

SAAP Bulletin

The newsletter of the South Asian Association of Physiologists

April 2020 | Volume 3, Issue 2 | ISSN: 2714-1756



Nobel Prize winning German bacteriologist and physiologist Emil Adolf von Behring, right, uses a syringe to inject a quinea via held by lab assistant. circa 1890

The very first Nobel Prize in Physiology and Medicine (1901) was awarded to Emil von Behring for his life-saving work developing a cure for diphtheria.

Diphtheria ‘antitoxin’ was injected to sick patients with antibodies taken from animals who had recovered from the disease.

This antitoxin wasn’t a vaccine, but the earliest example of ‘convalescent plasma’ that’s being explored as a potential treatment for COVID-19

Inside this issue

	Page
Editorial Board	2
From Editor’s Desk	2
News and Events from Physiological societies of SAAP countries	3
Featured article: The Physiological classification of adult learners & our responsibility by Dr Ahmed Badar	10
Letters to the Editor	14
Upcoming events	14

Published by:

South Asian Association of Physiologists: No.112, Model Farm Road; Colombo-08, Sri Lanka

Website: <https://saapphysiologists.webs.com/> E mail: physiology.ac@gmail.com



Editorial Board of the South Asian Association of Physiologists (SAAP)

2018-2020

Editor-in-Chief

Professor Piyusha Atapattu
Sri Lanka
piyushaatapattu@yahoo.com

Members

Bangladesh

Dr. Shams Ruhani Islam
shams.ruhani@yahoo.com
Dr. Kamol Chandra Das
kamolchandradas@yahoo.com

India

Professor Krishana Ray
krishna.roy@rediffmail.com
Professor NK Chakraborty
ncphysiolcu@gmail.com

Nepal

Dr. Narayan Mahotra
narayanmahotra@gmail.com
Professor Rita Khadka
rita.khadka@gmail.com

Pakistan

Dr. Sadaf Mumtaz
sadaf_mumtaz@yahoo.com
Dr. Arslan Ahmed Uqaili
arslanuqaili@gmail.com

Sri Lanka

Professor Niranga Devanarayana

Invited nominees from Bhutan

Dr. Karma Tenzin
Dr. Phurpa

From Editor's Desk



Professor Piyusha Atapattu

The release of the issue of the SAAP Bulletin for the year 2020 is in the midst of a global pandemic caused by COVID-19 or SARS-CoV-2.

It is a rapidly evolving pandemic affecting 209 countries and over 1.3 million patients and causing nearly 75000 deaths worldwide. At present the world is facing an unexpected war-like situation, with normal life coming to a standstill, with many countries in lockdown or implementing multiple restrictions and facing severe economic hardships.

South Asian region still appears to be relatively spared, which may be due to many reasons including inadequate COVID-19 testing, not detecting many affected persons.

Physiologists in the region can contribute in multiple ways to the battle against the virus: eg. assisting in diagnosis and management by development of rapid COVID-19 and antibody tests, conducting COVID-related research encompassing etiology, pathophysiology, vaccine development, clinical trials, contributing to management in clinical capacity or technical expertise etc.

Other aspects include providing leadership in guideline development, consultative services or public education.

As many universities worldwide are closed, with uncertainty on the possible time of reopening delivery of online education to maintain the continuity of university education is another important responsibility for physiologists.

We hope that the physiologists of the SAAP region furthermore act as responsible role models, in containing the SARS-CoV-2 pandemic.

Professor Piyusha Atapattu
Department of Physiology, Faculty of Medicine
University of Colombo, Sri Lanka
E-mail: piyushaa@physiol.cmb.ac.lk

News and Events of the Physiological Societies of SAAP Countries

Bangladesh Society of Physiologists

Since its founding in 2006, BSP has been devoted to fostering Physiology education, research and quality impacting the full spectrum of medical Physiology in Bangladesh. About 400 active members of this society are committed to work continually for the welfare of society.

Besides hosting conferences at two years interval, society conducts general meeting, scientific session, workshop, discussion meeting and continuing medical education (CME) as well. BSP is publishing a peer-reviewed, open-access journal biannually since its establishment. BSP is closely working with South Asian Association of Physiologists and International Union of Physiological Sciences (IUPS).

The 6th periodic scientific seminar was organized by BSP at Bangladesh Institute of Child Health (BICH) on 19th Oct' 2019



Officials and members of BSP executive committee and few legendary Physiologists participating in the 6th scientific seminar

In this session chaired by Prof. Rokeya Begum President of BSP, “Prof Nayeema Akhter Memorial” award was handed to Dr. Ismoth Ara Jerin and Dr. Syeda Fadia Tasnim for academic excellence.



Young members of BSP at a poster presentation



Awards ceremony

In addition five selected cutting edge research was presented in oral and poster session. The brilliant presentation of the young researchers stimulated enthusiastic discussion among the participants. President of BSP Prof. Rokeya Begum, General Secretary Prof. Nilufar Rahman and Treasurer Prof. Nilufa Akhter’s outstanding contribution made this program successful.

Dr. Shams Ruhani Islam
Lecturer (Physiology), Shaheed Suhrawardy Medical College, Dhaka, Bangladesh.



Physiological Society of India



University College of Science and Technology, University of Calcutta, Kolkata, India (HQ PSI)

The Physiological Society of India (PSI) is one of the pioneer organisations of physiologists and allied scientists. It was established by a group of eminent persons to promote the teaching and research of Physiology in the country.

Its headquarters is located in the University College of Science and Technology, University of Calcutta, Kolkata, India. PSI is a registered society under ACT XXI of 1860 and affiliated to Indian National Science Academy (INSA), New Delhi. The members of the society are from the different corners of the country.

The society publishes a quarterly journal, Indian Journal of Physiology and Allied Sciences with ISSN Number regularly since 1946 and books for students. To honour eminent scientists in India and abroad, a number of orations are held in the name of founders of PSI.

The office bearers of PSI are elected every 3 years through proper election procedures.

For the encouragement of the young researchers and students PSI has introduced young scientist awards and prizes. The society organises Annual Conferences in different parts of the country.

The society is adhered to the International Union of Physiological Sciences (IUPS). The society is also a member society of Federation of Asian and Oceanian Physiological Sciences (FAOPS), Federation of Indian Physiological Societies (FIPS) and South Asian Association of Physiologists (SAAP).

The society organised its Platinum Jubilee Celebration in 2009.

The society held its XXXI Annual Conference (PHYSICON 2019) at Bankura Christian College, Bankura, West Bengal during 15th to 17th November, 2019 wherein about 350 delegates from the country and abroad participated. The focal theme was “Recent Trends in Physiology and Healthcare Research for Salubrious Society”.

PSI organised seminars, symposia, plenary lectures, invited lectures, poster presentation, along with the awards ceremony to honour the distinguished scientists and research scholars.



Inaugural session of PHYSICON 2019

Recently the Office-bearers and Executive Committee members of the society have been elected for the session 2019 – 2022.

This year XXXII Annual Conference of the society along with VII Biennial Conference of South Asian Association of Physiologists (SAAP) will be organized in Jamia Hamdard University, New Delhi during 3rd – 5th December 2020.

**[Website: physiologicalsofndia.org.in]
(Estd. 1934)**

Prof Amar K Chandra
Professor
Department of Physiology, University of Calcutta
India

Estd.-1934

SAAP - PSI - 2020

7th Biennial Conference of the
South Asian Association of Physiologists
(SAAP – VII)

32nd Annual Conference of the
Physiological Society of India (PSI)

December 2020
3rd – 5th

Organized by
Department of Physiology
Hamdard Institute of Medical Sciences & Research

Venue:
Hamdard Convention Centre
Jamia Hamdard

Pre-Conference Workshop on 02-12-2020

- Medical Education - IUPS Initiative
- Recent Advances in Physiological Techniques

For More Details Please Contact:

Dr. M. Iqbal Alam Head, Dept. of Physiology +91 9953971178	Dr. Shikha Gautam Dept. of Physiology +91 9810557315	Dr. Salamah Imteyaz Dept. of Physiology +91 8447248242
Muneeb Qadir Dept. of Physiology +91 7006582738	Ms. Huma Dept. of Physiology +91 7065898484	Ms. Sabeena Dept. of Physiology +91 8882253454

Address: Hamdard Institute of Medical Sciences & Research, Jamia Hamdard, Hamdard Nagar, New Delhi- 110062.
Email: psi.saap2020@gmail.com | Contact: 011 29901146

ALL PAKISTAN INTER-MEDICAL COLLEGE PHYSIOLOGY QUIZ IMCPQ 2020

All Pakistan Inter-Medical Colleges Physiology quiz (IMCPQ) was held for the first time in Pakistan on 20th Feb, 2020. The global pioneer of international undergraduate Physiology quiz, Prof. Cheng Hwee Ming from University of Malaya, Malaysia, conducted the quiz in University College of Medicine and Dentistry (UCMD), University of Lahore (UOL), Lahore, Pakistan on request of Prof. Samina Malik.



Prof. Cheng Hwee Ming and Prof. Samina Malik

The quiz was organized by committee members from the Department of Physiology (including Associate Prof. Dr. Qasim Janjua, Assistant Professors Dr. Maimoona Nasreen, Dr. Sara Mukhtar, Dr. Saman Ansari, Dr. Shamaila Saleem, Senior Demonstrators Dr. Qurat ul Ain Leghari, Dr. Zobia Hafiz, Demonstrators Dr. Sana, Dr. Ayesha Ch, Dr. Ayesha Riaz, Dr. Ahmed, Dr. Moiz, Dr. Nooria, Dr. Anum, Dr. Fouqia, Dr. Misbah, and Lab Managers Haji Khalid, Dilshad sb, Ali Raza, M. Ali, Hafiz Naveed, Maratab Ali and Badar) under the dynamic leadership of Prof. Samina Malik, with the soulful involvement of the Chair of the event Dr. Mahwish Arooj, current Vice President from Pakistan for SAAP, Vice Principal and Director Medical Education, UCM along with the kind support of

Principal Prof. Farrukh Iqbal UCM and Pro-Rector Health Sciences Prof. Shahid Malik, UOL.

The organizing secretary received endorsements for this academic activity from PPS, SAAP, International Union of Physiological Sciences (IUPS), FAOPS and International Federation of Medical Students' Association (IFMSA). All medical colleges and universities of Pakistan were invited to participate. For qualifying round unbiased MCQs pool was received by seeking contribution from 5 South-Asian countries, involving Prof. Rita Khadka from Nepal (Ex-President SAAP), Prof. Savithri W. Wimalasekera from Sri Lanka (Current Gen. Sec. SAAP), Prof. Amar K. Chandra from India (Ex-Gen. Sec. SAAP), Prof. Fatima Khanum from Bangladesh and Assistant Prof. Karma Tenzin from Bhutan.

Forty four teams (each consisting of 3 undergraduate students) from 26 Medical Colleges of Pakistan registered for the IMSPQ 2020, from limelight cities of Punjab to far-off Makran Medical College, Turbat and Khyber Pakhtunkhwa province represented by Women Medical and Dental College, Abbottabad.



All participants gathered for the group photo

Prof. Samina Malik made the inaugural address, and Dr. Mahwish Uzair, welcomed all participants. Prof. Cheng Hwee Ming congratulated the participants on the impressive response of undergraduate medical community.

The event kicked-off with the qualifying round through which, top scoring 29 teams were selected for the next round. This round consisted of written test of 30 MCQs contributed by 5 South-Asian

countries, with negative marking. In the next rounds, 29 teams were divided into 5 groups through lottery method. In the semi-final round, top nine teams qualified and responded to challenging questions by Prof. Cheng Hwee Ming. Three teams out of nine semi-finalist teams were promoted to final round of IMCPQ'20. In this final (buzzer) round, a correct answer increased the score by two and an incorrect one deducted one mark out of the total score of that team.



Teams waiting for the results of the qualifying round

The team from Nawaz Sharif Medical College, Gujarat were the winners of the IMCPQ 2020 receiving Rs.50,000 and Prof. M. H. Qazi trophy.



1st Prize winners: Nawaz Sharif Medical College,

The runners up team from Nishtar Medical University, Multan won the cash prize worth Rs.30,000 and a trophy and the second runners-up team, CMH Lahore Medical College won the cash prize worth Rs.20,000 and a trophy.



2nd Prize winners: Nishtar Medical University, Multan



3rd Prize winners: CMH Medical college, Lahore

In his concluding address, Prof. Shahid Malik, Pro-rector congratulated the winning teams and commended all participants and organizers. In the end, shields were distributed to organizers and honourable guests and certificates were distributed to semi-finalists, quarter-finalists and participants.

This quiz brought forth a unique blend of ingenious, stimulating academic quiz rounds, cultural diversity and a social gathering. Students took this event as an opportunity to meet the legendary quiz master Prof. Cheng Hwee Ming. The day ended with vote of thanks by Prof. Farrukh Iqbal, Principal University College of Medicine.

Prof. Samina Malik
Organizing Secretary IMCPQ'20 and Pakistan
Physiological Society / PPS 16 & South Asian Association
of Physiologists / SAAP VI Pakistan

First International Photography & Arts Festival (FIPAF)

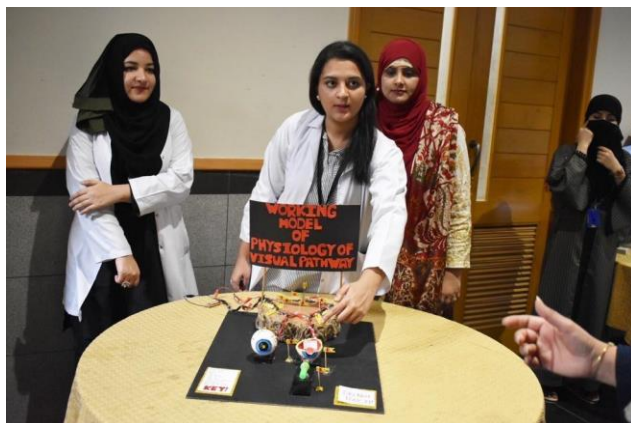
FIPAF with focus on Physiology endorsed by International Union of Physiological Sciences (IUPS), South Asian Association of Physiologists (SAAP) & Pakistan Physiological Society (PPS) was successfully conducted on 25th March, 2019.

FIPAF is a unique event of its kind & was hosted by the UCMD Photography & Arts Society-UPAS. Furthermore. FIPAF certification contained CME credit points.

Highlights from the FIPAF are given below:



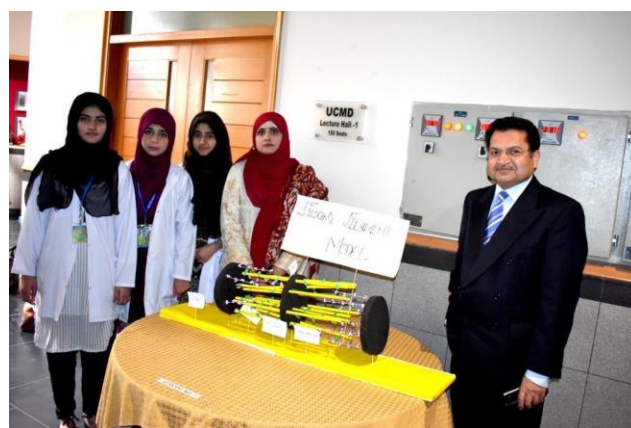
FIPAF with focus on Physiology received photographs from national and international students based on comparison of gross normal vs abnormal clinical findings



2nd Year MBBS student Fatima Khalid explaining her working model of Physiology of optic pathway



4th Year MBBS students presenting their working model of Physiology of micturition reflex



MBBS Students explaining their working model of Physiology of sliding filament model.



Amna Akram & Aqsa Akram, MBBS students explaining their working model of Physiology of gustatory pathways

Physiological Society of Sri Lanka

The new council of the Physiological Society of Sri Lanka (PSSL) led by Professor Niranga Devanarayana, Professor of Physiology at the Faculty of Medicine, University of Kelaniya, conducted two monthly council meetings in the months of January and February.

The Council of the PSSL is as follows:

President - Prof. Niranga Devanarayana
Vice President - Prof. Piyusha Atapattu
Secretary - Dr. Nayomi Ranathunga
Assistant Secretary - Dr. Tania Warnakulasuriya
Treasurer - Dr. Chandana Hewage
Editor - Dr. Lakmali Amarasiri

Committee members

Prof. Vajira Weerasinghe
Prof. K. Sivapalan
Prof. Savithri Wimalasekera
Prof. Deepthi De Silva
Prof. Sudharshani Wasalathanthri
Prof. Mangala Gunatilake
Dr. Amaranath Karunanayake
Dr. Nilanka Wickramasinghe
Dr. Anoja S. Ariyasinghe
Dr. Padmini Dahanayake
Dr. Indu Nanayakkara
Prof. Dinithi Fernando
Prof. Sharaine Fernando
Dr. Himansu Waidyasekera
Dr. Dulani Kottahachchi
Dr. Sujanthi Wickramage
Dr. Nalinda de Silva

Following activities were planned for year 2020

Regional Meeting: This was planned for March 2020 but had to be postponed due to SARS-CoV-2 pandemic

7th Inter-Medical Faculty Physiology Quiz for Professor Carlo Fonseka Challenge Trophy: currently scheduled for June 2020 at the Faculty of Medicine, University of Kelaniya

Annual Scientific Sessions of the PSSL: currently scheduled for November 2020 at the Faculty of Medicine, University of Kelaniya

Orations:

Currently the PSSL has 3 established orations in the names of three former giants in Physiology in Sri Lanka.

A C E Koch Memorial Oration
KN Senevirathne Memorial oration
Valantine Basnayake oration

It was decided to introduce another oration in the name of Professor Carlo Fonseka, whose recent demise has left a great void in the arena of physiology in Sri Lanka.



Prof KN Senevirathne



Prof A C E Koch



Prof Valantine



Prof Carlo Fonseka

However, the activities planned for the year may not be able to be held as scheduled due to the SARS-CoV-2 pandemic.

Prof Piyusha Atapattu
Professor in Physiology
Faculty of Medicine
University of Colombo

Featured Article



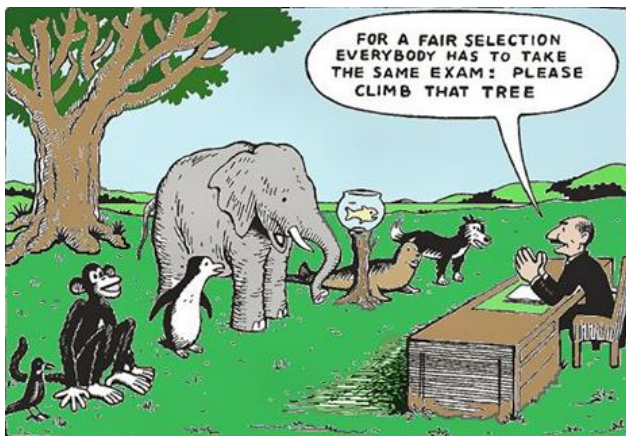
Dr Ahmed Badar

The Physiological classification of adult learners & our responsibility

"Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid" Albert Einstein¹

Barbra Prashnig defined learning styles as *"The way human beings prefer to concentrate on, store and remember new and/or difficult information"*.²The concept of different learning styles is not new, however despite passage of time it remains controversial. There are educationists who fully believe in them and even practice so called "adaptive teaching methods" to benefit all their students. On the other end are educationists who do not believe in different styles of learning. They too have studies that reinforce the concept that learning style is a modifiable "learned" skill or habit.

The argument *"All learners have uniform learning styles"* is simple and easier to believe in. On the other side the case of *"Learning styles are different in different learners"* needs in depth study before believing in it.



Recalling my childhood, I remember names and faces of most of my teachers in the primary school. I do not however remember what subject they taught.

Surprisingly I remember only one set of classes by Mr. Sharif, my drawing teacher in very junior classes. He taught us how to maintain proportion of the objects while drawing from a real-life scene. For that he had constructed a scene with different objects in his classroom. It had a clay flowerpot, painted red. The pot had a single plant with just two flowers, a pink and a blue, with four petals each. The stem of the plant was bent to the right and had six leaves of different sizes and shapes. The flowerpot was on a wooden table, painted mahogany, put on an angle with only three legs visible. The table had two drawers; one half open with a teacher's cane (norm of good old days) protruding about 4 inches out of it towards the left of table. The drawing class continued for many weeks (*I do not have time memory of that age*), however the scene remained intact, until all of us completed the drawing in multiple tries and perfected the concept of proportion of objects in a scene to be drawn.

Thirty years later while attending a pedagogy workshop on teaching skills, I realized that Mr. Sharif created the scene with a lot of effort, and the leaves were different size and shapes as they were taken from different plants. I am in touch with three of my class fellows who attended drawing classes with me, the first an army man, the second an engineer and the third a car show room manager. Believe me, none of them remembers the scene, what to say of the detail of it.

Sharing a couple of experiences from my days at the college of medicine, where I used to live in the boarding. I had a class fellow who was never seen studying. He would come to selected friends late in the night on the eve of every quiz, exam or viva. Then he used to make a request to "discuss the course". He used to ask questions and then listen to the answers very quietly. On the following day he would write the exam and always get through, as a rule, with marks better than his benefactors. We used to call him "parasite". We used to envy listening skills and memory of this parasite.

Another friend of ours used to hide in a corner of his room in the last few weeks before the final exam, making a partition with his bed to make him disconnected from the roommates. He would stop talking to us and came out only for the washroom or quick lunch or dinner. He used to scan books from title to title and make extensive notes in those few weeks and again pass comfortably. The rest of the year his behavior and social life was perfectly normal with no studies at all. We used to call his phase of hiding "hibernation". Then there were a few who took notes in the lectures at an astounding speed, then convert them to "neat & clean" versions. Some of them traded them with friends too. Each one of them had many girls surrounding them after every lecture and booking their copy of notes.

One of my teachers in the medical college used to bring plastic transparencies hand-written by his daughter. He would succeed in putting transparency in the correct direction always in the 4th attempt. Then often he could not read the handwriting. I do not remember a single word or even the topic that he taught, however I learnt accurately from his mistake how to put transparency on an overhead projector and importance of reading the teaching material before going to class.

Years down the lane I realized that my recall of the details of the drawing teacher's scene and the transparency placements of medical college teacher, the listening skills of the "parasite", the "hibernation" of our friend and the "notes taking" guys all depict different learning styles.

Thelen (1954) is credited for being the first to mention the broad idea of learning styles. He wrote *"The most significant quality of a good teacher is that he is able to meet his own needs through playing the roles required to make activities educative for students. Learning by students is complicated by the fact that different kinds of learning require different roles and that learning experience is complex, involving thoughts, feelings, actions, emotions and desires."*³

The idea of individualized learning styles started appearing regularly in discussions in the 1970s when David A. Kolb presented his learning styles model

based on the "Experiential Learning Theory".^{4,5} He updated his theory in the 2014 edition of his famous book *Experiential Learning: Experience as the source of learning and development*⁶.

This model suggests that ideal learning is acquired by engaging four tactics. Out of these four, two are experience grasping approaches (Concrete Experience and Abstract Conceptualization) and two experience transforming (Reflective observation and Active Experimentation) approaches. Initially all individuals try to use all the four approaches, however they get expert in only one experience grasping and one experience transforming approach. This generates the following four individualized learning styles:⁶

1. **Converger:** Making use of the abstract conceptualization and active experimentation, these individuals can convert ideas to practical applications and use deductive reasoning to solve problems
2. **Diverger:** The use of concrete experience and reflective observation makes these individuals imaginative. They can come up with new ideas and look at problems from different perspectives
3. **Assimilator:** They use abstract conceptualization and reflective observation to create theoretical models by means of inductive reasoning
4. **Accommodator:** Their tools are concrete experience and active experimentation. They are the ones who engage with the things to experiment instead of just reading and studying about things

Kolb's model formed the basis for "Learning Style Inventory" that was used for many years to come as a tool to determine an individual's learning style. However later the interest shifted to other simpler models like the VARK model of Fleming and Mills (1992) that classified the learning styles into the following 4 categories:⁷

1. Visual learners: Learn best by seeing. Charts, diagrams, illustrations, handouts, and videos are all helpful for them.
2. Aural/Auditory learners: Learn best by hearing. They learn a lot from lectures and are good at remembering things that they listen. They are very often seen trying to record lectures.
3. Reading/writing learners: They prefer reading and writing. They read books and make their own notes.
4. Kinesthetic (tactile) learners: Hands on experience is what they look for. Touching and doing is how they learn.

I have a small task for the worthy readers before reading further. Using my short autobiography above, please try to assign a learning style to me and to my “parasite”, “hibernating” and the “note taking” friends mentioned.

The things, however, might be complex. The educational experts believe that a learner with Read/Write learning style might learn to use Visual Strategies for help in notes taking (writing). Likewise, a person with Visual preference may get help of Kinesthetic methods to learn or express.

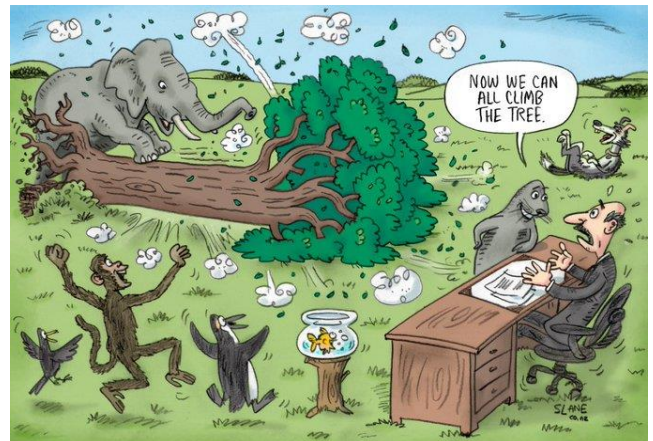
The most recent systematic reviews show that for those under 18 years of age there were 36.2% with a single preference and 63.8% with some form of multimodality. For those aged 55+ there were 43.2% with a single preference and 56.8% who had multimodal preferences. Likewise the proportion with a Read/Write (only) preference increases with age, while that of Kinesthetic (only) decreases.⁸

There has been increased attention in recent years to mental health, quality of life, stress and academic performance among university students, and the possible influence of learning styles. Brief reliable questionnaires are available online that could help determine learning styles of individuals or of groups. Small videos about VARK, a free questionnaire for individuals and a paid questionnaire for groups are available from <https://vark-learn.com/>⁹

As there is still no empirical evidence about learning styles that is why most of the current curricula are focused on aligning teaching to the objectives rather than learning styles.¹⁰ Schools, colleges and universities still emphasize upon attending the orthodox lectures, “reading” from books and “writing” the exams as an evidence of learning.

The concepts of student-centered teaching and ‘learning needs of individuals’ are not new. We all attend workshops and seminars highlighting this. Educationists keep on telling the teachers that “Individuals differ in regard to what mode of instruction or study is most effective to them”.¹¹ Theoretically synchronization of the instructional strategies with individual learning styles would enhance the learning outcome.¹¹

However practically there are many impediments in tailoring the instructional strategies for crowded classrooms and big groups of students. In addition the teachers are supposed to comply with time bound objectives of specific lectures, modules and curricula.



There is a need to first recognize that a given set of students would have subsets belonging to a great variety of learning preferences. This would then lead to efforts in developing “adaptive” and “blended” teaching and assessment materials where we would facilitate the students not just in “Read” & “Write” but also in “Learn” & “Reproduce”.

Devoted and intelligent teachers now a day make their presentations keeping in mind the concept of learning styles. Their presentations is a beautiful blend of the following (and even more):

- a) A few compact summary slides containing images, diagrams, flow charts and mind maps for the visual learners
- b) Excellent communication skills for lecturing about the key concepts along with a short movie, sound track (like heart sounds) or a rhyme for the Aural/Auditory learners.
- c) Enough reading material or references for reading of the Read/write learners.
- d) A small task like drawing a mind map, labelling a figure, solving a puzzle or at least a matching quiz for the Kinesthetic learners.

Physiology is mother of all biological sciences especially the medical science. As a witness to the gradual change from the chalk/blackboard to the flipped and virtual classrooms, I feel that the change is now gradually starting. I just wish and pray that Physiologists become pioneers of this change.

References

1. Kelly M. The rhythm of life: Living every day with passion and purpose. Simon and Schuster; 2004 Oct 26.
2. Prashnig B. Learning styles vs. multiple intelligences (MI). Teaching Expertise. 2005;9:8-9.
3. Thelen HA. (1954). Dynamics of Groups at Work. Chicago, IL: Univeristy of Chicago Press.
4. KolbDA. Learning Style Inventory Technical Manual. Boston, MA: Mc Bert&Co., 1976.
5. Kolb DA, Rubin IM, McIntyre JM. Organizational Psychology: An Experiential Approach, (3rd ed.). Englewood Cliffs, NJ, 1977.

6. Kolb DA. Experiential learning: Experience as the source of learning and development. FT press; 2014 Dec 17.
7. Fleming ND, Mills C. Not another inventory, rather a catalyst for reflection. To improve the academy. 1992 Jun;11(1):137-55.
8. Aslaksen K, Lorås H. The modality-specific learning style hypothesis: A mini-review. Frontiers in psychology. 2018 Aug 21;9:1538.
9. The VARK Questionnaire. Available from <https://vark-learn.com/the-vark-questionnaire/> [Last Accessed on Feb 28, 2020]
10. Riener C, Willingham D. The myth of learning styles. Change: The magazine of higher learning. 2010 Aug 30;42(5):32-5.
11. Pashler H, McDaniel M, Rohrer D, Bjork R. Learning styles: Concepts and evidence. Psychological science in the public interest. 2008 Dec;9(3):105-19.

Dr Ahmed Badar

Department of Physiology, College of Medicine
Imam Abdulrahman Bin Faisal University
Dammam. Saudi Arabia

Email: absheikh@iau.edu.sa

Letters to the Editor

Asymptomatic Transmission of Contagious Covid - 19

Dear Dr Piyusha,

The Covid - 19 being a cousin of SARS and MERS has locked down the globe all over. Who thought of such an amazing and phenomenal effect to bring the curves of economy and associated global warming to give the Mother Earth a chance to breathe fresh air with oxygen being bestowed by the Cyanobacteria billions of years ago.

Of note is the fact that Covid-19 is highly contagious because of its nature of asymptomatic transmission in the form of droplet as well as aerosol! What is needed is to trace, test, quarantine and treat according to various stages from population to OPD to hospital to ICU. Differential scores of infected, recovered and mortality would be expected depending upon the level of health delivery system and the degree of the health and educational structure of a country. Antibody response of Covid - 19 can be tested in a drop of blood and the virus antigen by PCR if its primer is genuinely available. The forehead temperature, CBC and reliable antibody titer with signs and symptoms could be used to screening the population.

Expert commentary series on Corona Pandemics by Dr John Campbell from UK is available on YouTube for your perusal and update. JC reviews the data on Covid - 19 from the top journals e.g. NEJM and Lancet inter alia. It is a treat hearing his analysis and inferences of the studies based on observations times' evidence. Let there be light.

Cordially,

HR Ahmad

The author is a professor of physiology at SIUT and AKU, Karachi Pakistan.

Upcoming Events



SAAP - PSI - 2020
7th Biennial Conference of the South Asian Association of Physiologists (SAAP - VII)
32nd Annual Conference of the Physiological Society of India (PSI)
December 2020
3rd - 5th

Organized by
Department of Physiology
Hamdard Institute of Medical Sciences & Research

Venue:
Hamdard Convention Centre
Jamia Hamdard

Pre-Conference Workshop on 02-12-2020

- Medical Education - IUPS Initiative
- Recent Advances in Physiological Techniques

For More Details Please Contact:

Dr. M. Iqbal Alam Head, Dept. of Physiology +91 9953971178	Dr. Shikha Gautam Dept. of Physiology +91 9810557315	Dr. Salamah Imteyaz Dept. of Physiology +91 8447248242
Muneeb Qadir Dept. of Physiology +91 7008382738	Ms. Huma Dept. of Physiology +91 7005594848	Ms. Sabeena Dept. of Physiology +91 8882351454

Address: Hamdard Institute of Medical Sciences & Research, Jamia Hamdard, Hamdard Nagar, New Delhi- 110062.
Email: psi.saap2020@gmail.com | Contact: 011 29901146



IUPS2021
Beijing, China

39th IUPS Congress
Marvels of Life - Integration and Translation
CNCC, Beijing, China, August 20-24, 2021

Warmest Invitation from
The Chinese Association for Physiological Sciences (CAPS)

Logos: IUPS, CAPS, ADS

Compiled by Professor Piyusha Atapattu
Editor-in Chief, SAAP Bulletin

