated with a variety of non-motor symptoms in almost all patients, including hyposmia, constipation, urinary dysfunction, orthostatic hypotension, memory loss, depression, pain and sleep disturbances. These non-motor symptoms are common in the early stages and are intense and distressing for some patients.

In the present research we aim to ameliorate those symptoms and slow down the progression as much as possible since there is no cure for this disease yet. Functional assessment of a person with Parkinson's is a crucial component in the proper management and care of his condition. This assessment evaluates the patient's ability to perform essential daily activities such as dressing, eating, walking and maintaining balance. These aspects can provide significant information about the patient's level of functionality and the impact of the disease on activities of daily living.

Through kinesiotherapy we aim to provide better stability and precision in those day-to-day activities so that our patients can do those tasks easier and faster and enjoy a better life.

Keywords: *Parkinson, daily activities, kinesiotherapy*

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

- Balestrino R, Schapira AHV. Parkinson disease. (2020). *Eur J Neurol.* 27(1):27-42. doi: 10.1111/ene.14108.
- Băjenaru, O., Perju-Dumbravă, L. Tiu, C. Popescu. B.O., (2004). Ghidul de diagnostic și tratament al bolii Parkinson. *Revista Română de Neurologie*, 3: 79-91
- Bloem BR, Okun MS, Klein C. Parkinson's disease. (2021). *Lancet.* 397(10291):2284-2303. doi: 10.1016/S0140-6736(21)00218-X.
- Kalia LV, Lang AE. Parkinson's disease. (2015). *Lancet.* 386(9996):896-912. doi: 10.1016/S0140-6736(14)61393-3.
- Pont-Sunyer C, Hotter A, Gaig C, Seppi K, Compta Y, Katzenschlager R, Mas N, Hofeneder D, Brücke T, Bayés A, Wenzel K, Infante J, Zach H, Pirker W, Posada IJ, Álvarez R, Ispierto L, De Fàbregues O, Callén A, Palasí A, Aguilar M, Martí MJ, Valldeoriola F, Salamero M, Poewe W, Tolosa E. The onset of nonmotor symptoms in Parkinson's disease (the ONSET PD study). (2015). *Mov Disord.* 30(2):229-37. doi: 10.1002/mds.26077.

IMPORTANCE OF THE PSYCHOLOGICAL FACTOR IN THE KINESIOTHERAPEUTIC RECOVERY

LUNGU Maxim^a

Abstract

Effective recovery in physical therapy relies not only on physical interventions but also on an essential aspect: the psychological factor. This study explores the psychological impact on postural recovery.

The scientific literature emphasizes the importance of the psychological factor in the recovery process. Studies indicate that a positive perception and active involvement of the patient can significantly improve physical therapy outcomes. Additionally, motivation and self-efficacy are key factors in maintaining therapeutic progress. Psychological interventions can reduce anxiety and depression, factors that negatively influence recovery. Furthermore, mindfulness and body awareness techniques have proven effective in promoting postural self-control. Similarly, patient involvement in setting recovery goals and monitoring progress can enhance adherence and treatment outcomes

Thus, the psychological factor plays an essential role in the long-term success of recovery through physical therapy. Constant attention to correct posture and active involvement in self-monitoring can prevent relapse and support the results achieved through physical interventions.

Keywords: *psychological, recovery, kinesiotherapy*

Author affiliation

^a3rd year bachelor student, Kinesiotherapy and Special Motricity specialization, Department of Physical Education & Sports, Faculty of Law and Social Sciences, "1 Decembrie 1918" University of Alba Iulia, Romania

Selective bibliography

Gangwani R, Cain A, Collins A, Cassidy JM. Leveraging Factors of Self-Efficacy and Motivation to Optimize Stroke Recovery. (2022). Front Neurol. 13:823202. doi: 10.3389/fneur.2022.823202.

Book of abstracts

*International workshop - Science and Leisure build bridges together, 2nd Edition
24th of May 2024 – Kaunas, Lithuania*

Lequerica AH, Donnell CS, Tate DG. Patient engagement in rehabilitation therapy: physical and occupational therapist impressions. (2009). Disabil Rehabil. 31(9):753-60. doi: 10.1080/09638280802309095.

Pérez-Peña M, Notermans J, Desmedt O, Van der Gucht K, Philippot P. Mindfulness-Based Interventions and Body Awareness. (2022)/ Brain Sci. 12(2):285. doi: 10.3390/brainsci12020285.

Sagen JS, Kjekken I, Habberstad A, Linge AD, Simonsen AE, Lyken AD, Irgens EL, Framstad H, Lyby PS, Klokkeud M, et al. Patient Involvement in the Rehabilitation Process Is Associated with Improvement in Function and Goal Attainment: Results from an Explorative Longitudinal Study. (2024). Journal of Clinical Medicine. 13(2):320. <https://doi.org/10.3390/jcm13020320>

Qudsia Shamim, Laraib Fatima, & Husna Albab. (2023). The Impact of Psychological Factors on Rehabilitation Outcomes in Patients with Chronic Pain. Journal of Health and Rehabilitation Research, 3(1).