02 MAY 2019 (8 AM – 2 PM)  
RESEARCH COMPLEX (F101), QATAR UNIVERSITY  
SPORT SCIENCE PROGRAM RESEARCH DAY

BRIEF DESCRIPTION

The Sport Science Program’s (SSP) Research Day is an annual tradition that brings together faculty and undergraduate students to share recent research advances in the field of Sport Science. It is an occasion for students to present their senior projects in a poster format and highlight the research activities of the SSP to a wider audience.

In this year’s edition, 39 SSP senior students (i.e., 21 female and 18 males) will present their research projects on various topics such as Exercise and Health, Physical Activity and Physical Education, Psychology, Cognition and Well-Being, Sport Performance and Fitness and Training, to Sport Management, Social Inclusion, Gender and Culture.

ORGANIZING COMMITTEE

The SSP Research Day is organized by the departmental Research Enabling Committee (REC) with the support of SSP administration office. Organizing members include Dr. Lina Majed, Dr. Walid Briki, Dr. Bryna Chrismas, Dr. Monoe'm Haddad, Dr. Mahfoud Amara and Mrs. Lamia Mansour. Dr. Georges Jabbour will be chairing all panels of students’ poster presentations.

TIMING

Male Session: 08.00 – 11.00  
Female Session: 11.00 – 14.00
INSTRUCTIONS

All students’ posters will be assessed by the SSP REC members to choose the best two posters. Student speakers will also be assessed by their primary instructor and second reader.

...TO SPEAKERS
1. Duration of poster presentations should be 5 minutes
2. Interactions with the audience should be limited to two questions

...TO MODERATORS
1. Ensure compliance with the speakers’ instructions (i.e., timing and number of questions)
2. Call the assigned assessors

...TO ASSESSORS
1. Assess students’ communications (use the provided rubrics).
   Bring back the assessment sheets to the main supervisor

BEST POSTERS’ 18

AlDana AlAli: “The effect of blue virtual nature on psychological and physiological variables”

Abdulkarim Ahmed Jama: “Descriptive analysis of different physical activities on physical education classes in Qatari public school”

“In its 2018 edition, 46 SSP students (13 male and 33 female) presented their research posters”
# RESEARCH DAY PROGRAM - Male session

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30-09.40</td>
<td>Arrival and Coffee (08.00-08.30)</td>
<td>[Coffee Break (10.20-11.00)]</td>
</tr>
<tr>
<td>08.30-08.40</td>
<td>Mohammad Shoaib Prince. Dynamic stretching alone can impair slower velocity isokinetic performance of young male handball players of at least 24 hours</td>
<td>Muhammad Abdul Hakim. Policies and strategies in relation to community sport for special needs in Qatar</td>
</tr>
<tr>
<td>08.40-08.50</td>
<td>Mohammed Abdelkawy. Upper limb symmetry in basketball players: comparison of handgrip muscle strength between dominant and non-dominant hands</td>
<td>Adel Ahrari. The effect of physical educators on encouraging students to do physical activity outside of school: The mediating role of perceived importance of students’ belief</td>
</tr>
<tr>
<td>08.50-09.00</td>
<td>Assem Boumaraf and Mohammed Al-Ghoul. Upper limb symmetry in handball: comparison of muscle strength (handgrip strength) between dominant and non-dominant hands in handball players</td>
<td>Ali Al-Kanaani. The power of sport in strengthening a country: The case of Qatar</td>
</tr>
<tr>
<td>09.00-09.10</td>
<td>Khaled Saleh Al Hak and Omar Moharram Abdel Monem. Comparison of lower limb asymmetry between two legs and its effect on agility and power</td>
<td>Abdirahman Ahmed Guleid. Sport fans as a football club consumer in Qatar Stars League (QSL)</td>
</tr>
<tr>
<td>09.10-09.20</td>
<td>Abdalla Mustafa Awad. The effect of arm swinging on spatiotemporal characteristics of running gait at two different controlled speeds</td>
<td>Sabbir Hassan Mizanur Rahman. Effectiveness of the social media in sport event to promote a country: Handball and gymnastics championship</td>
</tr>
<tr>
<td>09.20-09.30</td>
<td>Bahaa Aboghaba. Effect of weight status on walking speeds in young male and female adults in Qatar</td>
<td>Atef Zaghbani. Examining the contextual factors in teacher-coach role conflict in physical education</td>
</tr>
<tr>
<td>09.30-09.40</td>
<td>Mohammed Abdullah Al-Jarmal. Walking speeds in young adults in Qatar: effect of gender</td>
<td>Ahmad Maher Al Adawi. Motivating children in primary school physical education</td>
</tr>
<tr>
<td>09.50-10.00</td>
<td>Hadi Hamdoon. The effects of colors on handball scoring efficiency: a pilot study on penalty shot by Qatar Handball National Team</td>
<td></td>
</tr>
</tbody>
</table>
# RESEARCH DAY PROGRAM - Female session

## Arrival and Coffee (11.00-11.30)

<table>
<thead>
<tr>
<th>Time</th>
<th>Panel 1: Sports Management, Branding and Gender</th>
<th>Presenter/Topic</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.30-11.40</td>
<td>Fatima Al Mansoori. Football development in Qatar</td>
<td>Dr. Mahfoud Amara, Dr. Wadih Ishac</td>
<td></td>
</tr>
<tr>
<td>11.40-11.50</td>
<td>Nazanin Moradi Nejad. Branding strategy of fitness gym</td>
<td>Dr. Mahfoud Amara, Dr. Wadih Ishac</td>
<td></td>
</tr>
<tr>
<td>11.50-12.00</td>
<td>Mariam Sheikh. Contributions and portrayal by media in the field of Paralympic sports in Qatar</td>
<td>Dr. Mahfoud Amara, Dr. Wadih Ishac</td>
<td></td>
</tr>
<tr>
<td>12.00-12.10</td>
<td>Khloud Al-Saeed. The role of social media in building fan engagement and brand loyalty in Qatar football clubs</td>
<td>Dr. Mahfoud Amara, Dr. Wadih Ishac</td>
<td></td>
</tr>
<tr>
<td>12.10-12.20</td>
<td>Khawla Issa Aliyauqob. Women leadership in Sport: Challenges and Opportunities</td>
<td>Dr. Wadih Ishac, Dr. Mahfoud Amara</td>
<td></td>
</tr>
<tr>
<td>12.20-12.30</td>
<td>Alanoud Alathba. How politics dominates sports: the case of Qatar’s win of the Asian Cup 2019</td>
<td>Dr. Wadih Ishac, Dr. Mahfoud Amara</td>
<td></td>
</tr>
<tr>
<td>12.30-12.40</td>
<td>Amna AlabdulJabbar. The pre-impact of the 2019 world championship athletics on young generation</td>
<td>Dr. Wadih Ishac, Dr. Mahfoud Amara</td>
<td></td>
</tr>
<tr>
<td>12.40-12.50</td>
<td>Maryam Al-Marri. Exploring the fan engagement in football match: the case of QSL</td>
<td>Dr. Wadih Ishac, Dr. Mahfoud Amara</td>
<td></td>
</tr>
<tr>
<td>12.50-13.00</td>
<td>Naefa Faisal Al-Marri. How to grow women’s sports: the case of Qatar</td>
<td>Dr. Wadih Ishac, Dr. Mahfoud Amara</td>
<td></td>
</tr>
<tr>
<td>13.00-13.10</td>
<td>Anwar Hassen Nooh. Coaching setup and motivation performances within the Qatar women’s national basketball team</td>
<td>Dr. Wadih Ishac, Dr. Mahfoud Amara</td>
<td></td>
</tr>
</tbody>
</table>

## 11.30-11.50 Parallel Panel 1: Coaching, Health, Nutrition and Physical Education

<table>
<thead>
<tr>
<th>Time</th>
<th>Parallel Panel 1: Coaching, Health, Nutrition and Physical Education</th>
<th>Presenter/Topic</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.30-11.40</td>
<td>Amal Mohamed Awad. Effects of PA practiced after school on cognitive performance in scientific disciplines in female students</td>
<td>Dr. Walid Brikic, Dr. Souhail Hermassi</td>
<td></td>
</tr>
<tr>
<td>11.40-11.50</td>
<td>Gada Jebali. Effects of physical activity practiced after school on cognitive performance in scientific disciplines in female students</td>
<td>Dr. Walid Brikic, Dr. Souhail Hermassi</td>
<td></td>
</tr>
<tr>
<td>11.50-12.00</td>
<td>Sara Mohammad Almojaber. The role of omega-3 fatty acids and antioxidants during post-surgery nutrition in ACL</td>
<td>Dr. Walid Brikic, Dr. Souhail Hermassi</td>
<td></td>
</tr>
<tr>
<td>12.00-12.10</td>
<td>Dhoha Eltigani Abdelrahman. The Effect of Obesity and Gender on Walking Speed</td>
<td>Dr. Walid Brikic, Dr. Bryna Chrismas</td>
<td></td>
</tr>
<tr>
<td>12.10-12.20</td>
<td>Aya Khenissi. Fear of re-injury improves from post-operation to discharge in Qatari male athletes following anterior cruciate ligament rehabilitation</td>
<td>Dr. Bryna Chrismas, Ms. Cassie Frasher</td>
<td></td>
</tr>
<tr>
<td>12.20-12.30</td>
<td>Somaia Gabor. Participation in low, moderate and vigorous physical activity in young adults in Qatar: effect of gender and weight status</td>
<td>Dr. Walid Brikic, Dr. Lina Majed</td>
<td></td>
</tr>
<tr>
<td>12.30-12.40</td>
<td>Maha Abumaali. Effect of Caffeine ingestion on general health parameters in young adults in Qatar</td>
<td>Dr. Bryna Chrismas, Dr. Lina Majed</td>
<td></td>
</tr>
<tr>
<td>12.40-12.50</td>
<td>Dhoha Al-Harami. Effects of Fasted vs. Fed Aerobic Exercise on Fat Oxidation and Fat loss in Adults: A Systematic review</td>
<td>Dr. Bryna Chrismas, Khouloud Mtibaa</td>
<td></td>
</tr>
<tr>
<td>12.50-13.00</td>
<td>Fatema Fouladi. Effects of exercise on youth with autism spectrum disorder</td>
<td>Dr. Mahfoud Amara, Dr. Maha Sellami</td>
<td></td>
</tr>
<tr>
<td>13.00-13.10</td>
<td>Dana Al-Shamlan. Exploring community projects targeting elderly people in Qatar</td>
<td>Dr. Mahfoud Amara, Dr. Wadih Ishac</td>
<td></td>
</tr>
<tr>
<td>13.10-13.20</td>
<td>Latifa Al-Mulla. The Qatar policies among schools</td>
<td>Dr. Mahfoud Amara, Dr. Wadih Ishac</td>
<td></td>
</tr>
</tbody>
</table>

## Lunch Break (13.20-14.00)
# Sport Science Program Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Specialization</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Mahfoud Amara</td>
<td>Associate Professor (Director)</td>
<td>Sport policy and management, sport, business, culture, politics in the MENA region, sport development, Olympic studies</td>
<td><a href="mailto:mamara@qu.edu.qa">mamara@qu.edu.qa</a></td>
</tr>
<tr>
<td>Dr. Lina Majed</td>
<td>Assistant Professor</td>
<td>Human movement science, gait analysis, exercise metabolism, obesity, physical activity</td>
<td><a href="mailto:lina.majed@qu.edu.qa">lina.majed@qu.edu.qa</a></td>
</tr>
<tr>
<td>Dr. Walid Briki</td>
<td>Assistant Professor</td>
<td>Sport psychology, social psychology, psychological momentum, performance and well-being</td>
<td><a href="mailto:wbriki@qu.edu.qa">wbriki@qu.edu.qa</a></td>
</tr>
<tr>
<td>Dr. Bryna Chrismas</td>
<td>Assistant Professor</td>
<td>Exercise physiology, nutrition, acute and chronic adaptations to exercise in elite and clinical populations</td>
<td><a href="mailto:bchrismas@qu.edu.qa">bchrismas@qu.edu.qa</a></td>
</tr>
<tr>
<td>Dr. Monoem Haddad</td>
<td>Assistant Professor</td>
<td>Athletic performance optimization, strength and conditioning, monitoring training load</td>
<td><a href="mailto:mhaddad@qu.edu.qa">mhaddad@qu.edu.qa</a></td>
</tr>
<tr>
<td>Dr. Ferman Konukman</td>
<td>Assistant Professor</td>
<td>Physical education (PE), teaching and coaching effectiveness in PE and sports, children physical activity, health and children with disabilities</td>
<td><a href="mailto:fkonukman@qu.edu.qa">fkonukman@qu.edu.qa</a></td>
</tr>
<tr>
<td>Dr. Wadih Ishac</td>
<td>Assistant Professor</td>
<td>Sport marketing and management, strategy development, social and political impact of investing in sport</td>
<td><a href="mailto:wishac@qu.edu.qa">wishac@qu.edu.qa</a></td>
</tr>
<tr>
<td>Dr. Souhail Hermassi</td>
<td>Assistant Professor</td>
<td>Exercise and sports coaching, practice, conditioning and rehabilitation, physical education</td>
<td><a href="mailto:shermassi@qu.edu.qa">shermassi@qu.edu.qa</a></td>
</tr>
<tr>
<td>Dr. Maha Sellami</td>
<td>Assistant Professor</td>
<td>Exercise and ageing, exercise immunology, exercise nutrition</td>
<td><a href="mailto:msellami@qu.edu.qa">msellami@qu.edu.qa</a></td>
</tr>
<tr>
<td>Mr. Zlatan Aganovic</td>
<td>Teaching Assistant</td>
<td>Exercise physiology and sport performance</td>
<td><a href="mailto:zlatan.aganovic@qu.edu.qa">zlatan.aganovic@qu.edu.qa</a></td>
</tr>
<tr>
<td>Ms. Cassie Frasher</td>
<td>Teaching Assistant</td>
<td>Health &amp; human performance, strength &amp; conditioning, leadership, motivation, emotional intelligence</td>
<td><a href="mailto:frasherc@qu.edu.qa">frasherc@qu.edu.qa</a></td>
</tr>
<tr>
<td>Dr. Khouloud Mtibaa</td>
<td>Teaching Assistant</td>
<td>Exercise physiology, environmental physiology, proprioception, balance, hyperthermia</td>
<td><a href="mailto:kmtibaa@qu.edu.qa">kmtibaa@qu.edu.qa</a></td>
</tr>
<tr>
<td>Dr. Georges Jabbour</td>
<td>Assistant Professor</td>
<td>Exercise and applied physiology, metabolism, exercise prescription, fitness assessment, training and exercise prescription</td>
<td><a href="mailto:gjabbour@qu.edu.qa">gjabbour@qu.edu.qa</a></td>
</tr>
</tbody>
</table>
RESEARCH AT THE SPORT SCIENCE PROGRAM

One of the pillars of Sport Science Program is Research. To capitalize on the expertise and national/international networks of faculty in Sport Science Program and partners at Qatar University and within Sport Science Community in Qatar, Sport Science Program initiated in 2017 Research Unit to increase contribution to knowledge on sport and exercise matters related to Qatar and the region. Our ambition is to position Sport Science Program at Qatar University as one of the top university departments in research and publications in the interdisciplinary fields of sport sciences in the Arab World.

SPORT, CULTURE AND SOCIETY (SCS)

The SCS theme is the Qatar University’s first to focus exclusively on sport, culture and society. The purpose of this group is to examine the interplay between sport, culture and society at local, regional and international levels, applying multidisciplinary approaches in social sciences, including social psychology, sport sociology, sport policy and management, sport and cultural studies.

Vision
The vision of the SCS group is to establish a multidisciplinary scientific culture and research team able to work collaboratively inside and outside Qatar University. The group also aims at conducting relevant research that can promote the sport environment within Qatar and the Gulf region as per the QNV 2030. More specifically, it consists in advancing the understanding of the relationship of cultural and societal factors with sport and/or physical activity participation (at elite or community levels; national and regional levels), and informing policy makers about up-to-date research findings and evidence-based research.

Mission
The mission of the SCS is to lead interdisciplinary research within the field of sport and social sciences in Qatar and the Middle East and to contribute to knowledge in the sport and social science internationally. Another mission is to enable and support students, academic and scientists with particular interest in sport and exercise sciences to lead scientific studies and research in accordance with the needs of the Qatari society and beyond. A last mission is to help optimize practices and solutions for the society towards the QNV 2030.
SPORT, PHYSICAL ACTIVITY AND HEALTH (SPAH)

The SPAH group is the Qatar University's first to focus exclusively on sport, physical activity participation, and health. This group aims at promoting the development of scholarship and teaching while establishing interdisciplinary research and advance knowledge about exercise, health and well-being issues from the scope of multiple disciplines (e.g., physiology, psychology, nutrition, motor control).

**Vision**
The vision of the SPAH group is to establish a multidisciplinary scientific culture and research team able to work collaboratively inside and outside Qatar University. The group also aims at conducting relevant research that can promote the sport environment and a healthy lifestyle within Qatar and the Gulf region as per the QNV 2030. It consists also in increasing physical activity participation levels, physical and mental health of the population within Qatar, and informing policy makers about up-to-date research findings and evidence-based research.

**Mission**
The mission of the SPAH is to lead interdisciplinary research within the field of sport and social sciences in order to promote physical activity, sport, health and well-being within Qatar, the Middle East and internationally. Another mission is to enable and support students, academic and scientists with particular interest in sport and exercise sciences to lead scientific studies and research in accordance with the needs of the Qatari society and beyond. A last mission is to help optimize practices and solutions for the society towards the QNV 2030.

SPORT PERFORMANCE (SP)

The Sport performance group (SP) is the first within Qatar University to focus exclusively on the optimization of sport performance. This group aims to promote the development of scholarship and teaching, whilst establishing interdisciplinary research, and advancing knowledge about sport performance issues from the scope of multiple disciplines (e.g., physiology, psychology, biomechanics, nutrition, motor control).

**Vision**
The vision of the SP is to establish a multidisciplinary scientific culture and research team, able to work collaboratively inside and outside of Qatar University. The group also aims to conduct relevant research that promotes a ‘sport environment’ within Qatar and the Gulf region as per the QNV 2030. In order to achieve this vision the SP will work to optimize sport performance across the scope of abilities (i.e., non-professional, youth and professional athletes) and genders in Qatar, through up-to-date evidence based research, via a method of sharing best practice with policy makers inside Qatar.

**Mission**
The overall mission of the SP is to lead interdisciplinary research within the field of sport and social sciences in order to optimize sport performance in Qatar, the Middle East and internationally. A secondary aim is to enable and support students, academics and scientists with particular interests in sport performance to lead scientific studies and research in accordance with the needs of the athletes and players in difference sports in Qatar and Internationally. Thirdly, the SP aims to help optimize practices and solutions for the sport movement.
ABSTRACTS

MALE SESSION - PANEL 1. SPORTS PERFORMANCE AND MOTOR BEHAVIOR

08.30-08.40. Dynamic stretching alone can impair slower velocity isokinetic performance of young male handball players of at least 24 hours

MOHAMMAD S. PRINCE1*, NIDHAL ZARROUK2, MONTASSAR TABBen2, DAVID G. BEHM3, KARIM CHAMARI2, MONOEM HADDAD1

1Sport Science Program, Qatar University
2Aspetar Orthopedic and Sports Medicine Hospital
3School of Human Kinetics and Recreation, Memorial University of Newfoundland
*mp1408827@student.qu.edu.qa

There is only a single study examining stretch-induced performance changes with youth at 24 hours’ post-stretch. The objective of this study was to examine physiological responses of young trained athletes at 24-hours after experiencing Static-Stretching (SS) or Dynamic-Stretching (DS) protocols. Eight-young-male, elite-handball-players (age: 16.1±5.1 years) were tested prior to-, 3-minutes and 24-hours. Tests included (i) two 4-s maximal-voluntary-isometric contractions at 600 of knee-flexion with 2-min rest, (ii) two maximal-isokinetic-contractions each at 600.s⁻¹ and 3000.s⁻¹ with 1-min rest, and (iii) two drop-jumps with 30-s rest. Results showed that 1) both the SS and control conditions exhibited knee-extensor 600.s⁻¹ and 3000.s⁻¹ isokinetic deficits at post-test, 2) DS impaired knee-flexor 600.s⁻¹ isokinetic work and power-related measures at post-test and at 24-hours’ post-test, 3) DS and SS enhanced knee-flexor 3000.s⁻¹ isokinetic force and power-related measures compared to control. In conclusion, testing-induced knee-extensor isokinetic impairments were counterbalanced by DS, however the hip-flexion DS could have produced minor muscle damage for at least 24-hours decreasing knee-flexor forces and power at 600.s⁻¹.

08.40-08.50. Upper limb symmetry in basketball players: comparison of handgrip muscle strength between dominant and non-dominant hands

MOHAMED ABDELKAWY1*, ZLATAN AGANOVIC1, MONOEM HADDAD1

Basketball is an open-skill team sport, strongly depending on the player’s capability to move quickly, jump and bounce the ball with coordinating lower and specifically upper limb movement. Handgrip strength is important in basketball as various moments rely on the continuous use of wrist and several flexor muscles when catching, holding, shooting and throwing the ball. The objective of this study was to evaluate the difference of handgrip muscle strength of male basketball players between dominant and non-dominant hands. Tests took place at Al-Rayan sport club. Thirty-male-basketball players aged between 20-36 years were included in the study. A strong consistency and reliability of handgrip of both hands (ICC right: 0.90; Left ICC=0.86) was shown. The Mann Whitney U Test (non-parametric test) revealed a non-significant difference between both hands independently of the position of the players (p ≥ 0.05). It may be suggested that basketball practice in different positions in the field does not affect the handgrip symmetry between the dominant and non-dominant hands.

08.50-09.00. Upper limb symmetry in handball: comparison of muscle strength (handgrip strength) between dominant and non-dominant hands in handball players

ASSEM BOUMARAF1*, MOHANNED ALGHOUL1#, ZLATAN AGANOVIC1, MONOEM HADDAD1

1Sport Science Program, Qatar University
*ma1305239@student.qu.edu.qa

Handgrip strength is one of the main components in handball, when it comes to controlling, passing and throwing the ball. Players must have a great grip of the ball. Player’s position plays an important key in deciding the strength of the handgrip. The objective to present study was to evaluate the upper limb symmetry in different positions of a handball match. 47 participants among Qatar handball League were included in this research (age ranged between 22 and 42 years). A hand dynamometer was used to measure the handgrip’s strength and each player had two attempts for each hand with two minutes in-between. The results showed a good consistency and reliability of handgrip tests (ICC right & Left= 0.99). A non-significant difference between both hands has been revealed in different positions in the court (p ≥ 0.05). It seems that handball practice and the occupation of different positions in the field do not affect the asymmetry of the upper body.
09.00-09.10. Comparison of lower limb asymmetry between two legs and its effect on agility and power
KHALED S. AL HALK1*, OMAR M. ABDULLA1*, MONOEM HADDAD1, WASSIM MOALLA2, LINA MAJED1
1Sport Science Program, Qatar University
2High Institute of Sport and Physical Education, University of Sfax
*ka1002371@student.qu.edu.qa
*oa1306270@student.qu.edu.qa

Muscle strength and power of the lower limb in football are crucial fitness components to reach the optimal performance of the players. The objective of the present study is to compare the lower limb asymmetry between dominant and non-dominant leg and its effects on agility in professional footballers in Qatar. A total of 23 players (25.3 ± 6.5 years) from Qatar Star Leagues (different field positions) participated in the study. The power and agility were tested with the drop jump test and the T-test, respectively. The non-parametric test showed significant higher values for jumping height in dominant leg compared to the non-dominant leg. Furthermore, a significant (negative) correlation was found between the T-test agility results and the amplitude of the difference between dominant and non-dominant leg power. It is suggested that agility is negatively affected by the asymmetry between dominant and non-dominant legs’ power, and henceforth may contribute to an increase in the risk of injury in football players.

09.10-09.20. The effect of arm swinging on spatiotemporal characteristics of running gait at two different controlled speeds
ABDALLA M. AWAD1*, LINA MAJED1, KOHLOUD MTHIBAA1
1Sport Science Program, Qatar University
*ma1308630@student.qu.edu.qa

Studies on running technique have mainly focused on the role of the lower part of the body in performance. The aim of this study is to examine the effect of arm swing on running gait’s spatiotemporal characteristics. Five Qatar University athletic students performed two running speed trials on a treadmill (11 and 13 km.h⁻¹) for each of two experimental conditions: restricted arm swing (RAS) where arms were folded at the chest level and free arm swing (FAS). The results showed that restricting the arm swing decreased significantly stride duration and length and increased the stride frequency with no specific effect on the contact time, approaching characteristics of trained running gait. Interestingly, arm swing restriction had a bigger impact on spatiotemporal parameters at 13km.h⁻¹ as compared to 11km.h⁻¹, especially for stride frequency. In sum, arm swing contributes towards the movement control during running especially at higher intensities probably to optimize running economy.

09.20-09.30. Effect of weight status on walking speeds in young male and female adults in Qatar
BAHAA ABOGHABA1*, LINA MAJED1, MONOEM HADDAD1
1Sport Science Program, Qatar University
*ba1408842@student.qu.edu.qa

Walking speed is a reliable and valid indicator of health and used in many clinical settings. To date, no data on gait exist in the Gulf region. However, it is still unclear if and how obesity changes gait. The aim of this study was to assess preferred (PWS) and maximal walking speeds (MWS) in young adults in Qatar and examine how weight status affects gait speed in both genders. 196 volunteers (119 female) were randomly recruited for a standardized walking test. Results indicated that obese participants had significantly lower MWS (but not PWS) compared to participants of different weight status. MWS was also affected by gender even when speeds were normalized to height. Moreover, young adults in Qatar seem to adopt a slower walking pattern as compared to international norms. In sum, this study showed that MWS could be a better and more sensitive indicator of health in young adults as compared to the widely used PWS in older populations.

09.30-09.40. Walking speeds in young adults in Qatar: effect of gender
MOHAMMED A. AL-JARMAL1*, LINA MAJED1, MONOEM HADDAD1
1Sport Science Program, Qatar University
*ma1308630@student.qu.edu.qa

Walking speed is a solid measure to estimate overall health. The objective of the present pilot study was to establish reference gait speed in Qatar (that do not exist) and to examine gender differences. 107 males and 199 females (21.97 ± 2.23 years) completed a standardized walking protocol on a flat 14-m pathway. The time to complete the intermediate 10-m was recorded, and preferred (PWS) and maximal walking speed (MWS) were calculated, as well as their values relative to height (rPWS and rMWS). Independent t-tests showed significant gender differences for PWS, MWS and rMWS, while rPWS did not differ between male and female groups. In sum, those values seem to be somewhat lower than the ones reported for populations from the Arabian Gulf and Arab regions (Kuwaitis and Tunisias). The data from Kuwaiti subjects indicated similar gender differences unlike other studies on Western populations. This could be explained by a cultural influence.
09.40-09.50. The effects of colors on handball scoring efficiency: a pilot study on penalty shot by Qatar Handball National Team

HADI H. HAMDOON\textsuperscript{1}, WALID BRIKI\textsuperscript{1}, MONOEM HADDAD\textsuperscript{1}

\textsuperscript{1}Sport Science Program, Qatar University
*hh1004211@student.qu.edu.qa

Sport is a new thriving industry with millions of dollars invested in, therefore everyone involved in sport look up for perfection and winning. The present paper aims to study the effect of colors in handball on the shooting efficiency. Based on the literature review, many articles showing the effects of colors on both sport and life aspects were discussed. Data collection was carried out during a controlled environment setting in order to control the measurement as much as possible. 10 participants from the Qatar handball national team between the ages of 27-39 years participated in the study. They were divided in 2 groups randomly. The first group was shooting penalties at the goalkeeper who was wearing red (each player had 6 shoots); the other group was shooting on the goalkeeper who was wearing gray. In the next week, the group and the goalkeeper colors were reversed. Both scoring results and movement fluidity were collected by two expert coaches. Results showed a considerable improvement in the goalkeeper performance and results while wearing red.

09.50-10.00. Effect of arousal on the 50m freestyle swimming performance in QU students

AHMAD A. SALEEM\textsuperscript{1}, LINA MAJED\textsuperscript{1}, WALID BRIKI\textsuperscript{1}

\textsuperscript{1}Sport Science Program, Qatar University
*as1303517@student.qu.edu.qa

Psychological factors play an integral role in sports and can affect performance at all levels of expertise. Arousal has been shown to increase in competitive settings and present an optimal level for enhanced performance. The aim of this study is to examine how arousal varies in competitive vs individual conditions and the extent of its impact on recreational swimming sprint performance. 12 volunteers (18-21 years) from Qatar University's swimming team reported their arousal scores prior to an official 50-m freestyle competition (qualifications for the eighth universities Gulf States tournament) and in an individual trial. Performances were collected in seconds. Results showed no significant differences in performance between individual and competitive conditions. Moreover, there was a negative significant correlation between arousal and performance only in the individual condition. Interestingly, when all data were combined, a quadratic (inverted U-shape) relationship was found between arousal and performance indicating an optimal arousal level for recreational swimming as in other elite contexts.

MALE SESSION –PARALLEL PANEL 1.
SPORTS MANAGEMENT AND PHYSICAL EDUCATION

08.30-08.40. Policies and strategies in relation to community sport for special needs in Qatar

MUHAMMAD ABDUL HAKIM\textsuperscript{1}, MAHFOUD AMARA\textsuperscript{1}, LINA MAJED\textsuperscript{1}

\textsuperscript{1}Sport Science Program, Qatar University
*ma1305899@student.qu.edu.qa

These studies look at sport policies and strategies that are in place to meet the needs of people with special needs in Qatar. To do so, we explored governmental & non-governmental sector’s strategies and initiatives. We used both, qualitative content analysis of documents that are been published and policies targeting people with special needs, particularly in sport, in addition to quantitative data, to find out about how the agenda of sport for people with special need is being formulated; and which organisations are involved and at which level. Furthermore, how resources are being allocated. Despite the tremendous effort put by Qatar in the development of sport in the last decade or so one can argue that the agenda of sport for people with special needs is yet to move up in the national sport policy.

08.40-08.50. The effect of physical educators on encouraging students to do physical activity outside of school: The mediating role of perceived importance of students’ belief

ADEL AHRARI\textsuperscript{1}, FERMAN KONUKMAN\textsuperscript{1}, WALID BRIKI\textsuperscript{1}

\textsuperscript{1}Sport Science Program, Qatar University
*aa1205968@student.qu.edu.qa

The previous several years has seen an apparent change in Qatar, which required physical education to become a focus within children's schooling. In addition, the country has put policies in motion to advocate and allow students to have more exposure to physical activity within school and outside. The physical activity in and out of the school plays an important role. The most important concept is to be a role model, support and engagement from the physical educators. This study examined the student’s perception about teachers and parent’s encouragement in link with belief and physical activity behavior to estimate their effect. 64 students from an independent school in Doha had completed the questionnaire. The results indicated that students' perception of the encouragement toward PA behavior positively predicted and there is an interaction between students and physical educators. Suggestion were attracted light of the outcomes, for example, regulate and
preserve a healthy social interaction between them and their students and inclusion in activities.

08.50-09.00. The power of sport in strengthening a country: The case of Qatar
ALI AL-KANAANI1*, WADIH ISHAC1, FERMAN KONUKMAN1

1Sport Science Program, Qatar University
*aa1512459@student.qu.edu.qa

Sports are non-controversial tools that bring nations together and enhance the reputation and image of countries that excel in them or host successful events. In recent years, Qatar used high-profile sports sponsorships to build its national profiles and change perceptions. The study discusses how states increasingly use sport events as part of their soft power in order to promote themselves internationally. Second how sport has enhanced the stature of Qatar in the world. Sports are non-controversial tools that bring nations together and enhance the reputation and image of countries that excel in them or host successful events. The purpose of this study is to examine the political effects associated with hosting the 2022 world cup in Qatar as developing country. By using systemic literature review method. The results revealed that the political impacts could be described as the outcomes of the 2022 world cup, which has the ability to strengthen Qatar.

09.00-09.10. Sport fans as a football club consumer in Qatar Stars League (QSL)
ABDIRAHMAN A. GULEID1*, WADIH ISHAC1, FERMAN KONUKMAN1

1Sport Science Program, Qatar University
*ag1209015@student.qu.edu.qa

The study represents the sports fans as the main target audience for improving the business processes in Qatar clubs and for the Qatar vision 2030. The purpose of the study is to determine sport fan problems that could indicate the value for a soccer game in the country. With the business entity, such an agreement opens a new way of ensuring safety and showing the possible instruments for success. The main protocol of this research was interview and used to approach to the head of the marketing teams in both Al-Rayyan club and QSL. The results showed that both of the organization do different experiments on the sport fans but have different outcomes. However, this study examined the loyalty and respect from the fans towards the organization and towards the football clubs, which can be implies the signed agreement with competition and game and Qatar Football Association (QFA) can benefit from it.

09.10-09.20. Effectiveness of the social media in sport event to promote a country: Handball and gymnastics championship

SABBIR H.M. RAHMAN1*, WADIH ISHAC1, FERMAN KONUKMAN1

1Sport Science Program, Qatar University
*sm1300612@student.qu.edu.qa

Social media has been used widely by the sport organizations in order to communicate with fans. The study found that Facebook and Instagram was used heavily during the two international mega events such as of World Men's Handball Championship in 2015 and 48th Artistic Gymnastics World Championships in 2018. In handball championship both Facebook and Instagram have similar results in terms of frequency of hashtags, 690 times the name “Qatar” was mentioned to grab the attention of fans and 660 posts without the hashtag “Qatar” but it was posted during the tournament on its official page. In addition, Artistic Gymnastics World Championships in Facebook they had posted 415 posts and they had 60 posts during their tournament but in Instagram 185 posts but during the tournament, 57 posts were posted with hashtag “Qatar”. Sport Organizations should utilize social media in more effective way to establish stronger relationships for personal, professional, and community and its fans to communicate and build strong relationship. These three components will help the country to be promoted positively.

09.20-09.30. Examining the contextual factors in teacher-coach role conflict in physical education
ATEF ZAGHBANI1*, FERMAN KONUKMAN1, SOUHAIL HERMASSI1

1Sport Science Program, Qatar University
*az1405896@student.qu.edu.qa

Teaching physical education and competitive sports coaching are separate occupational roles that require specific skill sets and have their own specific occupational demands. Although there are few shared commonalities, the roles of physical educators and coaches are not identical and there is no assumption that they can be performed by the same individual without facing challenges. This is presented when unequal rewards and accountabilities structure, pressure towards the teacher/coach to identify more with the role of coach than that of teacher. However, most of the recent research has minimized or altogether ignored the influence of the dual role conflict. The history of physical education showed that there are contextual factors that promote teacher-coach role conflict. Teacher-coach identity and the social context in which he/she performs in the experience of role conflict. This study found that several contextual factors and the interactions between these factors influence physical education teachers’ response to the dual roles.
Motivating children in primary school physical education

AHMAD M. AL ADAWI¹, FERMAN KONUKMAN¹, SOUHAIL HERMASSI¹

¹Sport Science Program, Qatar University
*ae1206586@student.qu.edu.qa

The research shows that Physical Education is equally of great significance to the students since it facilitates good health. This study examined the aspect of motivating children in primary schools to embrace physical education as a subject. The study presents some of the common factors that prevent young children from pursuing Physical Education as a subject. Generally, society influences the choices of young students on the subjects to pursue in school. The study discussed that parents and teachers are skeptical of the children undertaking physical education. Therefore, children are wired by their parents and teachers on the traditional subjects to study which are believed to be professionally better. However, this study found the significance of Physical Education both as a career choice and for health purposes. The study utilized both quantitative and qualitative studies to obtain information. Primary and secondary data collection methods used as well as stratified sampling technique to identify the research participants.

Football development in Qatar

FATIMA AL MANSOORI¹, MAHFOUD AMARA¹, WADIH ISHAC¹

¹Sport Science Program, Qatar University
*fa1208076@student.qu.edu.qa

This study explores Qatar’s strategy in elite sport/football development agenda and what are the pillars of football development in the country. The literature review examined four pillars of football development including diplomacy, direct investment in the football industry, elite development, and hosting major events in football. Aspire Academy has been instrumental in promoting male elite sport in the country, including in football. In addition to the role played by Qatar Football Federation, Qatar Stars League, and the clubs.

Contributions and portrayal by media in the field of Paralympic sports in Qatar

MARIAM SHEIKH¹, MAHFOUD AMARA¹, WADIH ISHAC¹

¹Sport Science Program, Qatar University
*ms1208859@student.qu.edu.qa

The study aims to understand the current situation of Paralympic sports in Qatar, what has media done for Paralympic sports and how the media has portrayed para-athletes in order to provide exposure, recognition and appreciation that they are worthy. The data was collected through interviews, questionnaires and published media content regarding Paralympics in Qatar. Both qualitative and quantitative methods of data collection were used and the findings were evaluated using thematic analysis. The results concluded that media portrayal is far off topic, Qatar media has not done any major contributions in order to uplift the Paralympic athletes and Paralympic sport situation. The examined publications emphasized mainly "performance" ignoring other societal aspects which would empower Paralympic sport in the country.
12.00-12.10. The role of social media in building fan engagement and brand loyalty in Qatar football clubs

KHLOUD AL-SAEED†, MAHFOUD AMARA†, WADIH ISHAC†

†Sport Science Program, Qatar University
*ka1308730@student.qu.edu.qa

Nowadays, professional sport teams have widespread influence. Globalization in sports has contributed to the entry of football into digital media technology. Social media is playing a greater role in building fan engagement and brand loyalty for football clubs. The purpose of this study is to understand the role of social media in building fan engagement and brand loyalty in football clubs in Qatar. The study applied qualitative thematic analysis research methodology. Moreover, the research explored: 1) the reasons why football fans follow their teams on social media, 2) the factors causing fans to utilize social media to engage with their football clubs, 3) the ways clubs are using social media to interact with their fans to strengthen their brand loyalty and 4) which social media sites are mostly utilized by fans. The study contributes significantly to the current research concerning social media application and branding strategy in sport marketing literature, with specific focus on the Qatari context.

12.10-12.20. Women leadership in Sport: Challenges and Opportunities

KHAWLA I. ALYAQUOB†, MAHFOUD AMARA†, WALID BRIKI†

†Sport Science Program, Qatar University
*ka1308730@student.qu.edu.qa

Sport is very beneficial to our daily life routine, and to increase public awareness of Women Participation as sport leader or female manager is the main strategy that state of Qatar focus on. Therefore, motivate female youth to recognize their weakness and strength in order to make decisions; take responsibilities and solve problems. The research was based on having single participant who is president of Qatar Women Sport Committee. Identifying the opportunities that women can use to reach managerial position or leadership; and challenges that obstacle women from continue being part of Qatar Olympic Committee or National Sports Institutions. Due to the lack of acceptance of men to the idea of women’s leadership, and the strong belief that women must be taking care of family responsibilities. This study highlights and demonstrates how to manage sport organization by female manager or sport leader who leads female players or female staff.

12.20-12.30. How politics dominates sports: the case of Qatar’s win of the Asian Cup 2019

ALANOOD AL-ATHBA†, BRYNA C.R. CHRISTMAS†, WADIH ISHAC†

†Sport Science Program, Qatar University
*200760639@student.qu.edu.qa

The recent 2019 Asian cup was held in the United Arab Emirates (UAE), a blockading country, increasing the pressure on Qatar’s national team to perform well. The aim of this study is to understand the impact of participating in international sport events within the context of the existing blockade as well as identifying the political impact that Qatar gain from winning the AFC against a blockading country. Four randomly selected reputable digital and print based publications from Qatar and the UAE (two from each country) surrounding the AFC Asian Cup of 2019 was quantitatively analyzed. Results showed that Emirates247 and Khaleej Times showed very limited mention of Qatar’s victory. Whereas, the media in Qatar clearly published multiple articles announcing and celebrating the same. The implications of how the political differences overshadowed the social experience of celebrating a hard-won prestigious cup indicate that there is a divergence from the traditional perspective that sports events unify stakeholders despite complex political agendas.

12.30-12.40. The pre-impact of the 2019 world championship athletics on young generation

AMNA ALABDULJABBAR†, WALID BRIKI†, WADIH ISHAC†

†Sport Science Program, Qatar University
*aa1404338@student.qu.edu.qa

Hosting an international sport event can have a great impact on the country. It can influence country in both economic and social fields. Moreover, sport events mostly affect the young generation. This paper discusses the influence of IAAF World Championship on the youth in Qatar. The literature review shows the position that such events have held in other countries and how these effects can be felt in the Qatari environment with a focus on the youth. The study was conducted in the form of a questionnaire aided qualitative thematic research. Two participants from Qatar University were asked questions relating to the topic. The form of the interview is the most suitable for this kind of research as it helps to get the most accurate information about the topic from a small sample size. The questions were designed to find out what impact 2019 World Championship in Athletics would potentially have on the youth.
12.40-12.50. Exploring the fan engagement in football match: the case of QSL

MARYAM AL-MARRI1*, WALID BRIKI1, MAHFOUD AMARA1

1Sport Science Program, Qatar University
*ma1401791@student.qu.edu.qa

This study explores how Qatar football fans are much interested in the European leagues and why the local matches are unattractive thus low level of engagement for the game. The general literature argues that football fans are loyal beyond limits to their adopted club. Some factors like motivate these attitude/behaviours; valence, form, scope, nature of its impact and customer goal. Fan satisfaction with services is a crucial element. Analysis of the data highlights a clear correlation between fans expectations in Qatar and the rate of satisfaction. Result showed that respondents favoured more focused actions and provide more impactful outreach to football fans in Qatar, and marketing of the local league on social media is essential. This study provided newfound intelligence for Qatar Football providers to give fans more space to contribute to the development of the local league. Also, identifying the necessary strategy for managers of Qatar Football to implement to fully engage fans.

12.50-13.00. How to grow women’s sports: the case of Qatar

NAEFA F. AL-MARRI1*, WALID BRIKI1, WADIH ISHAC1

1Sport Science Program, Qatar University
*na1204630@student.qu.edu.qa

One of the main pillars in 2030 mission and vision, is to improve health activity. Lately the country has seen an increase in the number of female participations on different levels. This paper is based on an interview from the president of Qatar women’s sports committee to understand the growth of the female participants in sports. Some of the factors that lead women away from sports in Qatar include religious and cultural beliefs, lack of opportunities for women in sports, laws, and regulations that exclude women from taking part in specific sports that have certain rules. All these factors were obstacles for female to attend a path related to sport. Strategies in which we can improve women participation in sports include building education on the benefit of sports, educating a sporting culture among women from a young age, passing laws that encourage funding of women in sports and mentorship of young women in sports.

13.00-13.10. Coaching setup and motivation performances within the Qatar women’s national basketball team

ANWAR H NOOH1*, SOUHAIL HERMASSI1, BRYNA C.R. CHRIMAS1

1Sport Science Program, Qatar University
*an1308745@student.qu.edu.qa

A well-managed sports team stands a better chance of registering success relative to that of a poorly-managed team. The effectiveness of a coach also determines the ability of a team to register good results. The Qatari women’s national basketball team is facing management challenges. The team last played, and performed well in 2017 when it won 8 times in a row. However, it has not been practicing ever since. The aim of this study is to investigate the effect of management style, coaching set-up, and team politics on the motivation of players in the Qatari women’s national basketball team. Quantitative surveys were completed by ten out of the fifteen Qatari women’s national basketball team members. Results showed that the national management performed poorly with respect to its styles, coaching set-up, and team politics. Administrative and technical leaders should closely and constantly monitor players’ motivation levels and make necessary coaching changes to avoid mutiny by the players and ensure success.

FEMALE SESSION—PARALLEL PANEL 1. COACHING, HEALTH, NUTRITION AND PHYSICAL EDUCATION

11.30-11.40. Effects of physical activity practiced after school on cognitive performance in scientific disciplines in female students

AMAL M. AWAD1*, WALID BRIKI1, SOUHAIL HERMASSI1

1Sport Science Program, Qatar University
*aa1305785@student.qu.edu.qa

Practicing regularly in extracurricular activities has a positive link to the academic performance of students. Limited studies have examined the effect of PA on academic achievement in the State of Qatar. The present study aimed to evaluate the effect of PA in children’s academic performance. 32 teenagers, aged 10-11 years were used as sample population from Maimouna school. To be more specific, 16 of the participants were practicing PA, while the other 16 were not. A quasi experimental design was used ANOVA, SPSS. Results showed significant difference between the students who were practicing PA (better performance in Arabic and English grades) and who were not. This was not a surprising result because all previous related studies showed the same outcome. Therefore, the findings showed that more studies need to be carried in Qatar to measure the effect of after school PA
on the achievement performance of the students with a bigger sample size.

11.40-11.50. Effects of physical activity practiced after school on cognitive performance in scientific disciplines in female students

GADA JEBALI1*, WALID BRIKI1, SOUHAIL HERMASSI1

1Sport Science Program, Qatar University
*ga1306267@student.qu.edu.qa

The relation among physical activity (PA), cognitive function, and academic achievement in children is receiving considerable attention. The utility of after-school PA to improve cognitive and academic performance. The purpose of this study is to examine the effects of after-school physical activity weather it increase or decrease the academic performance of mathematics and biology in female students. A quasi experimental design, total of 32 sixth-grade female students from a single public school in Doha (aged between 10-11) control group, 16 (active females) playing after-school PA “basketball” and 16 (inactive females) participating only in school physical education classes. Also, collecting data of mathematics and biology grades (average grades) and using (ANOVA) for data analysis and SPSS. There was a significant effect of after-school PA on cognitive performance in scientific disciplines (mathematics and biology) in students who participate regularly in PA more than students who do not.

11.50-12.00. The role of omega-3 fatty acids and antioxidants during post-surgery nutrition in ACL

SARA M. ALMOJABER1*, BRYNA C.R. CHRISMAS1, WALID BRIKI1

1Sport Science Program, Qatar University
*sa1404886@student.qu.edu.qa

Anterior cruciate ligament (ACL) injury is common among active athletes. Often, ACL injury requires surgery, and intensive physical rehabilitation in order to return the athlete back to action as quickly as possible. Inflammation post-surgery and during rehabilitation is common. Damaged and swollen body tissue can heal quicker with the presence of fatty acids (omega-3 and omega-6), and antioxidants. However, these fatty acids and antioxidants have to be present in significant amounts in the affected tissues. It is presently unclear if supplementation with fatty acids and antioxidants can improve ACL rehabilitation and return to sport. The purpose of this review is to investigate the role of omega-3 fatty acids during post-surgery nutrition in ACL Rehabilitation.

12.00-12.10. The Effect of Obesity and Gender on Walking Speed

DHOHA E. ABDELRAHMAN1*, LINA MAJED1, WALID BRIKI1

1Sport Science Program, Qatar University
*da1207125@student.qu.edu.qa

Walking speed is an important and reliable clinical indicator of mobility, health and mortality, mostly used in older populations. The study aims to examine the effect of gender and weight status on the preferred (PWS) and maximal walking speeds (MWS) in young adults living in Qatar. 119 females and 77 male (21.8±2.02 years) Qatar University students were randomly selected to perform a standardized walking test. Participants walked 3 trials at each of their most comfortable and fastest speeds on a 14 meter flat pathway, in which PWS and MWS were recorded. Results showed a significantly lower MWS for female as compared to male, even when speed was normalized to height. Obesity reduced significantly the MWS, while it did not affect the PWS as reported in previous studies on obesity gait. In conclusion, the MWS is presented as a more sensitive indicator of mobility in younger adults as compared to the widely used PWS in older population.

12.10-12.20. Fear of re-injury improves from post-operation to discharge in Qatari male athletes following anterior cruciate ligament rehabilitation

AYA H. KHENISSI1*, SEAN MCAULIFFE2, PAUL J. READ2, CASSIE FRASHER1, BRYNA C.R. CHRISMAS1

1Sport Science Program, Qatar University
2Aspetar Orthopaedic and Sports Medicine Hospital
*ak1108225@student.qu.edu.qa

Anterior cruciate ligament (ACL) rupture is the most common incapacitate knee injury that occurs frequently among athletes. However, up to 50% of athletes who undergo ACL surgery did not return to their pre-injury level in sport despite physical rehabilitation appearing optimal. This may be due to a lack of psychological readiness, specifically fear of re-injury. This study aims to investigate changes in fear of re-injury following ACLR. Nine male athletes from Qatar who completed ACLR at Aspetar Orthopaedic and Sports Medicine Hospital, completed the anterior cruciate ligament return to sport after injury (ACL-RSI), either in English or Arabic post-operation (6 or 7 weeks) and at discharge (20 – 43 weeks). Significant improvements in ACL-RSI were observed between post-operation and discharge. Psychological fear of re-injury could be an important outcome following ACLR. In addition to traditional rehabilitation outcomes such as strength, range of motion, and stability, health care practitioners should also aim to maximize psychological outcomes post operatively.
12.20-12.30. Participation in low, moderate and vigorous physical activity in young adults in Qatar: effect of gender and weight status

SOMAIA GABOR1, LINA MAJED1, WALID BRIKI1

1Sport Science Program, Qatar University
*s1408202@student.qu.edu.qa

In the State of Qatar, more than 70% of the population is either overweight or obese, while 83% participate in little to no physical activity (PA). This is associated with an increased risk of several non-communicable diseases. The aim of this study is to examine the weekly engagement (min. week-1) in vigorous and moderate PA and walking in young adults in Qatar and determine the effect of gender and weight status on PA participation. 307 Qatar University student volunteers (199 females) were randomly selected to complete the International Physical Activity Questionnaire (IPAQ). Results showed that on average 40.7% of the population do not meet the American College of Sports Medicine’s PA guidelines for health. Males engaged significantly more in vigorous PA and walking as compared to females, in line with previous reports on general population. Moreover, weight status did not affect significantly the levels of PA, suggesting a possible overestimation in the subjective self-reported PA in the obese population.

12.30-12.40. Effect of Caffeine ingestion on general health parameters in young adults in Qatar

MAHA ABOUMAALIE1*, BRYNA C.R. CHRISMAS1, LINA MAJED1

1Sport Science Program, Qatar University
*ma1403937@student.qu.edu.qa

Caffeine ingestion is rapidly increasing nowadays. Popular amongst youth, beverages that contain caffeine are becoming part of a culture, especially in Qatar. This study aims to identify the frequency at which Qatar’s young adults ingest caffeinated drinks, and examine whether excessive caffeine ingestion can result in adverse health effects at an early age. 139 male and female Qatar University students were randomly selected to fill out a food frequency questionnaire (NHANES, 2012). Basic health parameters (i.e., BMI, % body fat, resting systolic and diastolic blood pressure and heart rate) were collected. Results showed that both males and females consumed on average 2.26 (±2.33) cups of caffeinated drinks per day. Moreover, having 4 or more cups of caffeinated drinks per day was associated with a significant increase in systolic and diastolic blood pressure as compared to having 0 to 3 cups per day. Recommendations are made to minimize such physiological effects.

12.40-12.50. Effects of Fasted vs. Fed Aerobic Exercise on Fat Oxidation and Fat loss in Adults: A Systematic review

DHOHA I. AL-HARAMI1*, KHOULOUD MTIBAA1, BRYNA C.R. CHRISMAS1

1Sport Science Program, Qatar University
*da1402865@student.qu.edu.qa

Aerobic exercise is a commonly prescribed to decrease mortality and increase adipose tissue loss in obese individuals. The aim of this study is to examine the effects of performing aerobic exercise in a fed and fasted state on adipose tissue loss, fat oxidation and respiratory exchange ratio (RER). Scientific articles were collected from the E-resource databases of Qatar University; PubMed, SPORTDiscus, and Google scholar. Articles comparing the impact of fed and fasted aerobic exercise (duration ≥ 30 min) at an intensity of 50-80% of VO2 max were accepted. Following the PRISMA guidelines; 9 studies met the inclusion criteria of the systematic review. Results showed that fasted aerobic exercise increased fat oxidation and RER, but only during exercise. However, there was no difference in adipose tissue loss or energy expenditure between fed and fasted aerobic exercise. Aerobic exercise can be performed in the fed or fasted state to promote health benefits, and the preference of the individual should be considered.

12.50-13.00. Effects of exercise on youth with autism spectrum disorder

FATEMA FOULADI1*, MAHFOUD AMARA1, MAHA SELLAMI1

1Sport Science Program, Qatar University
*ff1407284@student.qu.edu.qa

Autism spectrum disorder (ASD) is a neurodevelopmental disorder which is considered as one of the most prevalent developmental mental disability across the world. Autistic individuals typically have some difficulties in social communication, sensory sensitivities, stereotyped, and restricted behaviors. An exercise workout is defined as any physical activity which maintains or increases bodily fitness and overall well-being. Some physical activities have significant roles in improving social interaction and behaviors in autistic individuals. The aim of this research is to study and review the literature of influences of exercises on youths with autism. The results have shown that there are considerable effects of endurance training (aerobic exercise) on behavior and social communication in this population. However, these improvements have been less marked in resistance training (anaerobic exercises).
targeting elderly people in Qatar

DANA AL-SHAMLAN¹*, MAHFOUD AMARA¹,
WADIH ISHAC¹

¹Sport Science Program, Qatar University
*da1203001@student.qu.edu.qa

In the past, sport has always been considered essential for the development of young people. However, the potential for participation in sports to impact positive growth and development across the lifespan is recognized. As a result, there is greater recommendation people, both in early development phase, middle, and senior adulthoods to engage in sports. In Qatar, recent years have witnessed increased efforts to explore the frameworks of youth development for sports as an avenue for positive development among older members of the community. In many places around the world, the rates of participation of the elderly persons in sports, recreational and therapeutic sports activities have been on an upward spiral. The trend follows the contemporary demographic changes that have left some countries, especially in the western world with booming populations of elderly people. As a result, there is a variety of senior spots programs, including swimming, yoga, table tennis, Zumba, basketball, yoga, and walking that are recommended to enable them to attain greater physical fitness levels for better quality of life.

13.10-13.20. The Qatar policies among schools

LATIFA AL-MULLA¹*, MAHFOUD AMARA¹, WADIH ISHAC¹

¹Sport Science Program, Qatar University
*la1206156@student.qu.edu.qa

Looking at literature on policy formulations in Qatari schools with regards to obesity, it is evident that despite new educational reforms, PE classes are minimum and non-existent in some learning institutions. Contemporary studies on the prevalence of obesity show that the level of PE was low, and schools did not achieve the amount World Health Organization (WHO) endorsed in 2007. For that reason, a qualitative study was conducted with 10 PE teachers from 10 public schools I choose only 2 PE teachers. In addition, campus schools (i.e. private schools' own website) were used to get information on PE with regards to these schools. The goal of the research is to understand the prevalence of obesity and if there are any policies in place to address this issue and to tackle the lack of physical activity in Qatari schools.