



How PE and School Sport survived COVID-19 pandemic in Slovenia

Gregor Jurak



SLOfit team

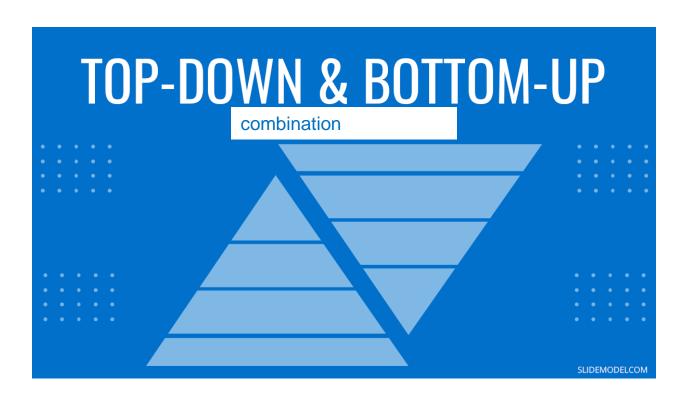




Pathway

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Policy makers on national, municipality and school level

Media

PE teachers, parents, coaches

Engagement of public

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#stayhome

#stayhome

Be physically active every day, however only with the members of your household

> Epidemic declared: 13.3.2020





#stayhome

#stayhome

#stayhome

virusa 16.03.2020 | ₼ Telesna dejavnost, COVID-19 | ← Nazaj



Engagement of public





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Commentary

Physical activity recommendations during the coronavirus disease-2019 virus outbreak

Gregor Jurak ^a, Shawnda A. Morrison ^a, Bojan Leskošek ^a, Marjeta Kovač ^a, Vedran Hadžić ^a, Janez Vodičar ^a, Polonca Truden ^b, Gregor Starc ^a $\stackrel{>}{\sim}$ $\stackrel{\boxtimes}{\bowtie}$

Recommendations

- DO exercise outdoors wherever possible and perform your choice of low to moderate level physical activity daily, either alone or with your family unit. It is critical to stress here that all persons must follow the suggested guidelines of their authorities. Whenever possible use the largest possible distance from others while outside (even more than the typically suggested 1.5 m). Physical activity (exercise as well as active commuting) from home door to home door without directly contacting others is highly recommended.
- DO NOT socialize and play group sports with people outside your household. Parents, avoid having your children interacting directly with other children. In particular, explain in age-appropriate language the risks of virus transmission that can occur with socializing in group or team sport situations.
- DO NOT allow children to climb on park equipment, slides and other features (especially metal and plastic), including outdoor fitness equipment, since they provide a surface for virus transmission.
- DO engage in a variety of exercises in your home and with your family climb stairs, hop, skip jump and dance with children and other household members, perform strength exercises or even active video-gaming in short bursts of activity to increase heart rate, blood flow and circulation periodically throughout the day. Improvise on exercise equipment with rope, broom, bottles etc. If you have a balcony or terrace, exercise there.
- DO incorporate stretching and breathing deeply each day. Take at least 10
 minutes each day to slowly move arms and legs throughout their range of motion comfortably.

SLO_f t

Recommendations

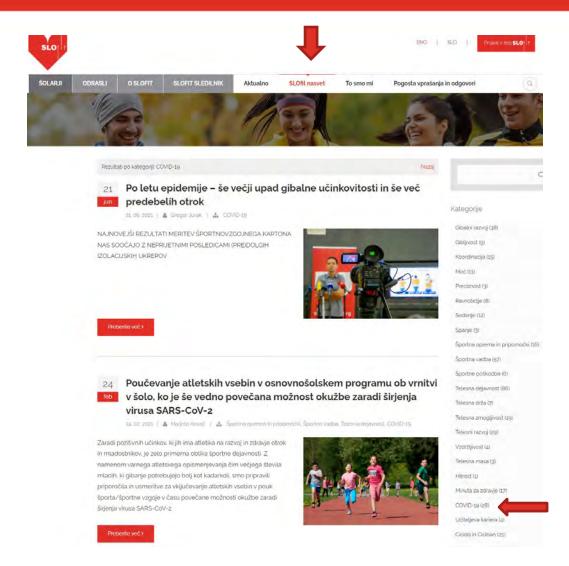
- DO follow online exercise classes, or post photos/videos on social media of yourself doing exercise at home if that keeps you motivated and connected to others.
- If you suspect you may have contracted a contagious disease, or are feeling ill in any way, limit your physical activity to within your home and contact your medical professional. Always call first to receive further instructions before going to a medical facility in person.
- It is critical that **older adults remain physically active** during this time, since they are the ones most likely to experience dramatic structural and functional changes to their muscles and bones after prolonged confinement and low levels of mobility. We want to avoid an increased risk of falls in the elderly overburdening health care services.
- DO check in on elderly individuals you may know (neighbours, family members) to see if they require assistance with their mobility during the day (avoid direct contact – call or inquire through other channels).
- Be aware of the cumulative screen and sedentary time break up sitting times with physical activity, standing up and stretching. For example, for every 60 minutes seated or recumbent throughout the day, perform 5 to 10 min of structured movement. This is especially important for those with impaired circulation, diabetes, and other vascular issues.
- Avoid screen viewing of all kinds after 8 pm to promote proper sleep quality, as increased stress and low physical activity each exacerbate poor nocturnal sleep patterns.

Recommendations

- Stay hydrated-choose water over sugary drinks or alcohol. Some indoor environments can be dry and may exacerbate those who suffer with breathing difficulties.
- Avoid prolonged, strenuous exercise; this type of exercise can reduce the body's resistance to viral and other infections in the short term.
- Most importantly do what is comfortable and right for you and your family!
 Regular physical activity is meant to be fun and reduce stress. It helps cognitive
 function, attention and reduces anxiety in children, who will be particularly affected
 by extended periods of time spent indoors. Be sure to avoid doing activities that
 have a higher risk of injury in order to avoid over-burdening the health system, and
 putting yourself at increased risk of exposure to the novel COVID-19 or other
 illnesses.
- BOTTOM LINE: AVOID INACTIVITY THROUGHOUT THE DAY AND BE AWARE
 THAT ANY ACTIVITY YOU DO IS BETTER THAN NO ACTIVITY AT ALL. All
 persons (who are physically able), should try to accumulate between 60-75
 minutes of low to moderate physical activity each day, but as stated before every
 minute counts. At least 15 minutes of this activity should take place outside, in
 natural light, whenever possible. If there is no other option due to political, health
 risk or other constraints, use a balcony or exercise by open window. Some
 activities should be of longer duration (e.g. walking or cycling outside for 30
 minutes), and other activities should incorporate strength and flexibility, ideally
 performed with family members.

Engagement of teachers

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15 on-line events (16.3.20-21.3.21)

Social media

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O KOORDINACIJI, seveda! Gibalni sposobnosti, ki nam omogoča natančno izvedbo zahtevnejših qibanj. 🌂 🐔 🦫

Njen razvoj se začne zelo zgodaj, saj plod že v fetalnem obdobju dobi prve gibalne izkušnje, v zgodnjem otroštvu pa malček usvoji temeljne gibalne vzorce.

Najpomembnejši obdobji za razvoj koordinacije gibanja sta zgodnje in pozno otroštvo, ko so otroci v vrtcu in nižjih razredih osnovne šole, razvoj temeljnih gibalnih sposobnosti pred puberteto pa odločilno vpliva na odnos do gibanja in gibalno uspešnost v kasnejšem v življenju.

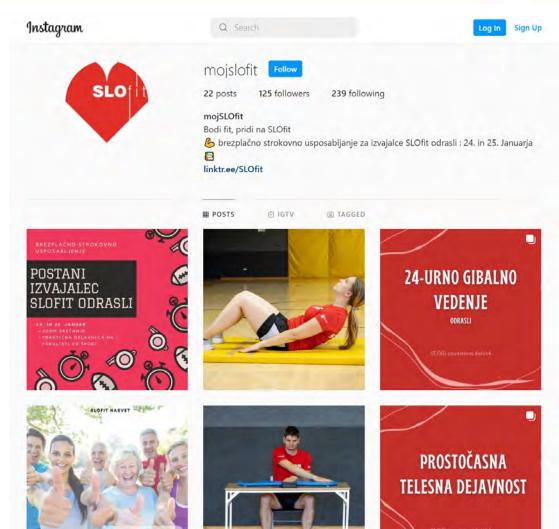
Dokazano je, da skupno poučevanje učitelja razrednega pouka in učitelja športne vzgoje pozitivno vpliva na razvoj koordinacije gibanja, zato predlagamo, da v prvih petih letih šolanja, ki so ključna za razvoj te gibalne sposobnosti, pouk športa poučujeta oba strokovnjaka. Zakaj?

Vse izveste na ...

千年年

https://www.slofit.org/.../Ena-najpomembnej%C5%A1ih...

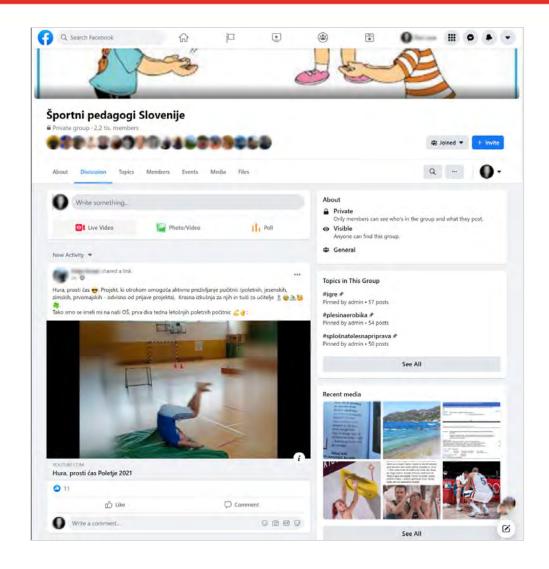




KAKO SI ZASTAVITI CILJ

FB group PE teachers Slovenia

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Ustvarjeni seznami predvajanja



»Ljubo doma, kdor telovaditi zna« Domači izzivi

Posodobljeno pred 3 dnevi OGLED CELOTNEGA SEZNAMA



Posodobljeno včeraj OGLED CELOTNEGA SEZNAMA

20



Plesne koreografije

OGLED CELOTNEGA SEZNAMA



Medijski prispevki

OGLED CELOTNEGA SEZNAMA

Nalaganja

PREDVAJAJ VSE









Conclusions about teaching on-line PE

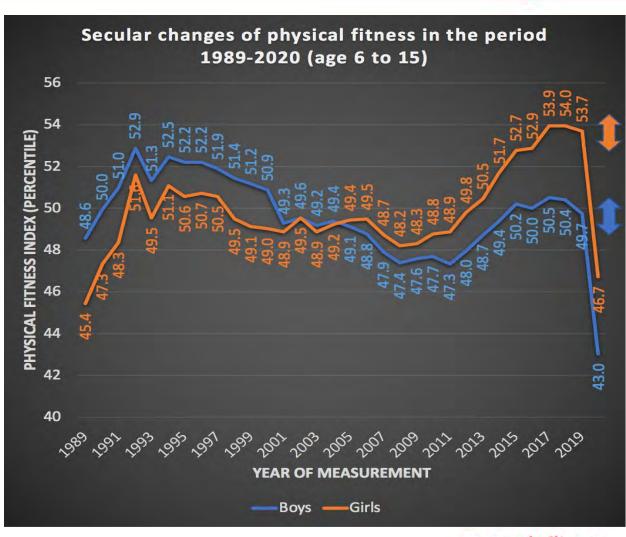


- We were not well prepared but we organised ourselves very fast.
- Enormous production of materials for on-line PE classes.
- 2/3 of children regularly following the on-line PE tasks.
- 2/3 of children claiming to be equally or more physically active during the lock-down than before.

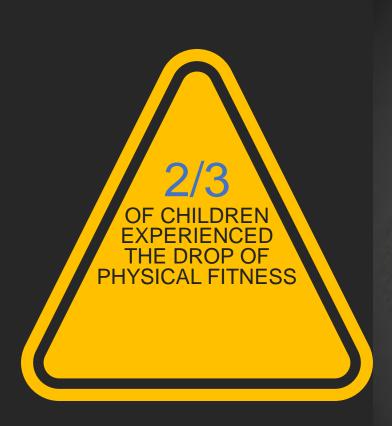




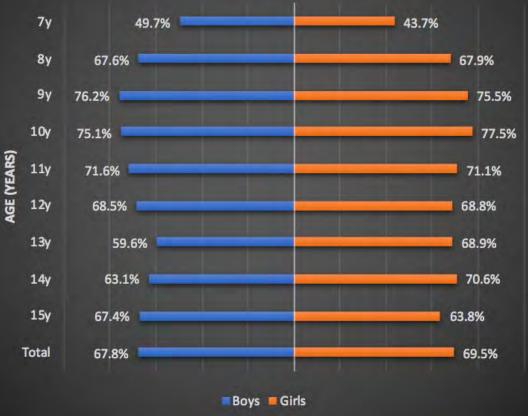








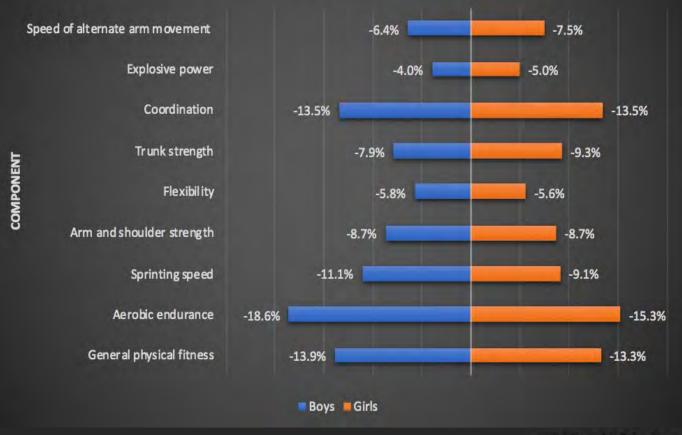
% of children that suffered the drop of physical fitness





% of drop of different components of physical fitness

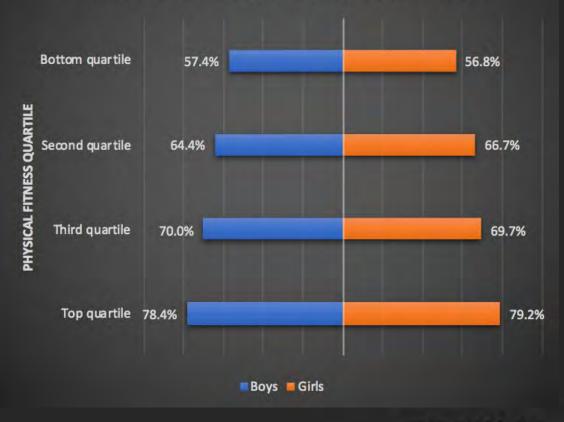




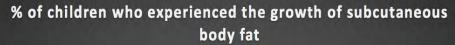




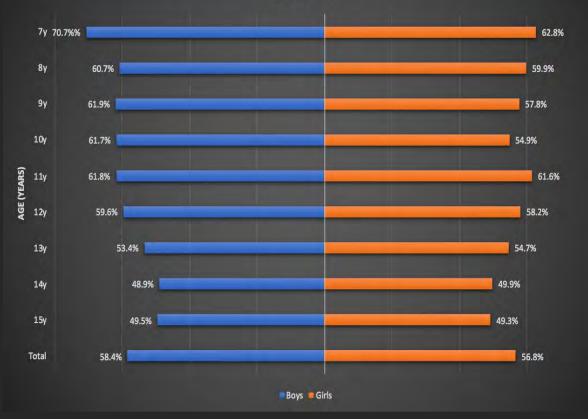
% of children from different quartiles of physical fitness who suffered the drop of physical fitness





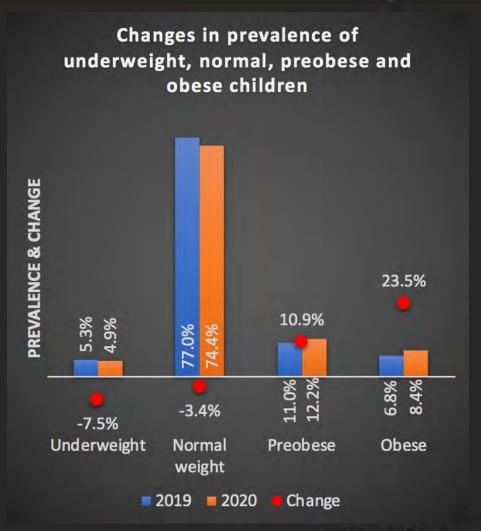














- Our fears became true. The COVID-19 counter-measures affected children more than the virus itself. They became a new vulnerable group with possible long-term developmental and health handicap.
- Despite tremendous efforts of teachers and schools, the on-line PE teaching produced no visible results.
- The intensity of physical activity of children at home does not reach the intensities of physical activity in school PE or sport training.

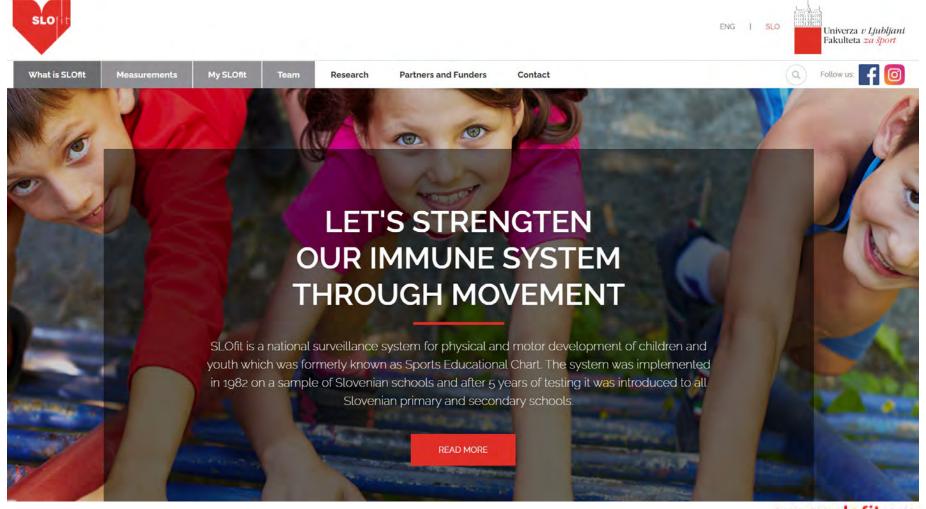
We suggested...



- Instead of focusing on on-line teaching, we should focus on outdoor teaching.
- The closure of schools should be avoided at all costs.
- In the aftermath of COVID-19 we will not be able to work as we did before. Everything will have to be intensified (increase of time for PE, learning in movement, rise of quality of PE delivery, joint teaching of classroom and PE teachers, smaller groups...)
- Countries should aim to implement national surveillance systems to regularly follow children's somatic development and their physical fitness. The physical activity surveys alone can be extremely misleading.

Campain

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Engagement of public



PERSPECTIVE article

Front. Public Health, 05 March 2021 Sec. Children and Health https://doi.org/10.3389/fpubh.2021.64423

This article is part of the Research Topic

The Effects of Climate Change and Environmental Factors on Exercising Children and Youth

View all 5 Articles >

A COVID-19 Crisis in Child Physical Fitness: Creating a Barometric Tool of Public Health Engagement for the Republic of Slovenia



Gregor Jurak¹,



Shawnda A. Morrison^{1*},



Marjeta Kovač¹,



Bojan Leskošek1,



Vedrana Sember¹,



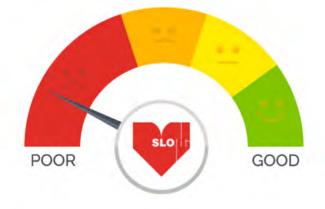
Janko Strel² and



Gregor Starc¹

SLOfit barometer







t

ıkrepov

na izjemno škodljive posledice ID-19 na gibalno učinkovitost Igov za omejitev teh posledic

Trying to influence on decision-making



- Council of Sport
 - Guidelines about opening PE and school sport within educational system and opening sport in sport clubs, fitness industry

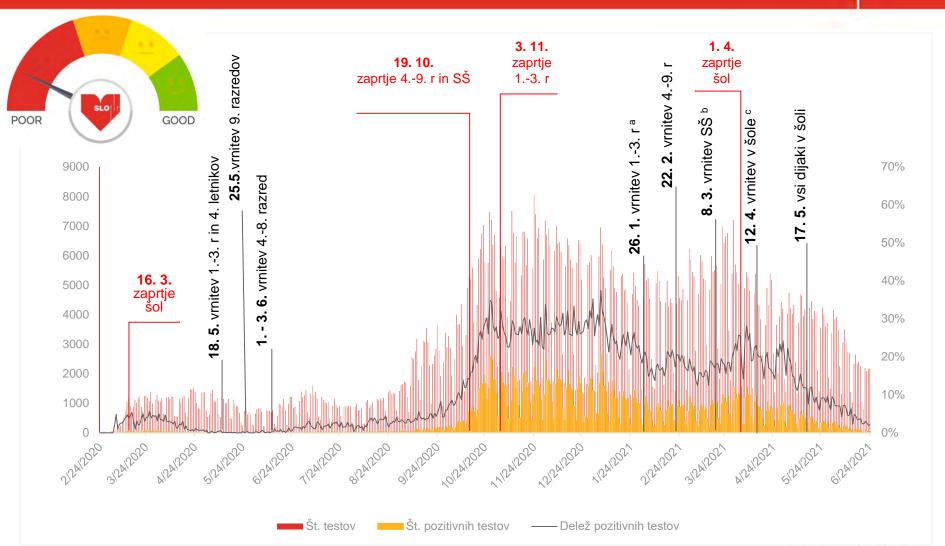
Excepted by Council but not by Government

- Council for General Education
 - Guidelines about opening PE and school sport within educational
 system
 Acknowledge by Council but not by Government
- Parliament Committee for Education and Sport
 - Proposed measures needed (from barometer) to combat situation

Conclusion that Ministry should consider proposed measures

School closure

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Same children living three scenarios...



Normal school year

School lockdowns, quarantines & on-line classes

Quarantines with online classes







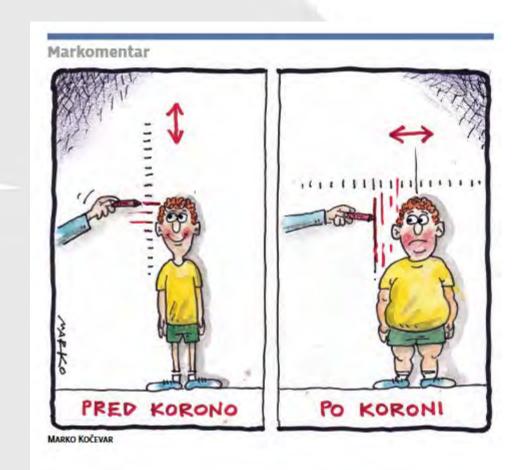
Number of distance schooling days (16.3.2020 – 17.5.2021)



Grade	No of distance schooling days	No of distance schooling weeks	No of PE classes per week	No of PE classes on distance	No of PE classes per year	% of PE classes on distance
1	105	21	3	63	105	60%
2	105	21	3	63	105	60%
3	105	21	3	63	105	60%
4	128	26	3	77	105	73%
5	128	26	3	77	105	73%
6	130	26	3	78	105	74%
7	130	26	2	52	70	74%
8	130	26	2	52	70	74%
9	123	25	2	49	64	77%
10-12	155	31	3	93	105	89%
13	128	26	3	77	105	73%

How we survived COVID-19 pandemic?





The epilogue after 2+ years

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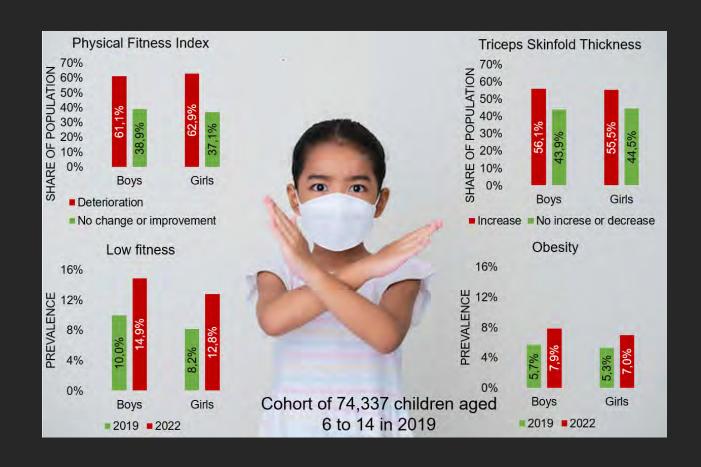




Normal and overweight children (in this group there is more girls) were more effected

Things won't improve on its own...

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Further efforts: new understanding of physical activity in school



FITTER KIDS HAVE BIGGER BRAINS

Cadenas-Sanchez et al. 2020 Scand J Med Sci Sports



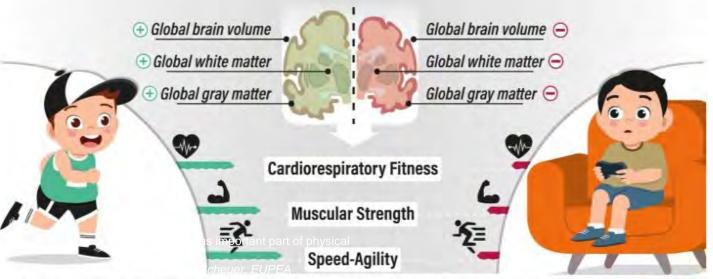
FIT CHILDREN

They have larger global brain volumes, which are directly related to fitness markers.



UNFIT CHILDREN

They have lower global brain volume, which are related to worse fitness markers.



This infographic has been developed with the support of the Unit of Excellence in Sport and Health (UCEENS), granted by the University of Granada and Junta de Andalucía, Consejería de Conocimiento, Investigación y Universidades and European Regional Development Funds (ref. SOMM17/6107/UGR).



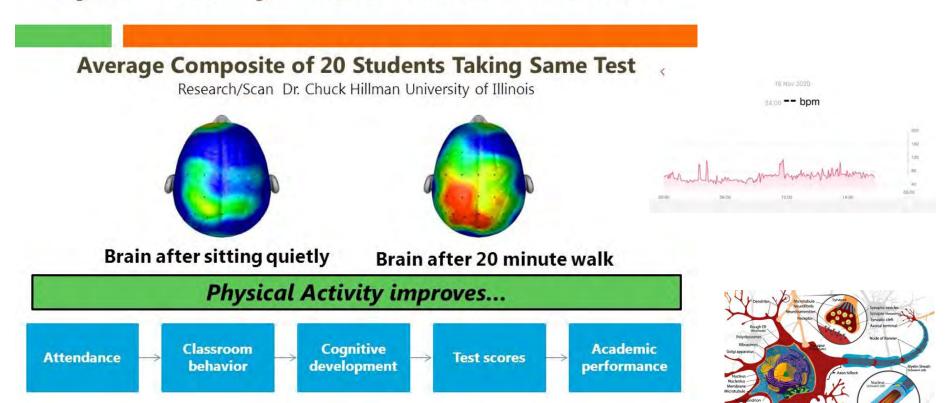




Further efforts: new understanding of physical activity in school

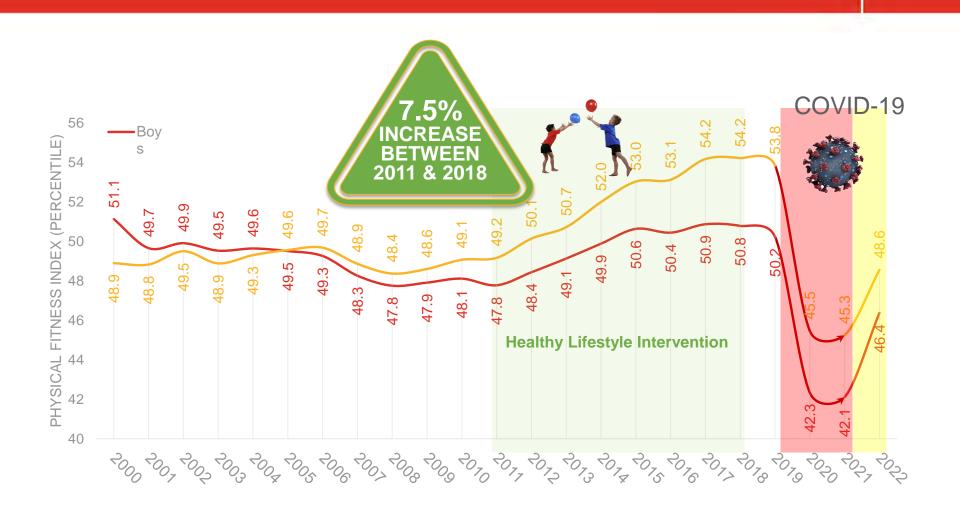


Physical Activity and Academic Achievement



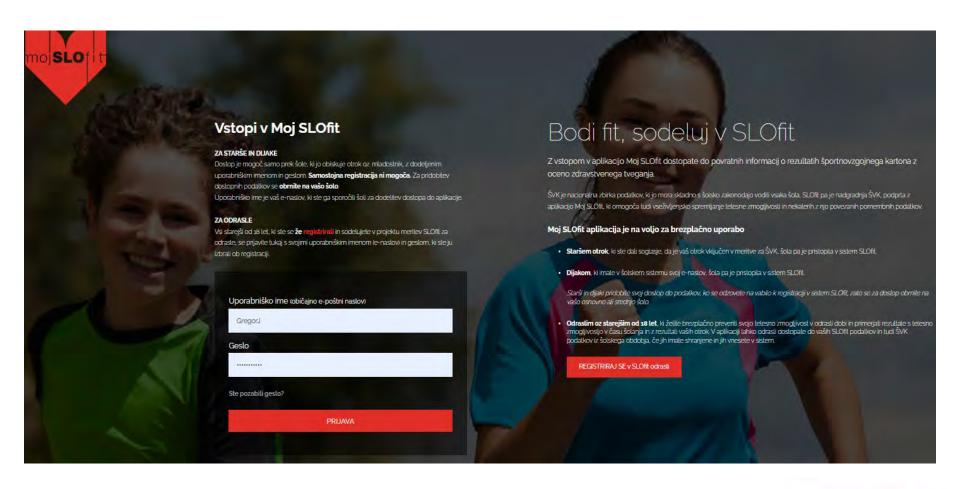
Further efforts: HLI in short term

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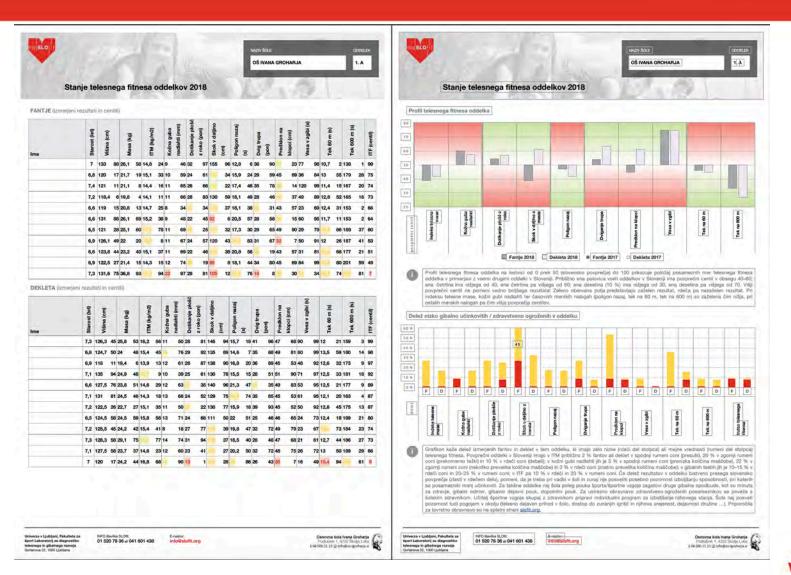
My SLOfit web-based app





SLOfit class and school reports

SLOf it



SLOfit student PDF report

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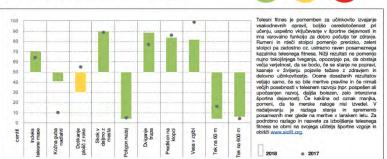


Poročilo prikazuje stanje tvojega telesnega fitnesa v primerjavi z vrstniki istega spola in starosti ter spremembo tvojih rezultatov v primerjavi s predhodnim letom. Pri tistih merskih nalogah, ki lih je mogoče povezovati z zdravstvenimi tveganji, so podatki prikazani v različnih območjih tveganja.



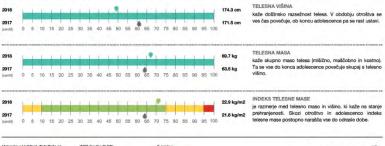






Navodila za branje rezultatov:

V grafikonih so povsem desno zapisane tvoje izmeriene vrednosti za posamezno mersko nalogo, s kaplijco pa so označene pripadajoče centilne vrednosti. Zgoraj so zapisane in označene vrednosti za letošnje leto, spodaj pa za preteklo leto. Centilne vrednosti kažejo tvoj položaj med vrstniki (npr. 40. centil pomeni, da ima med vsemi šolarji istega spola in starosti v Sloveniji 40 % nižji, preostanek, t.j. 60 %, pa višji rezultat od tvojega). Zelene kapljice kažejo zdravo območje posameznega kazalnika, rumene in rdeče pa, da bi bilo priporočljivo tisti del telesnega fitnesa izboljšati. Za telesno višino in maso sta skali ter oznaki enotno obarvani, ker šele razmerje med njima daje informacijo o telesnem fitnesu. Več o razlagi rezultatov si lahko prebereš na www.slofit.org/solar/razlagarezultatov, več o merskih nalogah pa na www.slofit.org/solar/merske-naloge. Z vadbo lahko veliko spremeniš. Nekaj nasvetov za vadbo najdeš na www.slofit.org/slofit-nasvet, svojega učitelja športne vzgoje pa prosi, da skupaj sestavita program za izboljšanje tvojega telesnega fitnesa.



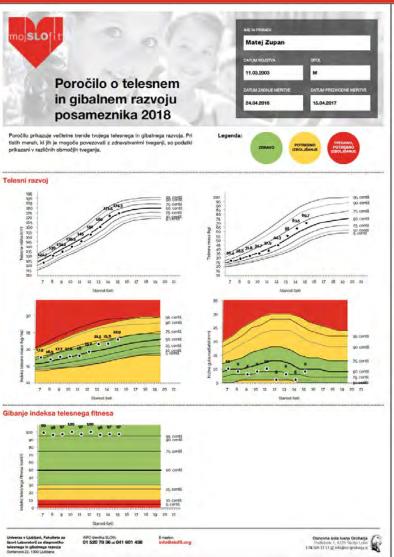
Stanje telesnega fitnesa Matej Zupan posameznika 2018 kaže količino podkožnega maščevia. Ta skozi otroštvo počasi narašča, tik pred adolescenco nekoliko vidneje 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 naraste, potem s hitro rastjo mišične in kostne mase pri fantih upada do odrasle dobe, pri dekletih pa še naprei narašča do odrasle dobe. DOTIKANJE PLOŠČ Z ROKO 🦠 meri hitrost izmeničnih gibov, ki kaže na učinkovitost 0 5 10 15 20 25 30 35 40 45 50 55 80 65 70 75 80 85 90 95 100 prehajanja živčnih dražljajev iz osrednjega živčevja do SKOK V DALJINO Z MESTA meri eksplozivno moč, to je sposobnost mišic za hitro meri koordiniranost gibania, to le sposobnost osredniega živčevja za uravnavanje sestavljenih gibanj. 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 meri dinamično moč, to je sposobnost ponavljajočega 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 izvajanja intenzivnih gibov. PREDKLON NA KLOPCI meri gibljivost, to je sposobnost izvajanja velikih amplitud 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 VESA V ZGIBI meri statično moč, ki kaže na sposobnost premagovanja dalj časa trajajočih obremenitev. 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 meri hitrostno vzdržlijvost, to je sposobnost hitre reakcije in ohranjanja skladnega gibanja v veliki hitrosti. 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 TEK NA 600 m kaže aerobno vzdržilivost, to je sposobnost dolgotrajnega izvalania gibania pri zmemi intenzivnosti. 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 INDEKS TELESNEGA FITNESA kaže na splošno učinkovitost telesa v gibanju z vidika vseh gibalnih sposobnosti in telesnih značilnosti posameznika 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 85

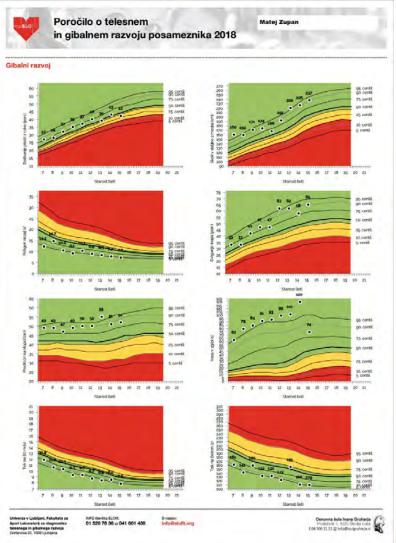
erza v Liubilani. Fakulteta za

irt Laboratorij za diagnostik isnega in gibalnega razvoja tanova 22. 1000 Liubijana

SLOfit student PDF report

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SLOfit student interactive report

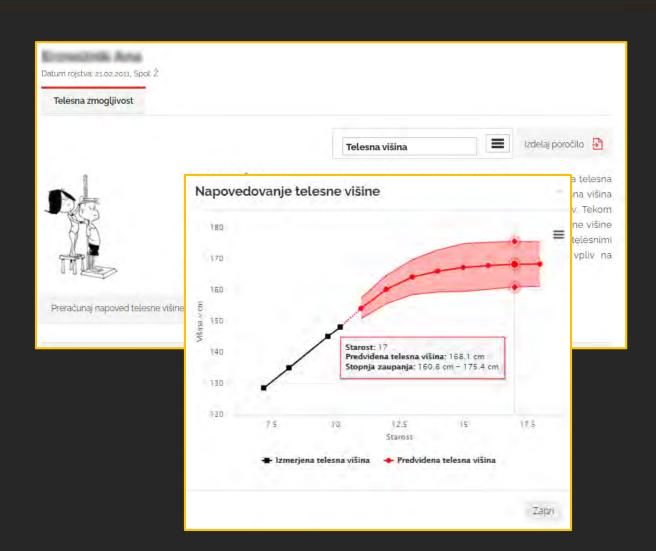
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SLOfit prediction and maturity assesment

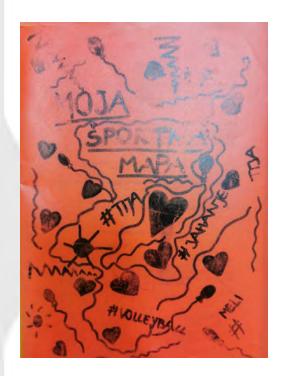


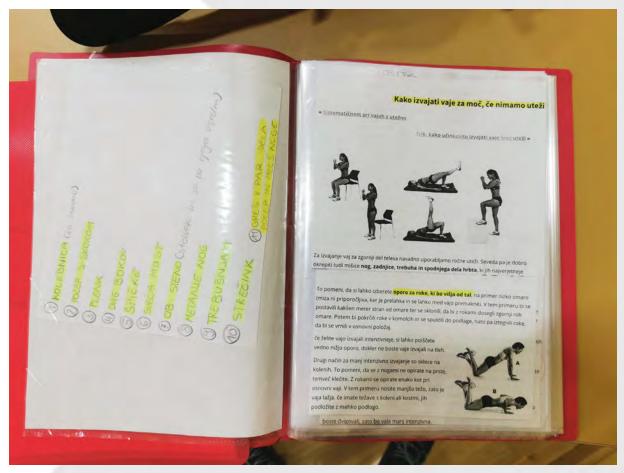


Height prediction calculator avaliable also in English on: https://en.slofit.org/measurements/height-prediction

PF monitoring in PE classes to increase PL











Lang et al., Sport Medicine, 2022

Thank you!





info@slofit.org

www.slofit.org