DERLEME MAKALE · REVIEW ARTICLE

ULUSLARARASI BEDEN EĞİTİMİ SPOR VE TEKNOLOJİLERİ DERGİSİ
INT JOURNAL OF PHYSICAL EDUCATION SPORT AND TECHNOLOGIES

OPERATION OF SPORT ACADEMIES DURING AND AFTER CORONA PANDEMIC

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Abstract : *The authors present details of operation of sport academies during and after corona pandemic for players 10-year old or younger concentrating on three sports (gymnastics, tennis and football). Changes in infrastructure are proposed to minimize close encounters of players. Players are to be admitted to academy after negative coronavirus test. Upon arrival players are given health and hygiene inspections. Standard Operating Procedures are put forward to prevent catching and spread of the disease, which include physical distancing, hygiene and healthy practices, proper dosages of vitamins C and D as well as maintenance of weight according to height. Height and weight of players are to be monitored twice a year and quantitative profiles are generated along with specific recommendations for the following 6 months to pick up height and put on or shed off weight. Safe and prohibited time slots for obtaining sun exposure to get the required dose of vitamin D are suggested as part of growth and obesity roadmaps of players. The daily routine should adopt approaches closer to nature, outdoor coaching as well as maximum interaction of body with sunshine and fresh air. Kits for gymnastics, tennis and football are recommended based on technical, practical and cultural considerations, with the consideration that maximum skin is exposed to be able to breathe fresh air and soak the body in sunshine. In order to reduce the number of players at any one time, it is suggested to make the sessions according to build and gender. At the end of each coaching session there is a mandatory presentation session to groom the players.*

Keywords : *Build of athletes, growth-and-obesity Vector-Roadmap 2.5, guarded-graduated sun-exposure, gymnastics, hardening of bodies,*

Citation : *Kamal, S. A., & Khan, S. A. (2020). Operation of sport academies during and after corona pandemic. International Journal of Physical Education Sport and Technologies 1(2), 12-29.*

Geliş Tarihi/Received: 22.12.2020 **Kabul Tarihi/Accepted:** 30.12.2020 **Yayın Tarihi/Published Online:** 31.12.2020

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World Health Organization (WHO) came to learn about an unknown virus on December 31, 2019, known as SARS-CoV-2. On January 1, 2020, information was requested from officials in China and on January 30, 2020, WHO declared a Public Health Emergency. Official recognition as a global pandemic came on March 11, 2020 in relation to the novel coronavirus disease, now called COVID-19.

With Cristiano Ronaldo dos Santos, the world-famous Portuguese footballer, testing positive for COVID-19, the significance of establishing Standard Operating Procedures (SOPs), for operation of sport academies during and after corona pandemic, takes center stage in sport management. Considering the psychological cost of lockdown on children and their parents, with increased cases of domestic abuse reported during these periods of frustration, the authors make the case for adopting approaches closer to nature, outdoor coaching as well as maximum interaction of body with sunshine and fresh air to be able to operate sport academies during and after corona pandemic. The sport academies should have state-of-the-art coaching methods, which include performance analysis through one-way screen, photographic, video and stereophotogrammetric (moiré fringe topography and dotted-rasterstereography) analyses, combined with periodic monitoring of health status (height-gain-target-achievement index, mass-management-target-achievement index, abnormalities of gait, risk of acquiring scoliosis) and fitness index of athletes. There should be ample educational resources available in the academy library (conventional and digital), which should include books, manuals, teaching softwares and instructional videos. A portion of the library cum museum should be devoted to history and prominent figures of the sport in the form of books, models, feature films and interviews.

In this paper, the authors discuss three sports, gymnastics, tennis and football, and propose SOPs for operation of sport academies during and after the corona pandemic for under-11 players, which include physical distancing, hygiene and healthy practices, proper dosages of vitamins C and D as well as maintenance of weight according to height.

Gymnastics

Gymnastics are considered to be the exercises, which help develop the muscles. They include joint mobility and muscle tone. Fédération Internationale de Gymnastique (FIG) governs competitive gymnastic events. Taken from adjective in Greek *γυμνός* (*gymnos*), meaning '*naked*' and the verb related to this adjective *γυμνάζω* (*gymnazo*) implying '*to train naked*', gymnastics is related to Latin *gymnasticus* as well as Greek *gymnastikos* (skilled in/liking bodily exercise) and *gymnazein* (to train/to exercise). Kamal & Khan (2015) suggested hairstyle, footwear and clothing for preteen and teen gymnasts based on practical, technical and cultural considerations. This is a sport involving extreme mental and physical stress on gymnasts. Burgress et al. (2016) discussed parental stress and coping in elite youth gymnastics. Batista et al. (2019a) dealt with flexibility and functional asymmetry in elite gymnastics. In another work, they analyzed strength in Portuguese rhythmic gymnasts of different competition levels (Batista et al., 2019b).

Tennis

Tennis is considered to be sport of the elite and children exposed to this sport may find tennis an asset to socialize and to move into the upper echelon of the society. Bromwich (1971) applied a few principles of dynamics and geometry to improve tactics of lawn tennis. Berdejo & González (2010) talked about training flexibility in young tennis players. It is a known fact that a number of injuries of lower limb happen as a result of poor flexibility. The authors emphasize that flexibility is one of the basic pillars of training and that programs for development of tennis should be flexibility-centered. Avilés et al. (2019) presented a less prescriptive approach to motor learning and tennis basic stroke teaching for 3- and 4-

year-old boys and girls. Their didactic proposal is divided into 3 complimentary and progressive stages: the first one involves encouraging the player to explore the learning environment and to discover motor capabilities; the second one is the intermediate phase with enhanced practice variety providing opportunities to the player to experience different ways of acting and the third one to allow the player to discover own preferred movements and stokes naturally.

Football

A game with a lot of money involved and a lot of fanfare, football trains the players to act as an active member of team, learning the tricks of team dynamics and team kinematics (Frencken & Lemmink, 2007; 2008). A successful team player has a very important soft skill to his credit, which helps the incumbent to become a good manager and eventually a good leader. Yaşar & Sunay (2019) discussed a new football philosophy in Turkish football. Kamal & Khan (2020a) proposed a model of football academy for residents of Lyari Town, Karachi, Pakistan, which could keep the youth away from gang wars and use of controlled substances.

Corona and Children

Coronavirus (COVID-19) is a communicable vascular and respiratory disease, which appears because of severe acute respiratory syndrome, named as SARS-CoV-2. It is spread by tiny droplets traveling in air and contact through surfaces. As early as the start of this decade, Zaki et al. (2012) isolated a novel coronavirus from a patient suffering from pneumonia in the Kingdom of Saudi Arabia. Since the beginning of this year it has spread all around the world, taking the name of a pandemic, which has affected children, adolescents, adults and the elderly. In sport academies catering to under-11 players, steps must be taken to protect children, their coaches and administrative staff (Aljamali et al., 2020). For academies in South Asia, extra precautions need to be taken to prevent catching and spreading this disease (Chalise, 2020). There is a dire need for research in the sociology of sport to cope with challenges posed by conduct of sport activities in the wake of the COVID-19 pandemic (Evans et al., 2020).

One must keep in mind that current research indicates that cumulative exposure matters, which may be during a number of sessions, just like cumulative radiation dose posing risk for acquiring cancer. Players are allowed in the academy only after negative corona testing certificate based on a test, which has a high sensitivity. In fact, no test can be 100% sensitive-sensitivity being the probability of right decision (true positive). A multi-level testing with high-relative-sensitivity test should be placed at the top level and high-relative-specificity test should be placed at the bottom level. Relative sensitivity and relative specificity were defined in Kamal et al. (2013). For this purpose probability theory should be employed to combine 2 or more tests, whose relative sensitivities and relative specificities are, already, determined.

Discipline in Academy

The following disciplinary measures are suggested considering safety, privacy, distractibility, hygiene and safety concerns:

- No tattoos allowed for players, coaches and administrators.
- Street clothing and shoes are not permitted for the players the in the academy-this way no controlled substances and weapons could sneak through in the academy campus; a detailed discussion on this issue may be found in Kamal & Khan (2018).
- No still or video camera, mobiles with camera and smart mobiles permitted for the players, the coaches and the administrators at the academy campus.
- The players have to deposit their simple mobiles in the lockers along with street clothing and shoes.
- The players cannot bring in watches, chains, bracelets or other jewelry on the academy campus.

SOPs for Safety

The following recommendations are prepared in order to prevent catching and spread of Corona:

- Protective gear (masks, gloves, ear coverings and eyeglasses like those used during swimming) to be worn upon arrival and departure and in transport (busses and vans), but not in sessions (actual sport and coaching), as the players should be exposed to a certain group only, which, if shows symptoms, is easily traceable-use of gloves beneficial in keeping dust and aerosol particles off, even after the pandemic's spread is reduced to safe levels.
- Regular sanitization of hands, once the gloves are removed inside the academy.
- Frequent washing for 20 seconds of face and hands, once the masks and the gloves are taken off, no sharing of towels and handkerchiefs-hand washing was strongly recommended even before the start of this pandemic (Kamal & Khan, 2014).
- Washing with dettol-mixed water after passing urine and stool, cleaning with tissue paper is not enough-chemical name of 'dettol' is 'chloroxylenol'.
- Avoiding handshakes, hugging and physical contact; no use of saliva on football-physical distancing, not social distancing (waving, salutations, smile): our hearts are close to each other.
- Staying away from close conversations as well as closed-off (with insufficient ventilation) and crowded places.
- Every player is to use personal equipment; if shared (e.g., beam, vault, asymmetric bars) the equipment should be disinfected after every use.
- Separate lunch/snack boxes and water/juice/milk bottles; milk, juices and water should not be dispensed through dispensers.
- No spitting except in designated places; sneeze or cough in one's bent elbow.
- No touching of eyes, nose or mouth.

Infrastructure Modifications

The following changes in infrastructure are suggested:

- Van and bus doors opened by operator (driver) and not players to minimize touching of surfaces.
- Green campus of the academy with separate walking, biking and motor-vehicle lanes as recommended elsewhere (Kamal & Khan, 2020).
- Walking lanes, separated by green belt, for incoming and outgoing students to prevent accidents, crowding and close contacts-all walking lanes are, therefore, one way.
- Color-coded paths leading to color-coded buildings.
- Smart board blinking the shortest path to a certain building, when the corresponding button is pressed by shoe.
- Face-, voice- and gait-recognition systems instead of thumb scanners (which require contact with the scanning surface) for identification; thermal-explosive-trace-detection system and canine teams for security-security matters discussed in detail elsewhere (Kamal & Khan, 2020).
- Thermal sensors for opening and closing of doors to minimize body contact-sanitization gates installed at all entrances.
- Taps, soap- and sanitizer-dispensers not be hand-operated; either foot-operated or thermally- operated-no hand-dryers.
- LED sensors to switch on lights, when a player enters restroom and switch off, when the incumbent exits to prevent wastage of electricity-restrooms should be of flush-style, not of commode-style to prevent body contact with these surfaces, which by their very nature, would have abundance of bacteria (commode-style restrooms, also, cause piles).
- Maximum use of sunlight indoors.
- Solar panels to be installed for electricity generation.
- Indoor areas should have maximum fresh air circulation.

Hardening of Bodies

Players need to be raised close to nature with hardening of bodies through maximum exposure to fresh air, sunshine as well as outdoor academic and sport activities. Hikari Kindergarten in Tokyo (Japan) lets their young students play in the snow dressed in shorts only, in addition to letting them attend their classes, stripped-to-waist.

Their claim is that such practices, not only, make the students physically strong, but also, emotionally balanced and able to cope better with the challenges of

life. Nikitin children in Moscow (Russia) suburb, also, practice dressing minimally. They are, not only, mentally sharp, but also, in excellent health, never catching cold.

To build up resistance against coronavirus, the child players should have adequate doses of vitamin C and vitamin D. Simonson (2020) is of the opinion that vitamin C is a significant cofactor contributing to the formation of blood vessels, cartilage, muscle and collagen in bone and is essential for the healing process. Being an anti-oxidant this vitamin has the potential to assist in protection of cells from damage by chemical free radicals. It is known that regular use of vitamin C supplements shortens duration of the common cold but does not reduce the risk of contracting a cold.

According to Kamal & Khan (2018), vitamin-D deficiency is taking the shape of an epidemic in the South-Asian Region. The problem is enhanced by insufficient nutrition in preteen players. Defined as a group of fat-soluble secosteroids, vitamin D causes increased intestinal absorption of micronutrients (calcium, magnesium, phosphate) combined with other biological effects. Deficiency causes chronic flu, delayed teething and skull-bone hardening in very young children, rickets and tuberculosis during early childhood as well as kyphosis, lordosis and scoliosis during later childhood. The remedial measures, to overcome this deficiency, include vitamin-D supplements (oral and injectable), food items (sun-ripe fruits and vegetables) as well as sun-exposure (guarded and graduated). The last one is preferred (it is a well-known fact that one gets about 85% of vitamin D from sunshine) and the academy operations are designed to maximize this sun exposure. Safe and intermittent sun exposure timings are included as part of Growth-and-Obesity Vector-Roadmap 2.5 of a girl subject.

Blood-oxygen intake should be carefully monitored during the practice of gymnastics, tennis or football (Badau et al., 2015). VO_2max is, also, referred to as maximal oxygen consumption, maximal oxygen uptake, peak oxygen uptake or maximal aerobic capacity. It is the highest rate of consumption of oxygen, which is evaluated during incremental (increasing intensity) exercise. 'V' stands for volume, 'O_2' for oxygen, and 'max' for maximum. Laboratory measurement gives a quantitative value of endurance fitness for comparison of individual training effects and among people in endurance training.

Table 1: Scheduling of different sport activities to keep children engaged throughout the day.

Shifts	Gymnastics	Tennis	Football
Morning (06:00-10: 00)	*Small Build*	*Big Build*	*Medium Build*
Day (10:15–14:15)	*Medium Build*	*Small Build*	*Big Build*
Evening (14:30-18:30)	*Big Build*	*Medium Build*	*Small Build*

Boys: Tuesday, Thursday, Saturday. Girls: Monday, Wednesday, Friday.

Academy Operations

The academy should be following the Denmark model, decreasing number of students in school at any one time. In our set-up approximately one-sixth of the total number of enrolled students shall be on campus at any one time, according to the following calculation: $\frac{N}{(3)(2)} = \frac{N}{6}$, where N is the total number of students enrolled in academy. The factor 3 comes from build-separation-approximate, as we do not expect equal number of boys/girls to be of small, medium and big builds. The factor 2 appears because of gender-segregation (only boys/girls on alternate days) -not exact, because we do not expect the enrolment of boys and girls to be equal. Table 1 gives scheduling of different sport activities among children of small, medium and big build to keep them engaged throughout the day for 3 days in a week and allowing opportunity for working parents to fulfill their professional obligations.

It was recommended by the authors earlier to form sport teams according to build (Kamal & Khan, 2015)

as well as classroom sections (Kamal, 2015). Chan et al. (2020) discussed returning of Chinese school-aged children to physical activity in the wake of COVID-19. They remarked that physical inactivity causes chronic diseases. The social lockdown in China had a negative impact on health- as well as fitness-related outcomes among Chinese children. For youngsters in the age range 5-17 years, they recommended daily physical activity, which should include aerobic activities, strength training and bone strengthening.

Table 2: Hairstyle and footwear for gender-segregated-training, public-performance and presentation sessions.

Sport	Boys	Girls
	Hairstyle for All Ages	
Gymnastics	Very short hair	Long hair tied in the form of (hair) bun
Tennis	Very short hair	Long hair left open
Football	Very short hair	Long hair left open
Presentations	Very short hair	Long hair left open, only held by plastic hair-band
Banquets[a]	Very short hair	Long hair left open, only held by plastic hair-band
	Footwear for All Ages	
Gymnastics	Barefoot[b]	Barefoot[b]
Tennis	Socks[c] + sneakers (both white)[d]	Socks + sneakers (both white)
Football	Socks (white) + sneakers	Socks (white) + sneakers
Presentations	Socks (white) + dress-shoes (black)[e]	Socks (white) + dress-shoes (black)
Banquets	Socks (white) + dress-shoes (black)	Socks (white)[c]+ dress-shoes (black)

[a]*held outdoors after sunset, one family seated on one table (tables distanced 3.5 m apart); food served by robots*
[b]*flip-flops should be worn to reach to (exit from) workout area*
[c]*pure-cotton socks (reaching to knees) to be worn on dried feet after applying disinfectant powder*
[d]*plimsolls (British), informal plimmies*
[e]*mocation shoes made of pure leather, with foot support to keep the feet in shape*

Only fit players are allowed to attend the academy, highlighting the need for pre-participation psychological and physical examinations as well as fitness testing, including determination of fitness index of athletes. 'Fitness Index' is the fitness level of the player from the test, compared with the average level of children the same age and gender (Badau et al., 2015). Fitness is defined as 'the condition of being physically fit and healthy'. Alternately, it could be visualized as the quality of being suitable to fulfill a particular athletic activity. Both health-related (which correspond to a better state of living) as well as skill-related (needed for performing the more technical aspect of sport) fitness need to be monitored (Kamal & Khan, 2013).

Health-related fitness may be subdivided into 5 aspects, viz. body composition, cardiovascular endurance, flexibility, muscular endurance and muscular strength. Skill-related fitness consists of 6 aspects, viz. speed, reaction time, agility, balance, coordination and power. Kamal & Khan (2020b) have discussed role of balanced diet in fitness of young athletes. Guidelines for lifestyle adjustment, diet and exercise plans for players are available in Kamal et al. (2020a).

The physical examination should include careful observation of feet (Kamal et al., 2016b), gait analysis (Kamal et al., 2016b) as well as screening for scoliosis (Kamal et al., 2020b). Details are given elsewhere (Kamal et al., 2017). A psychomotor evaluation of athlete at the start and the end of a module should give insight into psychomotor development because of participation in the sport (Szabo et al., 2020).

1. Daily Routine

Players arriving from the city must reach 15 minutes before the start of a shift to allow time for health and safety inspections, players undressed to underwear (Kamal & Khan, 2014; Kamal & Khan, 2018), followed by complete change of clothes as per kit recommended for the activity (Tables 2-6). Players should be fully hydrated with ORS water before and after each practice session. Fruits and juices are served during coaching lecture and tutorial. Breakfast (forenoon shift), lunch (noon shift) or snacks (afternoon shift) should overlap with presentations.

Table 3: Clothing for gender-segregated gymnastic-training session.

Build	Boys	Girls
	Under 7	
Small	Briefs[a]	Panties[a]
Medium	Briefs[a]	Panties[a]
Big	Briefs[a]	Panties[a]
	Under 9	
Small	Briefs[a]	Panties[a]
Medium	Briefs[a]	Panties[a]
Big	Briefs[a]	Training-leotard[b]
	Under 11	
Small	Briefs[a]	Panties[a]
Medium	Briefs[a]	Training-leotard
Big	Figure-hugging half-pants[a]	Training-leotard + stockings

White training attire needed for one-way screen, photographic, stereophotogrammetric and video analyses. Boys should be wearing athletic supporter under briefs or figure-hugging half-pants. During colder weather, extra clothing (coats, sweaters) for warm-up and cool-down activities.

[a]*unclothed from the waist up*
[b]*exposes the entire neck, scapulae and spinal outline from external auditory meatus to hip joint*

Table 4: Clothing for gender-segregated tennis-training session.

Build	Boys	Girls
	Under 7	
Small	Briefs + tennis-shorts[a]	Panties + tennis-miniskirt[a]
Medium	Briefs + tennis-shorts[a]	Panties + tennis-miniskirt[a]
Big	Briefs + tennis-shorts[a]	Panties + tennis-miniskirt[a]
	Under 9	
Small	Briefs + tennis-shorts[a]	Panties + tennis-miniskirt[a]
Medium	Briefs + tennis-shorts[a]	Panties + tennis-miniskirt[a]
Big	Briefs + tennis-shorts[a]	Panties + tennis-miniskirt[b]
	Under 11	
Small	Briefs + tennis-shorts[a]	Panties + tennis-miniskirt[a]
Medium	Briefs + tennis-shorts[a]	Panties + tennis-miniskirt[b]
Big	Briefs + tennis-half-pants[a]	Panties + tennis-skirt[b]

White training attire needed for one-way screen, photographic, stereophotogrammetric and video analyses. Boys should be wearing athletic supporter under briefs or figure-hugging half-pants. During colder weather, extra clothing (coats, sweaters) for warm-up and cool-down activities

[a]*all clothing above the waist removed*
[b]*white tennis-vest worn on top*

Table 5: Clothing for gender-segregated football-training session

Build	Boys	Girls
	Under 7	
Small	Briefs + football-shorts[a]	Panties + football-shorts[a]
Medium	Briefs + football-shorts[a]	Panties + football-shorts[a]
Big	Briefs + football-shorts[a]	Panties + football-shorts[a]
	Under 9	
Small	Briefs + football-shorts[a]	Panties + football-shorts[a]
Medium	Briefs + football-shorts[a]	Panties + football-shorts[a]
Big	Briefs + football-shorts[a]	Panties + football-shorts[b]
	Under 11	
Small	Briefs + football-shorts[a]	Panties + football-shorts[a]
Medium	Briefs + football-shorts[a]	Panties + football-shorts[b]
Big	Briefs + football-shorts[a]	Panties + football-shorts[b]

White training attire needed for one-way screen, photographic, stereophotogrammetric and video analyses. Boys should be wearing athletic supporter under briefs or figure-hugging half-pants. During colder weather, extra clothing (coats, sweaters) for warm-up and cool-down activities.

[a]*no clothing above the waist allowed*
[b]*white football-vest worn on top*

Practice Session I (40 mins): hairstyle, footwear and clothing as in Tables 2-5.

Body-Massage Session I (5 mins): with oil, players stripped to short underpants-body wiped with paper

towel at the end (tennis and football players remove shoes and socks and remain barefoot during coaching lecture and tutorial).

Coaching-Lecture Session (25 mins): footwear, clothing and boys' hairstyle as in Tables 2-5; girls should have hair open-hair-band removed by footballers and tennis players; hair-bun opened up by gymnasts.

Practice Session II (40 mins): as in practice session I.

Body-Massage Session II (5 mins): as in body-massage session I.

Coaching-Tutorial Session (25 mins): as in coaching-lecture session.

Practice Session III (40 mins): as in practice session I.

Body-Massage Session III (5 mins): as in body-massage session I.

Presentation Session (25 mins): hairstyle, footwear and clothing as in Tables 2, 6.

Sleep Session (30-45 mins-30 mins for children participating in only one sport; 45 mins for those staying for the following shift): all boys and under-7 girls change to fire-resistant pajama-shorts, stripped-to-waist; over-7 girls change into fire-resistant pajamas, 3-min, slow-stoke back massage to improve quality and quantity of sleep-before retiring to bed, all hair accessories, jewelry, watch and belt removed, girls should have hair opened up (Kamal & Khan, 2014). Sleep area should be dimly lighted and panels placed in front of doors so that sleep of players is not disturbed by bright light entering the room, when a supervisor or a latecomer enters the area. There should be remote video and audio monitoring of sleep area in order to prevent mischief/horseplay by players during the resting period.

Table 6: Clothing for gender-segregated-presentation session.

	Age Group	Boys	Girls
Assistant Investigators	Under 7	Briefs + dress-shorts (grey)[a]	Panties + skirt (grey)[a]
Associate Investigators	Under 9	Briefs + dress-shorts (navy-blue)[a]	Panties + cape + skirt (navy-blue)[a]
Principal Investigators	Under 11	Briefs + dress-trousers (black)[a]	Panties + sleeveless T-shirt (white) + skirt (black)

[a]*no clothing permitted from the waist up, as the children should be sweaty after vigorous sport activity*

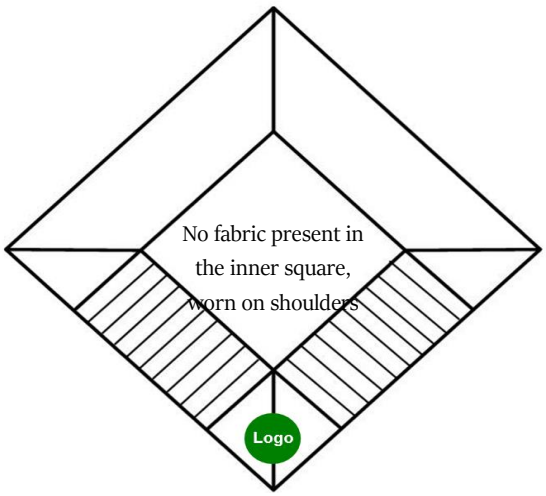


Figure 1: Design of cape, exhibiting academy colors (striped portion) and academy logo on the front.

Figure 1 gives design of cape to be worn on shoulders by under-9 girls. To make a cape, take a large square white sheet (side one and a half the shoulder width) of cloth and cut a small square (side two-third the shoulder width) in the middle.

2. Clothing for Various Sport Activities

Clothing for gymnastic activities was extensively discussed in Kamal & Khan (2015) and a practical gymnastic kit proposed, taking into account performance and safety aspects. This kit was suggested giving due consideration to the recommendations of American Academy of Pediatrics-Committee on Sports Medicine (1982; 2000), "clothing of exercising child should be light-weight, limited to one layer of absorbent material in order to facilitate evaporation of sweat and expose as much skin as possible." In addition, this kit allowed coach to observe unconscious posture and curvatures of the spinal column as well as free movement and abnormalities of gait. Through the trained eyes, the coach became aware of obese/wasted players. Exercising in minimal clothing has taken a new turn in the wake of corona pandemic as vitamin-D

sufficiency and allowing the skin and the hair to breathe may help prevent catching this disease. Clothing guidelines for tennis and football are prepared in line with the policies for gymnastic kit (put forward earlier) and are included in Tables 2-4. Clothing for public-performance sessions is listed in Table 6.

Gender-segregated-training as well as public-performance sessions are held outdoors. Training sessions are conducted in secluded grassy outdoors, offering acoustic and visual privacy from unrelated spectators (restricted-audience setting)-only the coach and the health professionals (doctor, medical researcher, nurse, physiotherapist, psychologist/ psychiatrist) are allowed to be present during these activities. A movable shed should be available for sport activities (training and public performance) during intense sunshine. Additionally, water sprinklers should be turned on when the weather is hot. For practice during winter season, heaters should be installed and operated in practice areas. Public-performance sessions may have parents of both genders as well as sport figures and other guests from the community (in person or remote viewing) and are conducted at the completion of each module. It would be an innovation to request prominent sport legends to participate and motivate the young players through video conferencing.

Table 7: Clothing for public-performance sessions.

Sport	Boys	Girls
	Under 7[a]	
Gymnastics	Briefs (white)[b]	Asymmetric-leotard[c]
Tennis	Briefs + tennis-shorts (white)[b]	Panties[d] + tennis-miniskirt (white)[e]
Football	Briefs + football-shorts[b]	Panties (white) + football-shorts[f]
Presentations	Briefs (white) + dress-shorts (black)[g]	Panties (white) + skirt (black)[g]
Banquets[a]	Briefs + shirt (white)[i] + dress-shorts (black)[h]	Panties + blouse (white)[i] + skirt (black)
	Under 9[j]	
Gymnastics	Briefs[b]	Regular-leotard[c]
Tennis	Briefs + tennis-shorts (white)[b]	Panties + tennis-skirt (white)[e]
Football	Briefs + football-shorts[b]	Panties (white) + football-shorts[f]
Presentations	Briefs + dress-shorts (black)[k]	Panties (white) + skirt (black)[k]
Banquets	Briefs + shirt (white)[l] + dress-shorts (black)[h]	Panties + blouse (white)[l] + skirt (black)
	Under 11[m]	
Gymnastics	Figure-hugging half-pants[c]	Regular leotard + stockings (white)[n]
Tennis	Briefs + tennis-shorts (white)[b]	Panties (white) + tennis-skirt (white)[e]
Football	Briefs + football-shorts[b]	Panties (white) + football-trousers[f]
Presentations	Briefs + jacket + trousers (both black)[o]	Panties (white) + jacket + skirt (both black)[o]
Banquets	Briefs + shirt (white)[l] + lounge-suit (black)[p]	Panties + blouse (white)[l] + skirt (black)[q]

[a]*basic level*
[b]*stripped-to-waist, briefs to be worn over dry body parts after applying disinfectant powder*
[c]*aymmmetric leotard should bare dominant arm and neck area; all leotards and half-pants to be worn over dry body parts after applying disinfectant powder (no underwear allowed)*
[d]*knickers (British), panties to worn over dry body parts after applying disinfectant powder*
[e]*with white tennis-T-shirt*
[f]*with football-T-shirt*
[g]*with cream dress T-shirt (indicating assistant investigator status) and cape (Figure 1)-introducing the presentation*
[h]*national dress, when occasion warrants*
[i]*half-sleeved*
[j]*intermediate level*
[k]*with sky blue dress-T-shirt (indicating associate investigator status) and cape-tackling body of the presentation*
[l]*full-sleeved*
[m]*advance level*
[n]*stockings are stretchable garments covering body from waist to ankles*
[o]*with white dress-T-shirt (indicating principal investigator status) and cape-concluding the presentation*
[p]*with black bow*
[q]*with matching jacket and bow*

Table 8a: Growth-and-Obesity Vector-Roadmap 2.5[a] of a girl subject - first to third checkups.

Gender: Female Date of Birth (year-month-day): 2005-06-16 Adult-Army-Cutoff Height: 157.48 cm (19.36^{P})
Father's Height: 178.20 cm Mother's Height: 170.78 cm Target Height: 167.99 cm (76.12^{P})

Checkup	**1st**	**2nd**	**3rd**
Age Range	Under 7		
Photograph	Photos were intentionally removed to protect privacy.		
Scanned Signatures	Signatures were intentionally removed to protect privacy.		
Class	KG	I	I
Date of Checkup (year-month-day)	2011-05-04	2012-03-20	2012-05-13
Age (year-month-day)	05-10-18	06-09-04	06-10-27
Age (decimal year)	5.88	6.76	6.91
Puberty Rating	Tanner 1	Tanner 1	Tanner 1
Height (cm) ⇐	113.40	119.42	120.45
Height (ft-in)	3 ft 8.65 in	3 ft 11.02 in	3 ft 11.42 in
CDC Percentile-of-Height ⇔	46.42^{P}	46.65^{P}	47.02^{P}
Scaled Percentile-of-Height	56.79^{P}	57.02^{P}	57.40^{P}
Current-Age-Army-Cutoff Height (cm) ⇐	109.45	115.19	116.12
Δ Height with respect to Current-Age-Army-Cutoff Height (cm)	+3.95	+4.23	+4.33
Current-Age-Mid-Parental Height (cm) ⇐	117.64	123.90	124.92
Δ Height with respect to Current-Age-Mid-Parental Height (cm)	−4.24	−4.48	−4.47
Estimated-Adult Height (cm)	162.71	162.75	162.82
Estimated-Adult Height (ft–in)	5 ft 4.06 in	5 ft 4.08 in	5 ft 4.10 in
Modified Status (pertaining-to-height)	0	0	0
Descriptive Status (pertaining-to-height)	Normal	Normal	Normal
Net Mass (kg) ⇒	18.30	20.14	20.74
Net Weight (lb-oz)	40 lb 5.62 oz	44 lb 6.54 oz	45 lb 11.71 oz
CDC Percentile-of-Net-Mass ⇔P	26.81^{P}	26.09^{P}	29.25^{P}
Scaled Percentile-of-Net-Mass P	34.98^{P}	34.12^{P}	37.87^{P}
Percentile-of-BMI-based-Optimal Mass ⇔	67.43^{P}	67.53^{P}	67.70^{P}
BMI-based-Optimal Mass (kg) ⇒	21.54	24.01	24.46
Δ Mass with respect to BMI-based-Optimal Mass (kg)	−3.24	−3.87	−3.72
Height-Percentile-based-Optimal Mass (kg) ⇒	19.70	21.86	22.26
Δ Mass with respect to Height-Percentile-based-Optimal Mass (kg)	−1.40	−1.72	−1.52
Estimated-Adult Mass (kg)	52.89	52.73	53.45
Estimated-Adult Weight (lb–oz)	116 lb 10.08 oz	116 lb 4.26 oz	117 lb 13.89 oz
Modified Status (pertaining-to-mass)	−7.12%	−7.86%	−6.85%
Descriptive Status (pertaining-to-mass)	1st-Deg Wasted	1st-Deg Wasted	1st-Deg Wasted
Away-from-Normality Index	0.0712	0.0786	0.0685
Polar Angle	180.000	180.000	180.000
Extended Nutritional Status	Wasting	Wasting	Wasting
Estimated-Adult BMI (kg/m^2)	19.98	19.91	20.16
Estimated-Adult-Specific BMI	0.832	0.829	0.840
Build	Medium	Medium	Medium

[a] detailed procedure to construct Roadmap 2.5 is given in Kamal *et al.* (2020a).
^{P} refers to percentile

Table 8b: Growth-and-Obesity Vector-Roadmap 2.5[a] of a girl subject-fourth and fifth checkups.

Checkup	4th	5th
Age Range	Under 9	Under 11
Photograph	Photos were intentionally removed to protect privacy.	
Scanned Signatures	Signatures were intentionally removed to protect privacy.	
Class	II	IV
Date of Checkup (year-month-day)	2013-06-02	2014-11-23
Age (year-month-day)	07-11-16	09-05-07
Age (decimal year)	7.96	9.44
Puberty Rating	Tanner 1	Tanner 1
Height (cm) ⇐	117.84	136.56
Height (ft-in)	3 ft 10.39 in	4 ft 5.76 in
CDC Percentile-of-Height ⇔	4.54^{P}	58.22^{P}
Scaled Percentile-of-Height	6.35^{P}	68.36^{P}
Current-Age-Army-Cutoff Height (cm) ⇐	122.27	129.51
Δ Height with respect to Current-Age-Army-Cutoff Height (cm)	−4.43	+7.05
Current-Age-Mid-Parental Height (cm) ⇐	131.65	139.81
Δ Height with respect to Current-Age-Mid-Parental Height (cm)	−13.81	−3.25
Estimated-Adult Height (cm)	152.30	164.77
Estimated-Adult Height (ft–in)	4 ft 11.96 in	5 ft 4.87 in
Modified Status (pertaining-to-height)	−3.58%	0
Descriptive Status (pertaining-to-height)	1st-Deg Stunted	Normal
Net Mass (kg) ⇒	25.12	33.06
Net Weight (lb-oz)	55 lb 6.23 oz	72 lb 14.36 oz
CDC Percentile-of-Net-Mass ⇔P	46.25^{P}	63.50^{P}
Scaled Percentile-of-Net-Mass P	56.60^{P}	73.16^{P}
Percentile-of-BMI-based-Optimal Mass ⇔	38.89^{P}	72.73^{P}
BMI-based-Optimal Mass (kg) ⇒	24.35	34.71
Δ Mass with respect to BMI-based-Optimal Mass (kg)	+0.77	−1.65
Height-Percentile-based-Optimal Mass (kg) ⇒	19.85	32.12
Δ Mass with respect to Height-Percentile-based-Optimal Mass (kg)	+5.27	+0.94
Estimated-Adult Mass (kg)	57.36	62.34
Estimated-Adult Weight (lb–oz)	126 lb 7.56 oz	137 lb 7.37 oz
Modified Status (pertaining-to-mass)	+3.16%	0
Descriptive Status (pertaining-to-mass)	1st-Deg Obese	Normal
Away-from-Normality Index	0.0478	0
Polar Angle	311.49	Indeterminate
Extended Nutritional Status	S-EC II	Normality
Estimated-Adult BMI (kg/m²)	24.73	22.96
Estimated-Adult-Specific BMI	1.030	0.957
Build	Medium	Medium

3. Height and Weight Monitoring

Measurement Protocols

A very important health-related activity is the careful monitoring of height and weight (mass) of players as per internationally accepted protocols, preferably, to least counts of (height) 0.005 cm and (mass) 0.005 kg (Kamal et al., 2016a). Kamal et al. (2020a) gives step-by-step methods of anthropometric measurements, illustrated through labeled photographs. From these measurements, CDC percentiles of height and mass are to be determined using the technique of box interpolation (Kamal et al., 2011a), employing Extended Growth Tables, which include heights and masses of boys and girls in the range 0.01^{P} to 99.99^{P}. These Extended Growth Tables are available in Kamal & Jamil (2014). Scaled percentiles (suitable for the local population) are obtained using mathematical relations. Sum of scaled percentiles of height and mass is used to determine build of a player (Kamal et al., 2017).

Regular monitoring of height and weight combined with developmental testing (Kamal, 2002) alerts the health-care professional whether a player is failing-to-grow or failing-to-thrive (Kamal et al., 2011a). 'Failure-to-grow' refers to stunted players, who have achieved age-specific- developmental milestones (reference established on the basis of community-based- developmental examination). 'Failure-to-thrive' refers to stunted players, who fail to achieve age-specific-developmental milestones.

Growth and Obesity Vector-Roadmap 2.5

Once the height and weight of a player is recorded, it should be used to generate Growth-and-Obesity Vector-Roadmap 2.5 of the athlete (Kamal et al., 2020a). Kamal et al. (2020a) gives the detailed method of determining this profile. This exercise should be repeated every 6 months. Roadmap 2.5 gives 6 monthly recommendations to pick-up height and put-on/shed-off weight. At the end of 6-month period compliance with the recommended targets is determined. Tables 8a-e give sample roadmap of a girl, longitudinal follow-up covering all age ranges (under-7, under-9 and under-11).

Table 8a exhibits pseude-gain of mass (Kamal et al., 2014) between first and second checkups-mass put-on from 18.30 kg to 20.14 kg, CDC percentile-of-net-mass dropping from 26.81^{P} to 26.09^{P}.

Table 8c: Height-gain-target-achievement index, h_C, and mass-management-target-achievement index, μ_c, of a subject at her last (fifth) checkup.

At the fifth Checkup[a]	Measured Height		Measured Mass (Weight)	
	cm	ft-in	kg	lb-oz
November 23, 2014	136.56	4 ft 5.56 in	33.06	72 lb 14.36 oz
November 23, 2014	138.75	4 ft 6.62 in	34.91 - 35.31	76 lb 15.69 oz - 77 lb 13.81 oz
Target-Achievement Index	98.42%		94.70% ↓	
Qualitative	h_C under-achieved		μ_c under-achieved (lesser mass outside the normal range)	

[a]first row gives measured values at the fifth checkup; following row displays targets computed based on Growth-and-Obesity Vector-Roadmap 2.5

Overall Grooming

Players should be trained in soft skills, e.g., time and task management, goal setting, relationship strategies, emotional intelligence and anger management, creative and out-of the-box thinking, critical analysis, negotiating skills as well as the art of questioning, with the end result of making the players friendly, cooperative and collaborative. The academy should arrange workshops on these topics. The most important soft skill is effective communication and persuasive presentation. For this purpose, a mandatory presentation session is included during each sport session. Both oral presentations (stimulating left part of the brain-serial processing) as well as poster presentations (stimulating right part of the brain-parallel processing) are video recorded and later graded by (a) self, (b) peers, (c) coaches and (d) experts through video replay, so that players, who are

future leaders of their countries, could "dream with ambition; lead with conviction" (Vice President-Elect of the United States of America, Kamala Harris, November 7, 2020), and express their frank opinions regarding the coaching and the teaching styles of physical-education teachers (Genç & Temel, 2020). Input of parents and coaches should, also, be taken on the operational style of a certain module. Instead of the confidential evaluation forms, made available to the instructor only after the result is finalized and submitted to examination department, the first author asked his students to submit the following via e-mail (with student's identification not concealed): (a) 3 strengths of the course, (b) 3 weaknesses of the course and (c) 3 suggestions to change the teaching content and the style, if the course is offered again. The outcome was eye-opening and resulted in implementation of some of these suggestions in the next course. In order that the above approach is successful, the students must have total confidence that their responses would not have any effect on their grades.

Table 8d: Month-wise height targets as well as mass and weight target ranges for a subject based on her last checkup-targets determined using Growth-and-Obesity Vector-Roadmap 2.5.

Target Date[a]	***Height Target***		***Range of Mass (Weight) Targets***	
	cm	**ft-in**	**kg**	**lb-oz**
November 23, 2014	136.56	4 *ft* 19.974 *in*	33.06	72 *lb* 14.36 *oz*
December 23, 2014	137.84	4 *ft* 10.179 *in*	34.03-34.12	75 *lb* 0.69 *oz* - 75 *lb* 13.90 *oz*
January 23, 2015	139.04	4 *ft* 10.377 *in*	34.97-35.14	77 *lb* 11.76 *oz* - 77 *lb* 17.86 *oz*
February 23, 2015	140.10	4 *ft* 10.582 *in*	35.82-36.06	78 *lb* 15.63 *oz* - 79 *lb* 18.12 *oz*
March 23, 2015	140.94	4 *ft* 10.780 *in*	36.50-36.88	80 *lb* 17.69 *oz* - 81 *lb* 14.97 *oz*
April 23, 2015	141.74	4 *ft* 10.985 *in*	37.20-37.85	82 *lb* 10.50 *oz* - 83 *lb* 17.27 *oz*
May 23, 2015	142.45	4 *ft* 11.190 *in*	37.87-38.56	83 *lb* 18.07 *oz* - 85 *lb* 10.54 *oz*

[a]first row represents values at the last checkup, which are taken as reference to generate 6 monthly recommendations; lifestyle, diet and exercise plans to achieve these targets are given in Kamal *et al.* (2020a)

Table 8e: Time slots, valid for the city of Karachi, Pakistan, for full body[a] sun-exposure[b] of the subject during 6-month period following her last checkup to obtain the required doses of vitamin D.

Month	**Day**	**Safe Period**[c]	**Intermittent Period**[d]	**Prohibited Period**	**Intermittent Period**	**Safe Period**
December	1	07: 00 - 08: 04	08: 05 - 09: 09	09: 10 - 15: 32	15: 33 - 16: 37	16: 38 - 17: 42
	15	07: 09 - 08: 13	08: 14 - 09: 18	09: 19 - 15: 35	15: 36 - 16: 40	16: 41 - 17: 45
January	1	07: 17 - 08: 20	08: 21 - 09: 24	09: 25 - 15: 46	15: 47 - 16: 50	16: 51 - 17: 54
	15	07: 19 - 08: 23	08: 24 - 09: 28	09: 29 - 15: 54	15: 55 - 16: 59	17: 00 - 18: 04
February	1	07: 15 - 08: 21	08: 22 - 09: 28	09: 29 - 16: 03	16: 04 - 17: 10	17: 11 - 18: 17
	15	07: 07 - 08: 15	08: 16 - 09: 24	09: 25 - 16: 08	16: 09 - 17: 17	17: 18 - 18: 26
March	1	06: 55 - 08: 11	08: 12 - 09: 28	09: 29 - 16: 00	16: 01 - 17: 17	17: 18 - 18: 34
	15	06: 41 - 07: 53	07: 54 - 09: 06	09: 07 - 16: 15	16: 16 - 17: 28	17: 29 - 18: 41
April	1	06: 24 - 07: 38	07: 39 - 08: 53	08: 54 - 16: 18	16: 19 - 17: 33	17: 34 - 18: 48
	15	06: 10 - 07: 26	07: 27 - 08: 43	08: 44 - 16: 20	16: 21 - 17: 37	17: 38 - 18: 54
May	1	05: 56 - 07: 15	07: 16 - 08: 35	08: 36 - 16: 22	16: 23 - 17: 42	17: 43 - 19: 02
	15	05: 48 - 07: 08	07: 09 - 08: 29	08: 30 - 16: 27	16: 28 - 17: 48	17: 49 - 19: 09

[a]subject barefooted, bareheaded, dressed in panties only (all clothing above the waist removed), hair opened up, eyes protected through UV-cutoff glasses, engaged in light exercises/free play-if sitting for drawing, jigsaw puzzles, painting, singing, story telling/listening, her back should be towards the sun

[b]10-15-*minute* guarded-graduated sun exposure (Kamal & Khan, 2018)

[c]safe-exposure duration is when the sun has not reached 18° after rising or is at an angle less than 18° before setting; children may be exposed to direct sunlight (suitable for summer months)

[d]intermittent-exposure duration is when the sun is at an angle between 18° and 36° (end-points included) after rising or between 36° and 18° (end-points included) before setting; children may be allowed to play in the shade with brief periods of sun exposure (suitable for winter months)

If conducted indoors, the venue of the presentation sessions should be amply ventilated. All SOPs are to be followed-compulsory gloving for both presenters and audience; for the former presenting from behind 7.5 cm glass, for the later, distancing of 2.5 m and mandatory masking.

There should be a mentoring system in place and counseling provided to players in need. Any sport program cannot function effectively without the

cooperation of parents. Therefore, there is a need to create a strong patents' network through parents' monthly newsletter as well as educational programs for parents. The academy could create a set up where parents along with their children, who are enrolled in academy, could come in the evening and enjoy educational films, performances and even have recreational games like table tennis, badminton, pool, etc.

Discussion and Future Directions

Increased inactivity and junk food consumption may increase obesity during the pandemic. Obese persons are more prone to catching COVID-19. Obesity tops the list of risk factors for being infected with corona virus. Even vaccines may not be so effective for obese persons. The authors have, therefore, included detailed step-by-step protocols to manage weight. If a weight reduction is indicated, it should be done in steps as per suggestions (ranges provided instead of a single value) at the end of each month (Table 8d), based on recommendations of lifestyle adjustment, diet and exercise plans given in Kamal et al. (2020a) as well as Kamal & Khan (2020b). Internationally famous gymnast, Nadia Elena Comăneci, went without food for 9 days during her teenage years in a frenzy to lose weight, according to her own admission. This could have disastrous consequences for a youngster's body and mind.

According to Dr. Jorge Rodriguez, Internal Medicine and Viral Expert, short-term strategy should consist of masking, distancing (at least 2.5 m-may be modified if new values of mean free path of virus travel are available) and testing (interview on CNN, Friday, May 15, 2020). Prof. Dr. Atta-ur-Rahman, FRS, Nishan-é-Imtiaz, Hilal-é-Imtiaz, Stara-é-Imtiaz, Tamgha-é-Imtiaz, UNESCO Science Laureate, emphasized on TTQ (Test, Track, Quarantine) in interview on PTV News on August 13, 2020. Precaution-containment-continuity framework with an overarching focus on health and safety is the strategy of Purdue University, West Lafayette, Indiana, United States. Even when lockdowns are necessary, they should not be announced in advance to crate mass exodus before lockdown, which would beat the very purpose of containment through lockdown.

The long-term strategy should consist of modeling of disease propagation in child's body through interaction with environment taking into account of sources of error followed by simulations and trials to find vaccines and medicines, which cure those suffering from the disease as well as related syndromes.

The proposed model of sport academies could be adapted for day-care facilities (needed for working parents) and schools-future of education seems to be a combination of short in-class teaching (lectures) supplemented by on-line discussion and problem-solving sessions (tutorials).

Sport academies could supplement educational sessions (on complementary days)-to allow engaging children for 6 days, so that parents could work or engage in intellectual activities (Table 9). The educational sessions should consist of 4-hour structured in-person learning (sessions separated by build, as in sport programs; children dressed as in gender-segregated presentation sessions), combined with on-line tutorial and problem-solving session for 3 hours 50 minutes and project supervision during summer break (project work through ZOOM sessions for players on vacation outside their city of residence).

As mentioned in Kamal & Khan (2014), setting-up exercises consist of stretching hands (palms together) to front and top of head (stretching body by standing on toes), reaching to toes such that knees are not flexed, exercising to relax neck muscles (chin up, chin down, neck turned to left and right at an angle of 90 degrees), whereas end-of-the session exercises consist of stretching, bending sideways, bending to touch toes with knees extended, moving head up and down, rotating neck on both sides so that the respective chin is aligned with shoulder. In addition, end-of-the-session exercises should include focusing eyes to infinity as well as moving eyeballs up, down and sideways.

Table 9: Schedule for educational sessions for 3 days a week (complimentary to sport-practice days).

	Lecture Session (mins)	Tutorial Session (mins)
Health and Safety Inspection	10	-
Setting-up Exercises	5	5
Sessions (5 in total)	40 each	40 each
End-of-the-Session Exercises (5 in total)	4 each	4 each
Snacks (after third end-of-the session exercise)	5	5
Total	240	230

Boys: Monday, Wednesday, Friday. Girls: Tuesday, Thursday, Saturday.

Total in-person and on-line teaching duration comes out to 23 hours 30 minutes, which may seems a little shorter than regular school contact hours during a week. However, it should be acceptable given the fact that children are engaged in coaching lectures and tutorials as well as presentations on sport days.

Conclusion

Corona virus may be here for a long time, so we must learn to live with it. Manage the situation through testing, tracing and isolating, which should become our new normal. Our response should be science based (contain, mitigate, eradicate) through testing, tracking and isolating and must use soft power through government, economics and culture. The corona SOPs would, also, safeguard students from other infections, like common cold, flu, etc. Hence, they must be designed to stay for a long time. Vaccinated persons should keep on following SOPs to protect themselves and others. It is not clear at this time that the currently available vaccines, designed for the first wave, are how much effective for the second, the third and the fourth waves. Already, COVID-19-mutated (second wave-very dangerous as no symptoms appear till the disease affects the lungs) has started attacking us in Pakistan, and there are indications of COVID-19-mutated-II (third wave-peculiar in the sense that there are no epicenters of spread, so contact tracing has no significance in this kind of infection; may be more severe in regions, which experienced the first and the second ones) is appearing in Europe, in particular, Turkey. Hong Kong is starting to experience COVID-19-mutated-III (fourth wave-spreads easily and harder to detect). With SOPs in place and a careful calculation of risk versus benefits, the academies may provide a rescue plan for children and their families at the same time introducing a new philosophy of education-a proper balance of physical, intellectual and moral upbringing of the future workforce of the nation.

The academy should offer teaching and research assistantships (during summer break) as well as scholarships (based on 5 categories-sport-skill-learning capability, health-status maintenance, academic excellence, creative thinking and critical analysis, communication and presentation skills) to players so that their families may cover coaching and tuition fees and living stipend. The spirit is that no player, who has the willingness and the ability to learn a sport, is denied the opportunity because of financial constraints. Team kinematics and team dynamics learnt through sport in the academy combined with training to achieve emotional intelligence (EQ, emotional quotient, is considered as important as IQ, intelligence quotient) should make these mentally- and physically-fit players leader-integrators of nation, contributing to gross national happiness of the society by reducing crime rate, controlled-substance addition and suicide rate.

Key Points

- Regular participation in organized physical activity and sport for child players becomes very important during corona pandemic, not only, to keep them physically and mentally healthy, but also, to save them from possible verbal and physical abuse from frustrated and often depressed parents.
- A model for 3 sport activities, gymnastics, tennis and football, to be run in a single set-up, with proper scheduling for gender segregation and team formation based on build is proposed, which should reduce the

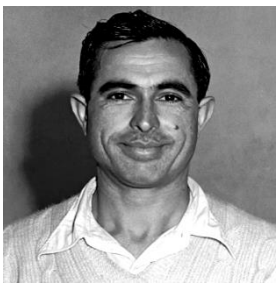
number of players to about one-sixth of the regular enrolment, making physical distancing and coaching easier.

- An approach closer to nature, outdoor coaching, interaction of body with sunshine and fresh air, with the players minimally dressed is proposed for effective coaching as well as receipt of required doses of vitamin D.

- SOPs are given to safeguard from catching corona as well as other communicable diseases.

- A detailed plan for monitoring players' growth as well as obesity and wasting surveillance in players is proposed based on Growth-and-Obesity Vector-Roadmap 2.5.

Dedication



The authors would like to dedicate this paper to the loving memory of international squash legend, Azam Khan (born April 20, 1926 in Nawakille, Peshawar, Khyber Pakhtunkhwa, Pakistan; died March 29, 2020 in London, United Kingdom), who left us at the age of 93 years, while suffering from COVID-19. He won the British Open four times between 1959 and 1962. Hailing from a family of squash players, he was younger brother of Hashim Khan, 7-times winner of British Open (1951-1958) and an uncle of squash great, Jahangir Khan. In his article, Ejaz Choudhry states, "He was a great player in his own right." Khan was the recipient of Lifetime Achievement Award at the World Squash Awards held in UK in the year 2008.

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