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Conference Abstract Book

18th EMS International Research Conference on Building Future: Data, Technology & Innovation for Economic Freedom & Prosperity, KSA

21-22 January 2026

Conference Collaborators

Experts in Management & Social Sciences Pesawar, Pakistan

18th EMS CONFERENCE ABSTRACT BOOK

Experts in Management & Social Sciences

FATA UNIVERSITY

ISLAMIA COLLEGE PESHAWAR

SUIT SARHAD UNIVERSITY

ECMPR
Voice for Right Liberty & Freedom

18TH EMS INTERNATIONAL RESEARCH CONFERENCE IN MAKKAH, SAUDI ARABIA

DATE AND PLACE
January 21-22, 2026, Makkah, Saudi Arabia

CONFERENCE COLLABARATING ORGANIZATIONS

Experts in Management & Social Sciences, Pakistan

Sarhad University of Science & IT Peshawar, Pakistan

Islamia College Peshawar

Fata University, Dara Adam Khel, FR, Kohat

CONFERENCE ORGANIZERS

Prof. Dr. Salim-ur-Rehman

Prof. Dr. Ahmad ur Rahman Saljoqi

Prof. Dr. Atiq-ur-Rehman

Prof. Dr. Wali Rahman

Assoc. Prof. Dr. Shahid Jan

Assoc. Prof. Dr. Fayaz Ali Shah

Prof. Dr. Muhammad Qasim

Prof. Dr. Amjad Ali

Assoc. Prof. Dr. Sajjad Ahmad Khan

Dr. Neelma Riaz

Asstt. Prof. Dr. Haji Rahman

FOREWORD

Experts in Management and Social Sciences, registered with Securities and Exchange Commission of Pakistan, isdelighted to issue Abstract Book of the ***18th EMS International Research Conference on Building Future: Data, Technology & Innovation for Economic Freedom & Prosperity, KSA, January 21-22, 2026.*** The Organizing Committee of the Conference is thankful to all those who participated in the conference and made the event successful.

The EMS Conferences have always been covering a wide range of subjects and that why the Conference has is generally divided into broader streams: *Social Sicences Stream*; *Engineering & Technology Sciences Stream*; and *Medical, Medicines, & Health Sciences Stream*. The Conference Proceedings Book contains only abstracts of the registered articles submitted for presentation in the conference. Complete Book can be accessed, when the conference concludes, from https://expertsms.org/ through surfing the conference window.

The Conference Organizing Committee expresses its deepest gratitude to those who helped the Committee to plan and organize this event. The Committee believes that the event must have inspired many individuals in academia to undertake new research initiatives and participate in such events in future.

Organizing and conducting an international research conference is not an easy task. It requires a lot of inputs and efforts to make such event a success. In its true essence, the event signifiesthe unflinching efforts of a number of researchers and scholarsin the field of research. The Committee recognizes and values contribution of everyone.

The Committee looks forward to the potentional researchers to participate in such academic events and hopes that such academid gathering and discussions during and after such events are helpful to both the old and new researchers in improving the quality of their future research evdeavours. It is also expected that each individual presentation would add to the knowledge of audience.

The Committee pays thanks to the its conference parteners especially Sarhad University of Science & IT Peshawar, Islamia College Peshawar for being. We are also thankful to the Vice Chancellors of Sarhad University an Islamia College, Dr. Alamgir, University of Peshawar, Dr. Sadaf Khan, Universiti Pendidikan Sultan Idris (UPSI), Malaysia, and Dr. Haji Rahman, Universiyt of Buner for giving their consent to Keynote Speakers in the conference. Besides, we are thankfull to other dignatories from around the world for agreeing to participate in the event and sharing their thoughts and ideas with the participants of the conference. Furthermore, the Committee also expresses its gratitude for all members of the Scientific Committees for their input in reviewing the abstracts and articles submitted for presentation in the conference.

At the end, the Committee once again greatly appreciates all those who directly and indirectly contributed in the organization of the conference. ***THANK YOU ALL***!

Organizing Committee
CEMS-18-2026

18th EMS International Research Conference on Building Future: Data, Technology & Innovation for Economic Freedom & Prosperity, KSA, Jan. 21, 2026

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About Experts in Management and Social Sciences Pvt. Ltd.

We are a group of experts working with and for youth in maximizing their academic and research potentials aiming at their social and economic well-being. We provide technical support to young graduates to become good researchers and entrepreneurs through a variety of interventions, like training, seminars, workshops, and conferences. We also assist PhD/MS students and researchers in acquisingnew skills and improving their skills in areas related to designing of research projects, data collection, data analysis and reporting.

Besides, we help organizations (in public, private and development sectors), through needed and relevant interventions to improving and sustaining their performance at three levels i.e., individual, group and organizational. We also facilitate the organizations in designing and implementing behavioral change initiatives.

Mission

Our mission is to empower young graduates with right skills, attitudes and tools, to work at their fullest potential aiming at enriching their professional skills to uplift theirs and their families' social, psychological and economic wellbeing.

Vision

Our vision is to become the leading and the most effective talent developer and enabler organization in Pakistan.

CoreValues

Our core values are:

- Creative thinking
- Happiness
- Psychological value
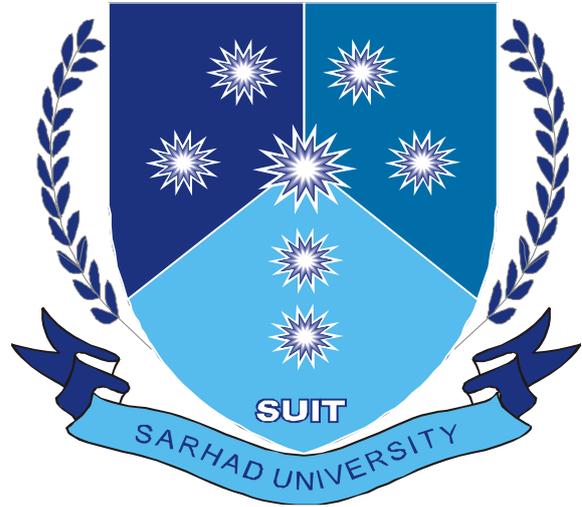- Diversity and inclusion
- Learning excellence

Our Slogan

Join our hands to empower youth for building a psychologically, economically and socially vibrant and progressive society.

Sarhad University of Science and Information Technology Peshawar

Sarhad University of Science & Information Technology (SUIT), Peshawar, is a renowned name in the educational circles of Pakistan and abroad. It was established in 2001 through an Ordinance of the Government of Khyber Pakhtunkhwa and is duly recognized by the Higher Education Commission. Since its inception, the University has made commendable achievements in disseminating quality education and, in a short span of time; it has become a leading institution of higher education in Pakistan. The University offers a wide range of programs from bachelor to doctoral level. These programs are executed through highly qualified and professionally groomed faculty holding PhD degrees from renowned institutions of Pakistan and abroad.

The University is dedicated to imparting high-quality education with emphasis on demand-oriented skill-development and training under excellent conditions of learning. Its educational programs are designed to enable the students and servicemen to Develop skills and competence in their respective areas of specialization. Obtain broad-based, cross-functional education with due emphasis on developing critical, analytical and logical thinking, and knowledge of societal matters. The education is cost-based, but affordable. The University is devoted to students' welfare and intends to provide all support and guidance in their pursuit of successful careers and jobs.

Islamia College Peshawar, Khyber Pakhtunkhwa, Pakistan

Islamia College Peshawar, the symbol of academic excellence is rich in history. Its building, which is the best embodiment of Muslim civilization in south Asia and its lush green lawns attract visitors from all over the country and abroad. It is not only the culminating point of the Aligarh Movement; it is in fact the beautiful combination of Aligarh and Deoband Schools of Thought. Being the breeding ground of the Pashtun intelligentsia, this great seat of learning is the place, where diamonds are skimmed since 1913. Moreover, Islamia College Peshawar was destined to become mother institution of the three universities and several colleges on its campus. The credit of this goes to Sir Sahibzada Abdul Qayyum, who is commonly called The Sir Sayyed of the Frontier and his sincere colleagues, who founded Islamia College Peshawar in 1913.

Islamia College Peshawar is the best example of endowments. According to the Board of Trustees, the College, which is spread over 300 acres of land, has 1089 Jaribs cultivable land in Harichand, Rai Killi and Tarnab, (District Charsadda). In addition to this there are 395 shops and flats in the Khyber Bazaar Peshawar and main bazaar Charsadda.

Quaid-e-Azam Muhammad Ali Jinnah visited this College in 1936, 1945 and 1948. Quaid-e-Azam who became lifelong honorary member of the Khyber Union ICP in 1936 made the College one of the heirs of his property in 1939. The Quaid Trust later on paid an amount of Rs.1, 08, 11, 600 /- in different installments to the College.

Experts Centre for Market ad Policy Research (ECMPR)

Experts Centre for Market ad Policy Research (ECMPR) is an independent policy think tank in Pakistan, the first one in Khyber Pakhtunkhwa. After the enactment of the 18th Amendment in the Constitution of Pakistan, the provincial governments in Pakistan have been given more autonomy, mandate, powers and resources. However, there hardly exists any systematic mechanism at provincial level to support the provincial governments with ind ependent analysis of their policies so that the quality of their policies be objectively assessed and improvement/changes suggested for a free, open and prosperous Pakistan.

Realizing the critical nature of the existing gap, Experts in Management and Social Sciences (Pvt.) Ltd., a group of experts working with all stakeholders to address their social and economic well-being through a variety of interventions, like research interventions, trainings, seminars, workshops, and conferences. The ECMPR is a nonprofit public policy organization based in Peshawar with a coordination office in Islamabad. In future, the ECMPOR will consider setting up regional offices in Lahore, Karachi, Quetta, Muzafarabad and Gilgit. However, most of the activities will be conducted online.

Vision, Mission and Values of the ECMPR

The ECMPR envisions public policy making process in the country based on evidence for a free, open and prosperous Pakistan.

Mission

The ECMPR is committed to work for the ideals of liberty, governments with limited interventions, rule of law, free markets and property rights by fostering high quality policy-relevant research, and disseminating the findings widely to decision-makers in the public and private sectors in Pakistan in general and in provinces in particular.

Values

Key values of the Centre will include: Freedom of thoughts, Creativity, Learning, Dialogue, Continuous improvement, Objective thinking, Collaboration

Organization's Slogan

Join our hands to empower the youth for a psychologically, economically, and socially vibrant and progressing society.

FATA University, Khyber Pakhtunkhwa, Pakistan

FATA University was established under FATA University Regulations in May 2013. Prof. Dr. Mohammad Tahir Shah (T.I.) was appointed as the first Vice Chancellor of the University. Soon after assuming charge, the Vice Chancellor started work on the preparation of the two PC-1s for obtaining funding for the smooth running of the affairs of the university. A PC-1 titled "Establishment of FATA University" was approved by the CDWP in April 2016 at a cost of Rs. 1.593 billion. In October 2016, initially the academic activities in the university were launched four years bachelor (BS) program in Management Sciences, Political Science, Sociology and Mathematics while three more disciplines such as Computer Science, Geology and English were started in September, 2017.The University is currently housed in a separate block of the Darra Adam Khel Degree College. However, the existing building and infrastructure does not suffice the research and academic requirements of the university. The construction of the new buildings and provision of research facilities require space to meet the necessary requirements. The university has hired a Consultant Firm for the Master Planning and Detailed Designing of the university future infrastructure development. The Technical Review Committee of the HEC has approved the Master Plan of FATA University. The Civil work has been divided into seven packages that include construction of different academic blocks, water system, boundary wall, etc.

Future Plan

The infrastructure of the FATA University and the Administrative and Academic requirements in more than six faculties as per FATA University Regulations 2013 will be completed in different phases. Under the approved PC-1 Scheme, the following activities will be accomplished during the next 5 years:

- ✓ Hiring of highly qualified faculty and staff
- ✓ Establishment of Infrastructure according to approved Master Plan.
- ✓ Sending of 20 faculty members on foreign Ph.D. scholarships
- ✓ Establishment of state-of-the-art labs in Computer Science & IT, Biotechnology, Electronics, Chemistry, Physics and Geology Disciplines
- ✓ Establishment of Post graduate (MPhil& PhD) programs
- ✓ Enhancing the Research capabilities of the faculty and students
- ✓ Affiliation of all the Colleges of Tribal Districts
- ✓ Establishment of Sub-campuses in other Tribal Districts
- ✓ Preparation and submission of 2nd Phase 5 years PC-1 to HEC & PCP during the 5th year of this project.

CONFERENCE KEYNOTE SPEAKERS

KEYNOTE SPEAKER I

Prof. Dr. Ahmad ur Rahman Saljoqi,
Vice Chancellor,
Islamia College Peshawar, Pakistan

Prof. Dr. Ahmad ur Rahman Saljoqi is a senior academic administrator and scholar currently serving as the Vice Chancellor of Islamia College University, Peshawar. He has extensive experience in higher education leadership, academic governance, and research management.

Dr. Saljoqi has held key academic and administrative positions in public sector universities of Khyber Pakhtunkhwa and has contributed to strengthening teaching quality, research culture, and institutional development. His academic background is in the biological and agricultural sciences, with a strong commitment to interdisciplinary research and capacity building in higher education.

As Vice Chancellor, he is actively engaged in promoting academic excellence, research collaboration, and community engagement, with a focus on aligning universities with national development priorities.

KEYNOTE SPEAKER II

Engr. Prof. Dr. Salim-ur-Rehman,
Vice Chancellor,
Sarhad University of Science & Information Technology Peshawar

Professor Dr. Salim-ur-Rehman, Vice Chancellor of Sarhad University of Science & Information Technology, gold medalist in Bachelor of Aeronautical Engineering, commissioned in the PAF in 1985, served National University of Science & Technology (NUST) for over six years and sought retirement as associate professor in 2001. He is one of the founding members of Sarhad University, VC SUIT since 2006. His areas of research include quality control & quality management, optimization, statistics, and stochastic.

KEYNOTE SPEAKER III

Prof. Dr. Alamgir,

Chairman, Department of Statistics, University of Peshawar

Title: Outlier-Resistant Feature Selection Using Improved Fisher Score for High-Dimensional Gene Expression Data

This study proposes a robust supervised feature selection method, termed Robust Fisher Score (R-Fish-Sn), for high-dimensional binary classification, particularly in gene expression data. R-Fish-Sn enhances the classical Fisher Score by using the median and Rousseeuw-Croux Sn statistic to reduce sensitivity to outliers and non-Gaussian noise. In the proposed method, a greedy search identifies an initial subset of informative genes, which is refined using R-Fish-Sn rankings and Least Absolute Shrinkage and Selection Operator (LASSO) to eliminate redundancy and promote simplicity. The method is evaluated on four public microarray datasets using Random Forest (RF), Support vector machine (SVM), and K-nearest neighbors (k-NN) classifiers, compared against six established techniques. Visual and quantitative analyses, based on both real data and simulations, show that R-Fish-Sn consistently delivers superior predictive performance, demonstrating its robustness and effectiveness. Simulation studies further reveal that the performance of the proposed method remains superior even with a larger contamination rate (30%).

KEYNOTE SPEAKER IV

Dr. Sadaf Khan,

Universiti Pendidikan Sultan Idris (UPSI), Malaysia

Dr. Sadaf Khan holds a PhD from Universiti Teknologi Malaysia. Her dissertation research work is the pioneering work in Pakistan. Her recent projects are on sustainable water related accounting disclosure practices. She has been awarded a fellowship from Universiti Teknologi Malaysia (UTM)and has been affiliated with the various faculty positions for 8 years in different national and international universities, including recent affiliation with Universiti Pendidikan Sultan Idris (UPSI) in Malaysia. She has renewed research contribution to her credit in national and international ranked journals EMD conference proceedings. She has been invited as a key note speaker in varied international platform. She is a member of SJDM society and serves as a regular judge in mentor mentee matching program/ in Philippine and USA. Currently she is affiliated with STAR NETWORK USA as an editor.

KEYNOTE SPEAKER V

Dr. Haji Rahman,
University of Buner, Khyber Pakhtunkhwa, Pakistan
Title: Sehat Sahulat Program: Boosting Timely Healthcare Access in Pakistan

Dr. H. Rahman is Ph.D. in Management Sciences (HRM) from Preston University, Islamabad, on HEC scholarships. He did his MS in Engineering Management from UET, Taxila. He is the author and co-author of several (40) international research papers. He worked as a senior teacher for more than nine years at the Ghulam Ishaq Khan Institute College (GIK College Topi), where he earned the best teacher awards. He taught as Assistant Professor at Preston University, Islamabad campus to undergraduate, graduate, and to post graduate students from September 2015 to September 2017. Preston University has awarded him the Punctuality and Efficiency Awards during all academic semesters. He remained a visiting faculty member at the IIUI, Islamabad, and the Federal Urdu University of Arts Sciences and Technology, Islamabad. He delivered different training sessions at Pakistan Manpower Institute (PMI) Islamabad and Pakistan Project Management Institute (PPMI) Islamabad. He joined the University of Buner (UoB) in September 2017 as Assistant Professor and worked as HoD for two years. He worked as the Director of QEC from December 22, 2017, till November 18, 2022, at the UoB (about five years). Dr. Rahman is now the Principal Investigator (PI) of an NRPU research project worth Rs. 9.113750 million. Currently he is working as the director ORIC at the University of Buner.

KEYNOTE SPEAKER VI

Hane Crevelari,
Director of Grants & Awards, Atlas Network, USA

Hane is Director of Grants & Awards at Atlas Network. A native Brazilian, Hane grew up in Vitória, Espírito Santo, but completed her education in the United States, where she currently resides. Hane has a bachelor's degree in economics and intern ational business from Utah State University, where she was a Koch Scholar and a Huntsman Scholar, and a M.A. in applied economics from George Mason University, where she was also an MA Fellow with the Mercatus Center.

EMS CORE TEAM

DR. WALI RAHMAN

Prof. Dr. Wali Rahman, Head, Department of Business Administration, Sarhad University of Science & IT, Peshawar, has his PhD (Human Resource Development) from NUML Islamabad. He has more than 25 years experience of serving in different public and private sectors/organizations. He is the founder and Editor-in-Chief of Sarhad Journal of Management Sciences and is reviewer of a number of national and international journals. He has published 50 plus research articles in national and international reputed journals. He has supervised 08 PhD scholars, 20 MS scholars. He has been organizer of 15 international conferences.

FAYAZ ALI SHAH, PhD (Management)

Dr. Fayaz Ali Shah, is working as an Associate Professor in the Department of Management Sciences, Islamia College Peshawar, which is one of the oldest institutes for higher education in the country. He has done his master in Human Resource Management form Kingston University, UK and PhD in Management from UniversitiTeknologi Malaysia. He has been editor of City University Research Journal and currently Editor of Journal of Business and Administrative Sciences and member of editorial boards on FJWC, SJMS and IMBR. He has more than 15 years' experience in teaching and research and has published one book and more than 60 research publications with 10 h-index in the field of organizational justice and law, human behaviour and management.

DR. SHAHID JAN KAKAKHEL

Dr. Shahid Jan Kakakhel is a Chairman and Associate Professor of Management at Islamia College University Peshawar. He received his MBA from Quaid-E-Azam University Islamabad and his Post Doctorate from Gatton college of Business and Economics, University of Kentucky, USA.During his seventeen-year career, he has served different Universities as a faculty member and as a research Committee, Academic council, BOS, ASRB, selection Board and Research Journal editorial member. He has supervised 21 PhD scholars, 60 MS scholars and published 90 research articles in the field of CSR, Social Entrepreneurship, HRM and Management.

DR. ATIQ UR REHMAN

Dr. Atiq ur Rehman is PhD in HRD. He has over 27 years' experience of working in academia and corporate world in Pakistan and Malaysia. He taught MS and PhD level courses in SZABIST and Air University Islamabad for about 8 years. He supervised several MS and one PhD dissertations. He has published nationally and internationally - including impact factor journals. His key areas of interest are: HRD, TVET, capacity mapping, performance management, communication and advocacy, gender assessment, value chain analysis, public sector project management, project M&E, impact evaluation, development of business plans, and start-ups management. He has been acting as Chief Editor of the IDD – an International Journal of Outcome Management (IOCOM), for the last five years. The journal is published on quarterly basis from Toronto, Canada. Besides, he has successfully completed more than 100 consultancy projects in Pakistan, Malaysia, Myanmar and Afghanistan.
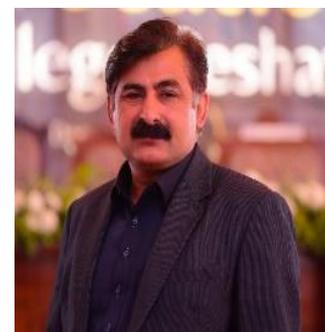
DR. AMJAD ALI

Dr. Amjad Ali, Associate Professor and is Chairman Department of Statistics, Islamia College Peshawar. He did his PhD from University Illionis, Urbana-Champaign, USA. His Research Interests are Data Analysis and Statistical Modeling. He Published numerous research papers in reputable journals. Dr. Amjad Ali is a renowned statistician and academician with a strong background in statistical research and education. He has made significant contributions to the field of statistics through his research and has supervised a number of M.Phil and Ph.D. students. His expertise in data analysis and statistical modeling has been recognized through various awards and publications.

DR. SAJJAD AHMAD KHAN,

Dr. Sajjad Ahmad Khan, Associate Professor, Department of Statistics, Islamia College Peshawar has his Ph.D. in Statistics from the University of Peshawar and has specialized in fields such as biostatistics, categorical data analysis, and regression analysis. Dr. Khan has published extensively in academic journals and has authored the book "Statistical Tests for the Analysis of Human Genetic Linkage". Dr. Khan has also organized several academic conferences, including EMS two conferences of the Islamic Countries Society of Statistical Sciences at Islamia College Peshawar and an international conference under the umbrella of the EMS International Research Conference.

Additionally, Dr. Khan conducted research in the Department of Human Genetics at the University of Pittsburgh, focusing on biostatistical methods for genetic data analysis.

Dr. Khan has held several key administrative positions, including: Member of Syndicate, Director Academics, and Chairman of the Department of Statistics at Abdul Wali Khan University Mardan.Director of Planning & Development, Director Asministration, Director Works and Chairman of theDepartment of Statistics at Islamia College Peshawar.

DR. NEELMA RIAZ

Dr. Neelma Riaz is an Assistant Professor at the National University of Sciences and Technology (NUST) and holds a PhD in Linguistics from Fatima Jinnah Women University. A committed scholar and pedagogue, she is deeply passionate about creating meaningful learning experiences through innovative, student-centered approaches.

Dr. Riaz is also a Master Practitioner of Neuro-Linguistic Programming (NLP) and Time Line Therapy, certified by the American Board of NLP and the Time Line Therapy Association (USA). She actively integrates these techniques into her teaching and training practices to foster motivation, clarity, and personal growth among learners.

Over the years, she has presented her research at numerous national and international conferences and has published in reputable academic journals. She has also organized, hosted, and chaired multiple international conferences. In her leadership roles, Dr. Riaz currently serves as the Director of Conferences at ECMPR (Experts in Conference Management and Policy Research) and as the Research Director at The Human Security Institute (THSI), a leading policy think tank. She is also an active member of EMS (Experts in Management and Social Sciences), contributing to its mission of academic excellence and collaborative research.

In addition, Dr. Riaz has been collaborating with the Regional English Language Office (RELO), U.S. Embassy, on initiatives aimed at promoting English language education and community development in Pakistan. In recognition of her contributions to education and leadership, she has been nominated for the prestigious International Visitor Leadership Program (IVLP) by the U.S. State Department and selected as the sole participant from Pakistan for a three-week Access Exchange Program. As part of this program, she will also attend the TESOL Convention 2026 in the United States.

Through her diverse roles in academia, leadership, and advocacy, Dr. Riaz remains deeply committed to curriculum development, digital innovation in education, and advancing the field of language education through research, public engagement, and scholarly initiatives.

CONFERENCE SCIENTIFIC COMMITTEES

\#	Name	Designation/Affiliation
Names of the Members of the Scientific Committees		

\#	Name	Designation/Affiliation
Accounting		
1.	Prof. Dr. Farzand Ali Jan	Chief Financial Officer, Peshawar Medical College
2.	Dr. Khurshid Iqbal	Associate Professor, BUTIM University, Baluchistan
3.	Dr. Muhammad Anees	Assistant Professor, Behriya University Islamabad
4.	Dr. Muhammad Adnan	Assistant Professor, AWKUM Mardan
5.	Dr. Zahid Ali	Assistant Professor, University of Malakand
6.	Dr. Mustafa Afeef	Assistant Professor Islamia College Peshawar
Economics		
1.	Prof. Dr. S. Ghaisul Haq	Dean, FMS, Sarhad University Peshawar
2.	Prof. Dr. Zalakat Khan	Department of Economics, University of Peshawar
3.	Prof. Dr. Muhammad Azam Khan	Professor, AWKUM Mardan
4.	Dr. Muhammad Tariq	Assistant Professor, AWKUM Mardan
5.	Dr. Wajahat Ali	Assistant Professor, Sarhad University Peshawar
Education		
1.	Dr. Itbar Khan	Assistant Professor, University of Malakand, Dir
2.	Dr. Abdul Ghaffar	Assistant Professor, AWKUM Mardan
3.	Dr. Waqar-un-Nisa	Assistant Professor, Islamia College Peshawar
4.	Dr. Khisro Kaleem Raza	Assistant Professor, Sarhad University Peshawar
5.	Dr. Iqbal Ahmad	Assistant Professor, University of Malakand
6.	Dr. Andi Andijah	Training Coach, South Sulawesi, Makassar Indonesia
Entrepreneurship		
1.	Dr. Wasif Jamal	Associate Professor, IM Sciences, Peshawar
2.	Dr. Muhammad Usman	Assistant Professor, University of Malakand
3.	Dr. Muhammad Nauman Habib	Assistant Professor, City University Peshawar
4.	Dr. Ch. Shoaib Akhtar	Assistant Professor, Fatima Jinnah Women University Rawalpindi
5.	Dr. Rabia Naseer	Assistant Professor, Islamia College Peshawar
6.	Dr. Urooj Zeb	Virtual University, Peshawar Campus

Finance		
1.	Prof. Dr. Syed Umar Farooq	Vice Chancellor, Abasyn University Peshawar
2.	Dr. Muhammad Naveed	Associate Professor, SZABIST Islamabad
3.	Dr. Agha Jehanzeb	Assistant Professor, IBA Sukkar
4.	Dr. Muhammad Abbas	Assistant Professor, Sarhad University Peshawar
5.	Dr. Wajid Khan	Assistant Professor, University of Baltistan, Skardu
6.	Dr. Hamidullah	Assistant Professor, Islamia College Peshawar
7.	Dr. Asif Baloch	Assistant Professor, City University Peshawar
8.	Dr. Wahid Raza	Assistant Professor, GCMS Karak
Human Resource Management		
1.	Prof. Dr. Muhammad Sajjad	Director IM Studies, University of Peshawar
2.	Dr. Rabia Ishrat	Associate Professor, Sarhad University, Peshawar
3.	Dr. Yasin Munir	Assistant Professor, Department of Business Administration, GC Women University Sialkot
4.	Dr. Muhammad Shakil	Assistant Professor, Sohar University, Oman
5.	Dr. Muhammad Siddique	Assistant Professor, University of Punjab, Gujrat Campus
6.	Dr. Fawad Latif	Assistant Professor, COMSATS University Attock Campus
7.	Dr. Muddassar Khan	Assistant Professor, Abbottabad University of Science & Technology, Abbottabad
8.	Dr. Asad Khan Akhunkhail	Assistant Secretary, Technical Board Peshawar
Islamic Studies		
1.	Prof. Dr. Hifazatullah	Professor Islamia College Peshawar
2.	Dr. Abzahir Khan	Associate Professor (Post-Doc Fellow, IRI, IIU, Islamabad), Abdul Wali Khan University Mardan
3.	Dr. Fatima	Associate Professor, SBBWU, Peshawar
4.	Dr. Khalil-ur-Rehman	Department of Dawah and Islamic Culture, International Islamic University, Islamabad
5.	Dr. Aftab Ahmad	Assistant Professor, Shaheed Benazir Bhutto University Sheringal Dir
	Dr. Gulzar Ali	(Post-Doc Fellow, IRI, IIU, Islamabad) Assistant Professor, Abdul Wali Khan University, Mardan
6.	Dr. Muhammad Ayaz	Assistant Professor, Islamia College Peshawar
7.	Dr. Asad Ullah	Assistant Professor, GPGC, Charsadda)

8.	Dr. Ashfaq Ali	Assistant Professor, Islamia College Peshawar
9.	Dr. Badshah Rahman	Assistant Professor, University of Malakand
10.	Dr. Abdul Naseer	Assistant Professor, University of Malakand

Literature and Linguistics

1.	Dr. Qaisar Khan	Professor, University of Malakand
2.	Dr. Iqbal Khan	Associate Professor, Islamia College Peshawar
3.	Dr. Riaz-ud-Din	Professor, Higher Education Department, KP
4.	Dr. Shaukat Ali	Assistant Professor, University of Malakand
5.	Dr. Muhammad Umer	Assistant Professor, Islamia College Peshawar

Marketing/Supply Chain Management

1.	Dr. Aamir Nadeem	Associate Professor, City University Peshawar
2.	Dr. Cedric Aimal Edwin	Associate Professor, CECOS University Peshawar
3.	Dr. Jawad Hussain	Associate Professor, University of Malakand Dir
4.	Dr. S Mohsin Ali Shah	Assistant Professor, AWKUM, Mardan
5.	Dr. Faiza Saleem	Assistant Professor, University of Wah, Pakistan
6.	Dr. Kausar Hayat	Assistant Professor GCMS, Swabi
7.	Dr. Sonia Sethi	Lecturer, Islamia College Peshawar

Operation Management

1.	Dr. Waqar Alam	Professor, Abasyn University Peshawar
2.	Dr. Nazim Ali	Associate Professor, University of Malakand, Dir
3.	Dr. Shams-ur-Rahman	Assistant Professor, IBMS Agri. University Peshawar
4.	Dr. Kashif Ameen	Assistant Professor, Qurtaba University Peshawar
5.	Dr. Haji Rahman	Assistant Professor, University of Buner
6.	Dr. Zainullah	Assistant Professor, City University Peshawar

Organizational Behaviour

1.	Dr. Muhammad Zeb	Associate Professor, SZABIST University Islamabad
2.	Dr. Razaullah	Assistant Professor, Islamia College Peshawar
3.	Dr. Maqsood Afridi	Assistant Professor, FATA University
4.	Dr. Muhammad Arif	Assistant Professor, University of Swabi
5.	Dr. Samina Waleed	Assistant Professor, Women University Swabi

Political Science/International Relations

1.	Dr. Jahanzeb Khalil	Ex- Vice Chancellor AWKUM Mardan
2.	Dr. Amirullah	Associate Professor, Islamia College Peshawar

Project Management

1.	Dr. Atiq ur Rehman	Consultant, Islamabad
2.	Dr. Ghulam Dastagir	Associate Professor, Kingdom of Saudi Arabia
3.	Dr. Alam Rahman	Associate Professor, NUML Peshawar Campus
4.	Dr. Anjum Ihsan	Islamia College Peshawar
5.	Dr. Abdul Latif	Assistant Professor, Abbottabad University of Science & Technology, Abbottabad
6.	Dr. Maimoona Saleem	Lecturer, Islamia College Peshawar

Psychology

1.	Prof. Dr. Erum Irshad	Professor, University of Peshawar
2.	Prof. Dr. Nighat Shaheen	Professor, Peshawar University
3.	Dr. Sharif Ullah Jan	Assistant Professor, Islamia College Peshawar
4.	Dr. Hina Iqbal	Assistant Professor, Islamia College Peshawar
5.	Dr. Salma Andaleeb	Assistant Professor, Islamia College Peshawar
6.	Dr. Sabeen Rahim	Assistant Professor, University of Peshawar

Sociology and Social Work

1.	Dr. Arab Naz	Dean, Social Sciences, University of Malakand
2.	Dr. Syed Rashid Ali Shah	Associate Professor, Abdul Wali Khan University
3.	Dr. Muhammad Ibrar	Assistant Professor, University of Peshawar
4.	Dr. Muhammad Sajjad	Assistant Professor, University of Malakand
5.	Mr. Muhammad Shakil Khattak	Lecturer, Islamia College Peshawar

Statistics

1.	Prof. Dr. Sareer Badshah	Ex-Professor, Islamia College Peshawar
2.	Dr. Sajjad Ahamd	Associate Professor, Islamia College Peshawar
3.	Dr. Umair Khalil	Assistant Professor, Abdul Wali Khan University
4.	Dr. Amjad Ali	Assistant Professor, Islamia College Peshawar
5.	Dr. Dost Muhammad	Assistant Professor, Abdul Wali Khan University

Strategic Management

1.	Dr. Muhammad Jehangir	Assistant Professor, Abdul Wali Khan University
2.	Dr. Altaf Hussain	Assistant Professor, University of Malakan
3.	Dr. Fazal Wadood	Assistant Professor, University of Buner

4.	Dr. Muhammad Irfan	Assistant Professor, NUST Islamabad
5.	Dr. Imran Saeed	Assistant Professor, IBMS Peshawar
6.	Dr. Qamar Abbas	Assistant Professor, MAJU University Karachi
Tourism and Hospitality Management		
1.	Dr. Mohib Ullah	Assistant Professor, AWKUM Mardan
2.	Dr. Faisal Khan	Assistant Professor, Swabi University
3.	Muhammad Hanif Yousafzai	Assistant Professor, University of Malakand
4.	Dr. Asia Umar	Lecturer, Islamia College Peshawar
5.	Dr. Abrarullah	Lecture, University of Swabi, Khyber Pakhtunkhwa
6.	Dr. Muhammad Irshad	Director ORIC, Qurtaba University Peshawar

DAY-1 WEDNESDAY, JAN. 21, 2026

18th EMS International Research Conference on Economic Freedom & Prosperity through Interdisciplinary Insights in Makkah, Saudi Arabia

January 21-22, 2026

Registration and Link Sharing   **January 21, 2025, 09:30 am To 10:00 am (KSA Standard Time)**
Conference Opening: Session Host: Sajjad Ahmad Khan
Recitation from the Quran-e-Kareem (10:00 am)
Opening Remarks and Welcome Address   **Dr. Dr. Shahid Jan Kakakhel**   **(10:05 am to 10:10 am)**
Keynote Speaker I   **Prof. Dr. Salim-ur-Rehman,**   Vice Chancellor, Sarhad University of Sc. & IT Peshawar, Pakistan   **(10:10 am to 10:20 am)**
Keynote Speaker II   **Prof. Dr. Ahmad ur Rahman,**   Vice Chancellor, Islamia College Peshawar, Pakistan   **(10:20 am to 10:30 am)**
Keynote Speaker III   **Dr. Alamgir,**   Chairman, Department of Statistics, University of Peshawar, Pakistan   **(10:30 am to 10:35 am)**
Keynote Speaker IV   **Dr. Sadaf Khan,**   Universiti Pendidikan Sultan Idris (UPSI), Malaysia   **(10:30 am to 10:35 am)**
Keynote Speaker V   **Dr. Haji Rahman**   Assistant Professor, University of Buner, Khyber Pakhtunkhwa, Pakistan   **(10:55 am to 11:5 am)**
Vote of Thanks   **Dr. Fayaz Ali Shah**
Certificate Presentation
Group Photo

ORAL PRESENTATIONS

Wednesday, January 21, 2026 (Time 12:00 Noon–onward)

Session Chairs	Dr. Wali Rahman Dr. Amjad Ali Dr. Alamgir
Name and ID	**Title of Abstract**
Rabia Abbas Malik CEMS-18-SS-126	Stigma, Dignity, and Consent: Student Perspectives on Zakat and Need-Based Aid in Pakistani Higher Education
Laiba Saleem CEMS-18-SS-127	The Issue of Vocabulary Words to Non-Native Speakers
Yasir Javed CEMS-18-SS-128	Listening, Reading, Writing and Speaking Skills for EFL Learners
Salma Talib CEMS-18-SS-131	Problems of English Teachers in Pakistan
Muazzam Mahmood CEMS-18-SS-141	Bridging Divides; Exploring Islamic Teachings as Foundations for Global Peace and Reconciliation
Muhammad Fayaz CEMS-18-M&HS-324	Automated Pneumonia Detection from Chest X-Ray Images Using Transfer Learning with DenseNet Algorithm
Muskan Farid CEMS-18-SS-121	Immigrant Women's Experiences in Nadia Hashimi's Sparks Like Stars, Jhumpa Lahiri's The Namesake, and Monica Ali's Brick Lane: A Spivakian Perspective
Atta ur Rahman CEMS-18-SS-135	The Significance of the Treaty of Hudaybiyya in the Contemporary World
Ihtisham ul Haq CEMS-18-E&T-225	Manipulation of Rotary Photon Drag in Sodium Atomic Medium and SiO2 Slab using Bragg's Diffraction law
Khan Farhan Rafat CEMS-18-E&T-222	A Minimalistic Encoding Scheme with Collective Cryptographic Assurance for Post-Quantum Lightweight Cryptography
Qaiser Akram CEMS-18-M&HS-322	Nano Boost: Enhancing Antibacterial Efficacy of Ceftriaxone with Magnesium Oxide Nanoparticles to Tackle Antimicrobial Resistance
Ibad Ullah CEMS-18-M&HS-322	The Impact of Digital Financial Inclusion and ESG Disclosure on Sustainable Economic Growth: Evidence from Global Perspective

Wednesday, January 21, 2026 (Time 03:00 pm–onward)

Parallel Session

Session Chairs	Dr. Shahid Jan Dr. Fayaz Ali Shah
Name and ID	**Title of Abstract**
Aqsa Sabir CEMS-18-SS-122	Transforming Pedagogy, Assessment, and Feedback in the Digital Age: Rethinking Learning Paradigms
Haleema Akbar CEMS-18-SS-123	Exploring the Impact of Early Childhood Trauma on Health and Wellbeing in Later Life: The Role of Education in Mitigating Adverse Effects
Muhammad Saleem CEMS-18-SS-124	Framing Nature: A Metaphor-Centered Ecolinguistic Study
Aleena Fatima CEMS-18-SS-125	Testing Dyadic Regulation Connectivity Model in Chronic Diabetic Patients and Their Non-Diabetic Partners
Robina Rashid CEMS-18-SS-132	From Rumi to Shakespeare: A Comparative Study of Love, Spirituality, and Humanism in Urdu and English Literature
Ruqiyya Abdul Qayyum CEMS-18-SS-130	Using Education Blogs at the Tertiary Level to Improve ESL Learner's Reading Comprehension Skills, Teachers' and Students' perceptions
Muhammad Naveed Iqbal CEMS-18-SS-134	Management of Bureaucratic Inefficiencies and Political Interference in Health Research Projects in Pakistan: Challenges and Solutions
Amjad Ali CEMS-18-SS-138	Bayesian Analysis of a 3-Component Mixture Model of Exponential Distributions in Random Censoring Trials: A Case of Survival Times for Cancer Patients
Nazim Ali CEMS-18-SS-139	"AI in Recruitment and Performance Management: Impact on Biases and Employee Evaluations
Nasir Rashid CEMS-18-M&HS-226	Challenges and Solutions in Adopting Scaled Agile Framework from Agile Software Development Team Perspective

Nabila Sher CEMS-18-M&HS-321	Effect of Lipid-Based Multiple Micronutrients Supplementation in Underweight Primigravida Pre-Eclamptic Women on Maternal and Pregnancy Outcomes: Randomized Clinical Trial

DAY-2

VIRTUAL

PRESENTATION

Sunday, January 25, 2026 (Time 09:30 am–onward)

Parallel Session

Session Chairs	Prof. Dr. Wali Rahman (SUIT Peshawar) Prof. Dr. Amjad Ali (ICP Peshawar)
Name and ID	**Title of Abstract**
Asna Mubashra CEMS-18-SS-129	Adaptive Clothing Solutions as Fundamental Need of Physically Challenged People
Mehr-un-Nisa CEMS-18-SS-133	Competing Stories of Catastrophe: A Comparative Ecolinguistic Discourse Analysis of Pakistani and American Media Coverage of the 2022 Pakistan Floods
Nasrin Bano CEMS-18-SS-136	Addressing Climate Change through Zero Waste Culture: Insights from School Leaders in Pakistan
Samina Nasim CEMS-18-E&T-221	Revolutionizing Mosaic Work: The Integration of Advanced Materials and Technologies
Bibi Amna CEMS-18-SS-149	نکاح رجسٹریشن فارم فیملی لاء 1961 کےشق1-25 کے شق وار جائزہ فقہ اسلامی کے تناظر میں
Muhammad Ibrahim CEMS-18-SS-150	دعوت و تبلیغ کے قرآنی اسلوب کا علمی جائزہ (تفسیر ذخیرۃ الجنان از مولانا سرفراز خان صفدر صاحب رحمۃ اللہ علیہ کی روشنی میں)
Bilal Ahmad CEMS-18-E&T-223	Quantitative Ethnobotanical Assessment of the Medicinal Flora of Fatehpur and Shin Valleys Swat Pakistan
Zahid Ullah CEMS-18-E&T-224	Antibacterial Efficacy of Silver Nanoparticles from Thymus Linearis, a High Valued Medicinal Herb
Saira Bano CEMS-18-M&HS-323	Artificial Intelligence Transform Microbial Analysis in Microbiology Laboratories

Sunday, January 25, 2026 (Time 09:30 am–onward)

Session Chairs	Dr. Fayaz Ali Shah (ICP Peshawar) Dr. Maimona Salim (ICP Pesgawar) Dr. Faisal Khan (University of Swabi)
Name and ID	**Title of Abstract**
Nabeel Mehfooz Babar CEMS-18-SS-140	Work-Life Balance Challenges and Resilience Strategies by the Single Mothers Working at Medical Teaching Institutions (MTI) Hospitals in Peshawar, Khyber Pakhtunkhwa, Pakistan
Sadiq ul Amin CEMS-18-SS-143	Impact of Organizational Culture on Electrical Hazard Management in PESCO/WAPDA, Pakistan
Muhammad Ishaq Khan CEMS-18-SS-144	"Training for AI Skills and Its Effect on Employee Employability and Commitment
Hikmat Ullah CEMS-18-SS-146	Assessing the Impact of Ineffective Employee Performance Evaluation on Governance Outcomes in Khyber Pakhtunkhwa
Maham Ahmad CEMS-18-SS-148	Ensuring Legal and Social Protection for Street Vendors: Overcoming Economic, Regulatory and Institutional Challenges
Tasneemullah Jan CEMS-18-SS-154	PhD Proposal
Saeeda Bibi CEMS-18-SS-155	Causes and Consequences of Time Poverty among Working Women in Urban Pakistan

ems enriching futures

Sunday, January 25, 2026 (Time 09:30 am–onward)

Session Chairs	Dr. Mustaf Afeef (ICP Peshawar) Dr. Wajid Khan (Universityof Baltistan Skardu)
Name and ID	**Title of Abstract**
Naveed Saleem CEMS-18-SS-141	Assessing the Impact of Foreign Direct Investment (FDI), Foreign Portfolio Investment (FPI), and Domestic Investment on Industrialization Process in a Country
Abdullah Farmanzoi CEMS-18-SS-142	Impact of Interest Rate Changes on Stock Market Performance in Pakistan
Zubair Gul CEMS-18-SS-145	The Mediating Role of Financial Inclusion on the Impact of Financial Services on the Rural Economic Development of SME in Merged Districts of Khyber Pakhtunkhwa
Amir Muhammad CEMS-18-SS-147	The Impact of Corporate Governance on the Earning Response Coefficient of Listed non-Financial Companies of the Pakistan Stock Exchange
Muhammad Imran CEMS-18-SS-151	Exploring Motivation and Barriers for Green Banking Practices in Khyber Pakhtunkhwa
Muhammad Sohail CEMS-18-SS-152	PhD Proposal
Nadir Nawaz CEMS-18-SS-153	Governance of Green Finance Practices and Their Impact on Sustainable Campus Performance in Public Sector Universities of Khyber Pakhtunkhwa, Pakistan

COMPLETE ABSTRACTS

ABSTRACT NO. CEMS-18-SS-121

IMMIGRANT WOMEN'S EXPERIENCES IN NADIA HASHIMI'S SPARKS LIKE STARS, JHUMPA LAHIRI'S THE NAMESAKE, AND MONICA ALI'S BRICK LANE: A SPIVAKIAN PERSPECTIVE

Muskan Farid, Department of English Literature, Shaheed Benazir Bhutto Women University, Peshawar, Pakistan. Email: muskan.farid123@gmail.com

This study explores the experiences of immigrant women as depicted in Nadia Hashimi's Sparks Like Stars, Jhumpa Lahiri's The Namesake, and Monica Ali's Brick Lane through Gayatri Spivak's Subaltern theory. The research focuses on how these women navigate gender and cultural identity in new lands. Spivak's framework highlights the silencing of marginalized groups, including immigrant women, within dominant narratives. The study aims to uncover how societal structures affect their agency and resistance. It also examines narrative techniques that shape their subaltern identities. The analysis reveals the intersection of gender and cultural heritage in their struggles. Qualitative methods, including textual analysis, guide the research. The findings address how these women's voices emerge despite marginalization. The study contributes to understanding immigrant women's challenges through a postcolonial lens.

Keywords: Immigrant Women, Subaltern Theory, Gender Identity, Cultural Heritage, Narrative Techniques, Postcolonial

ABSTRACT NO. CEMS-18-SS-122

TRANSFORMING PEDAGOGY, ASSESSMENT, AND FEEDBACK IN THE DIGITAL AGE: RETHINKING LEARNING PARADIGMS

Aqsa Sabir, Department of English Literature and Linguistics, National University of modern languages, Islamabad, Pakistan. Email: aqsay0220@gmail.com

The digital age has redefined the very architecture of teaching, learning, and evaluation, compelling educators to move beyond traditional pedagogical frameworks and adopt innovative approaches that are dynamic, flexible, and learner-centered. Pedagogy today is no longer confined to the classroom; rather, it extends into virtual spaces that demand multimodal instruction, collaborative learning environments, and a heightened emphasis on digital literacy. This transformation challenges the conventional "sage on the stage" model and foregrounds the role of educators as facilitators, curators, and co-learners. Assessment and testing practices, once rooted in rigidity and standardization, are equally undergoing a paradigm shift. The digital environment enables adaptive assessments, gamified testing models, and real-time analytics that not only measure performance but also track learning progress in nuanced ways. Such practices challenge the supremacy of summative evaluation, highlighting instead the importance of formative assessment, which prioritizes growth, reflection, and ongoing improvement. Feedback, in particular, emerges as the cornerstone of meaningful learning in the digital age. With the aid of artificial intelligence, learning management systems, and interactive tools, feedback has become immediate, personalized, and dialogic. Unlike the one-directional feedback of traditional models, digital platforms foster continuous interaction between learner and

teacher, allowing feedback to evolve into a process of co-construction of knowledge. This study argues that the integration of digital technologies is not merely about replacing old methods with new tools, but about fundamentally reimagining pedagogy, testing, and feedback as interconnected dimensions of a transformative learning experience. It invites educators, researchers, and policymakers to critically reflect on the ethical, cognitive, and social implications of these changes, ensuring that the digital turn in education nurtures equity, creativity, and critical thinking rather than reinforcing mechanization and dependency.

Keywords: Pedagoggy; Assessment; Digital Age; Learner; Teacher

ABSTRACT NO. CEMS-18-SS-123

EXPLORING THE IMPACT OF EARLY CHILDHOOD TRAUMA ON HEALTH AND WELLBEING IN LATER LIFE: THE ROLE OF EDUCATION IN MITIGATING ADVERSE EFFECTS

Dr. Haleema Akbar, Assistant Professor, **Dr. Ashraf Ullah** and **Zubaida Shakir**, Department of Education, Women University Mardan), Pakistan.
Email: drhaleemaakbar@wumardan.edu.pk

The purpose of this study is to examine the consequences of early childhood trauma on an individual's health and well-being as well as the potential protective effects of schooling. In order to better understand how educational experiences can help people who have experienced childhood trauma feel resilient and supported, this study used qualitative data from interviews. According to the research, education has a critical role in reducing the long-term impacts of trauma by offering possibilities for personal development, stability, and emotional support.

Keywords: Early childhood, Trauma, Education, Mitigating, Adverse Effects

ABSTRACT NO. CEMS-18-SS-124

FRAMING NATURE: A METAPHOR-CENTERED ECOLINGUISTIC STUDY

Muhammad Saleem, PhD Scholar, & **Dr. Naveed ur Rehman,** Associate Professor
Department of English, Air University Islamabad, Pakistan.
Email: saleemsafi5@gmail.com

This study examines the use of metaphor in weather reporting across five major news outlets—Al Jazeera, BBC, CNN, DW, and GNN—through the lens of ecolinguistics, drawing specifically on Stibbe's (2015) "Stories We Live By" framework. Metaphor is not merely a rhetorical flourish; it is a cognitive framing tool that shapes how the public understands environmental events and reacts to climate realities. The analysis focuses on how metaphors within weather discourse construct either anthropocentric worldviews—where nature is depicted as hostile, passive, or subordinate—or ecocentric perspectives that recognize nature's agency and interconnectedness. A corpus of 200 weather reports was compiled, and metaphorical patterns were identified using AntConc. These linguistic

patterns were then analyzed qualitatively within Stibbe's six stories frameworks, with emphasis on the metaphor story. The findings reveal that metaphors such as "icy grip," "storm lashes" or" heatwave attacks" are common in national and Western media, reinforcing destructive or ambivalent ecological discourses. In contrast, a minority of reports, particularly from Al Jazeera and BBC, employ system-based or human-integrated metaphors that reflect emerging ecosophical values. The study contributes to ecolinguistic and media discourse research by illuminating the ideological work metaphors perform in shaping climate narratives. It argues for increased metaphor awareness in weather journalism and encourages the adoption of ecocentric metaphors that support sustainability, ecological empathy, and long-term environmental responsibility. Ultimately, the paper calls for media narratives that do not simply inform but also inspire ecological consciousness and ethical engagement with the natural world.

Keywords: Anthropocentric; Ecocentric; Metaphor; Nature; Weather

ABSTRACT NO. CEMS-18-SS-125

TESTING DYADIC REGULATION CONNECTIVITY MODEL IN CHRONIC DIABETIC PATIENTS AND THEIR NON-DIABETIC PARTNERS

Aleena Fatima and **Sultan Shujja**, PhD, Department of Psychology, University of Sargodha, Pakistan. Email: sultanshujja@gmail.com

The Dyadic Regulation Connectivity Model (DRCM) explains how illness perception, dyadic coping, and relational outcomes are interlinked in couples facing chronic illness, but empirical evidence from Pakistan is limited. Prior research across cultures shows that dyadic coping is positively associated with well-being and relationship satisfaction and negatively associated with stress, yet no study has directly tested the full model in a South Asian context. The present study tested the DRCM among 83 couples, each comprising a patient with diabetes and a non-diabetic partner, using measures of illness perception, dyadic coping, perceived stress, well-being, and relationship satisfaction. Structural equation modeling showed that illness perception was positively associated with stress and negatively with dyadic coping, while dyadic coping was positively associated with relationship satisfaction and well-being and negatively with stress. However, overall model fit indices indicated that the DRCM provided only partial explanation of dyadic adaptation in this cultural context. Findings suggest that although dyadic coping protects against stress and strengthens relational outcomes, cultural dynamics may limit the applicability of the model for Pakistani couples.

Keywords: Dyadic Regulation; Connectivity Model; Illness Perception; Dyadic Coping; Stress; Well-being; Relationship Satisfaction

ABSTRACT NO. CEMS-18-SS-126

STIGMA, DIGNITY, AND CONSENT: STUDENT PERSPECTIVES ON ZAKAT AND NEED-BASED AID IN PAKISTANI HIGHER EDUCATION

Rabia Abbas Malik, Lead Advancement & Fundraising, National University of Sciences and Technology (NUST), Islamabad, Pakistan. Email: rabiaabbasmalik@outlook.com

This mixed-methods study investigates why university students perceive accepting zakat or need-based financial aid as taboo, and tests approaches to secure informed, dignified consent. Combining a cross-sectional survey of undergraduate and postgraduate students with in-depth interviews and focus groups, the study examines cultural, religious, social, and institutional drivers of stigma; measures emotional outcomes (shame, pride, gratitude); and evaluates consent framing strategies (private opt-in, value-framed messaging, peer ambassadors). Findings will inform ethical fundraising practices that preserve student dignity while increasing uptake of legitimate zakat/need-based supports. The paper contributes to literature on charitable stigma, Islamic giving norms, and higher-education equity, and offers evidence-based recommendations for universities and donors.

Keywords: Zakat; Stigma; Consent; University; Students; and Dignity

ABSTRACT NO. CEMS-18-SS-127

THE ISSUE OF VOCABULARY WORDS TO NON-NATIVE SPEAKERS

Laiba Saleem, Principal, Language Zone, Sialkot Cantt., Pakistan.
Email: javedyasir301@gmail.com

This study presents the design and implementation of a newly developed vocabulary book aimed at enhancing lexical competence among secondary and tertiary learners. The book integrates high-frequency word lists, thematic clusters, and context-based activities, providing learners with meaningful exposure and opportunities for active use. Pedagogical features such as word-building strategies, collocation practice, and digital supplements are incorporated to align with current communicative approaches to language teaching. Preliminary feedback from pilot groups indicates improved learner engagement and measurable growth in receptive and productive vocabulary. The project contributes to the broader goal of equipping learners with the linguistic resources needed for academic success and intercultural communication, and it offers practical insights for educators and curriculum designers working in Saudi Arabia, Pakistan and beyond.

Keywords: Lexical Competence; Schools Learners; Learner Engagement; Feedbackqq

ABSTRACT NO. CEMS-18-SS-128

LISTENING, READING, WRITING AND SPEAKING SKILLS FOR EFL LEARNERS

Yasir Javed, PhD Scholar, Language Zone, Sialkot Campus, Pakistan.
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The acquisition of English as a Foreign Language (EFL) requires balanced development across the four core skills: Listening, Reading, Writing, and Speaking (LRWS). My book LRWS introduces an integrated framework that connects these skills, demonstrating how mastery in one area reinforces progress in others. This approach is particularly relevant for learners preparing for high-stakes assessments such as the IELTS exam, where success depends on competence across all four components. At this conference, I will present the LRWS model as both a theoretical foundation and a practical guide for EFL learners. The book outlines strategies for active listening, effective reading comprehension, structured and academic writing, and confident speaking performance—skills directly aligned with IELTS tasks. In addition, I will discuss adaptable classroom practices and learner-centered techniques that support EFL learners in Saudi Arabia and beyond, ensuring that language instruction is culturally responsive and goal-oriented. By integrating the four skills, the LRWS framework not only enhances test performance but also builds lasting communicative competence for academic and professional contexts.

Keywords: Listening; Reading; Writing; Speaking; Skills; EFL; Learners

ABSTRACT NO. CEMS-18-SS-129

ADAPTIVE CLOTHING SOLUTIONS AS FUNDAMENTAL NEED OF PHYSICALLY CHALLENGED PEOPLE

Dr. Asna Mubashra, Associate Professor, Textile Design Department, College of Art and Design, University of the Punjab, Lahore. Email: asnamubashra786@gmail.com

Clothing is one of the essential needs of all people and is a subject of universal interest. This subject has a multidimensional approach. Ever increasing dimensions have brought into limelight the strong contributions of this subject in exploring probabilities of dress designing to serve some specific purpose, the functional aspect of clothing designing. The understanding of improvements required in the normal clothing designs for the important segment of our society, the special group of physically disabled persons are the focus of this research paper. Data will be collected from physically challenged persons from some selected hospitals in Lahore. Quantitative and qualitative data will be collected from research participants. The research paper topic originated from the researcher's questioning the lack of availability of adaptive clothing for these specific groups. Such persons encounter failure to get hold of functional and visually appealing solutions which are also according to the local context of dress style and standards of modesty. This indicates a pressing need for this avenue to be explored. The real assessment of the specific needs of such persons is the appropriate method for generating ideas for adaptation in normal clothing designs. A clinical definition of disability single-handedly cannot serve as basis for adaptive clothing designing. Although clinical explanation provides categorization of physical effect of disease on body but individuals suffering from infirmity have explicit clothing needs and preferences. By understanding and recognizing

the need of selected study participants researcher proposed specially engineered adaptive clothing design solutions that helped them to obtain the quality of life, maintain the dignity, and make the everyday tasks easier.

Keywords: Clothing; Physical Disability; Adaptive Clothing; Functional Design

ABSTRACT NO. CEMS-18-SS-130

USING EDUCATION BLOGS AT THE TERTIARY LEVEL TO IMPROVE ESL LEARNER'S READING COMPREHENSION SKILLS, TEACHERS' AND STUDENTS' PERCEPTIONS

Ruqiyya Abdul Qayyum, Indus University, Karachi, Pakistan.
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The world is changing as rapidly as it can, as technological inventions are taking place rapidly. This particular study looks forward to investigating the perceptions, opinions, and beliefs of teachers and students regarding the usage of educational blogs to improve reading skills and understanding, especially at the tertiary level. The study used qualitative data collected via semi-structured interviews of 10 teachers and 10 students. the collected data is analyzed utilizing thematic analysis. The interview took place for more than 30 minutes. The thematic analysis suggested that both the teachers and students have positive attitudes toward the usage of educational blogs reflecting numerous benefits, advantages, and impacts especially on reading skills of language learning. The study suggested that social constructivism and social-cultural theory are realities of the students' lives, especially in the world of technology. The study is vital in tracing out the teaching methodologies and pedagogies while using the technological forum are impacting the learning process of the students, and enforcing the teachers to change their traditional mindset set especially in the context of Pakistan. This study is limited as it's a case study of public college. The findings represent how and why educational blogs should be used for long-lasting impacts and effective pedagogical strategies for improving the quality of education.

Keywords: Education Blogs; Thematic Analysis; Pedagogy; Social Constructivism

ABSTRACT NO. CEMS-18-SS-131

PROBLEMS OF ENGLISH TEACHERS IN PAKISTAN

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English language teaching (ELT) in Pakistan faces a wide range of challenges that affect both teachers and learners, limiting the overall quality of English education in the country. English, being the second official language and the medium of instruction in many schools and universities, plays a crucial role in academic success and professional growth. However, many English teachers in Pakistan face difficulties due to inadequate professional training, limited linguistic competence, and the use of outdated, grammar-

translation-based teaching methodologies. A large number of teachers enter the profession without specialized education in language pedagogy, relying instead on traditional rote-learning techniques that fail to develop students' communicative competence. Another significant issue is the lack of access to modern teaching aids and learning materials. In many public schools, teachers work in resource-poor environments with limited technological tools, insufficient libraries, and overcrowded classrooms. These conditions make it difficult for teachers to provide individualized attention or to apply interactive and student-centered teaching methods. The imbalance between urban and rural education systems also plays a major role: while teachers in private urban institutions may have access to better training and resources, those in rural areas often struggle with poor infrastructure and minimal institutional support. Sociolinguistic and cultural factors further complicate the situation. Pakistan is a multilingual country where regional languages such as Urdu, Punjabi, Sindhi, Pashto, and Balochi dominate daily communication. As a result, both teachers and students often lack real-life exposure to English, reducing opportunities for meaningful language practice. Additionally, the education system's exam-oriented nature encourages memorization over skill development, forcing teachers to prioritize test preparation instead of fostering creativity and communication. Teachers also face challenges related to motivation and confidence—many feel underpaid, undervalued, and overburdened with administrative duties, which diminishes their enthusiasm for professional growth. To overcome these challenges, a comprehensive approach is required. Continuous professional development programs should be introduced to enhance teachers' language proficiency and pedagogical skills. Curriculum reforms must emphasize communicative and task-based approaches, encouraging interactive classroom practices. Furthermore, policy makers should ensure equitable distribution of resources, especially in rural and government schools, and promote digital literacy among teachers. By empowering English teachers with better training, resources, and institutional support, Pakistan can improve not only the standard of English teaching but also students' global competitiveness.

Keywords: English Language Teaching; Language Proficiency; Teaching Challenges; Communicative Approach; Education Reform; Language Pedagogy

ABSTRACT NO. CEMS-18-SS-132

FROM RUMI TO SHAKESPEARE: A COMPARATIVE STUDY OF LOVE, SPIRITUALITY, AND HUMANISM IN URDU AND ENGLISH LITERATURE

Dr. Robina Rashid and **Mr. Rafiullah Khan**.

This paper presents a comparative study of Jalaluddin Rumi and William Shakespeare, exploring how their works reflect universal themes of love, spirituality, and humanism. Despite belonging to different cultural, religious, and linguistic traditions, both figures converge on the idea that literature serves as a bridge for peace, tolerance, and moral growth. Rumi views love as a divine, transformative force that leads the human soul toward God, while Shakespeare dramatizes love as a deeply human experience, entangled with joy, conflict, and tragedy. By analyzing selected texts from Rumi's Mathnawi and Shakespeare's plays and sonnets, this study highlights the complementary ways in which Eastern mysticism and Western humanism contribute to the understanding of human existence. The paper argues that placing Rumi and Shakespeare in dialogue not only

enriches comparative literary scholarship but also offers a pedagogical model for integrating spiritual and humanistic values in education. Ultimately, the study concludes that both Rumi and Shakespeare continue to inspire intercultural harmony and provide timeless insights into the shared quest for meaning, love, and unity in a fragmented world.

Keywords: Rumi; Shakespeare; Comparative Literature; Love; Spirituality; Humanism; Peace Education; Intercultural Harmony

ABSTRACT NO. CEMS-18-SS-133

COMPETING STORIES OF CATASTROPHE: A COMPARATIVE ECOLINGUISTIC DISCOURSE ANALYSIS OF PAKISTANI AND AMERICAN MEDIA COVERAGE OF THE 2022 PAKISTAN FLOODS

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This study applies Stibbe's (2021) comprehensive ecolinguistic framework to examine how Pakistani and American newspapers constructed fundamentally different narratives of the 2022 Pakistan floods, which affected 33 million people and caused unprecedented devastation. Through systematic analysis of two extensive articles—Dawn's "Man-made Catastrophe" and The Washington Post's "U.N. chief calls Pakistan floods a 'climate catastrophe'" from August 2022, the research reveals two competing "stories we live by": Dawn's narrative of development betrayal emphasizing governance failures versus The Post's story of climate inevitability requiring financial solutions. The detailed textual analysis identified 43 thematic units in Dawn's article and 48 in The Washington Post's article, where thematic units represent coherent segments ranging from single phrases to paragraph-length passages expressing complete ideas about flood representation. Across these units, the study traces patterns in eight interconnected categories such as ideologies, framings, metaphors, evaluations, identities, convictions, erasure, and salience, demonstrating how linguistic choices create divergent environmental realities. Dawn employs visceral metaphors of violation ("choked passages," "defying gravity") and inclusive pronouns to enable collective critique of development models, while systematically erasing climate science. Conversely, The Post utilizes technical metaphors and institutional identity constructions to privilege scientific authority, while erasing local governance dimensions. Neither narrative fully serves ecological wellbeing: Dawn advances social justice while ignoring planetary systems; The Post acknowledges global connections while erasing local agency. The findings contribute to ecolinguistic theory by demonstrating the synergistic operation of analytical categories, validating thematic units as methodological focus for in-depth single-text analysis, and revealing how early coverage establishes persistent discursive templates. The study underscores the urgent need for integrated narratives that connect local development failures with global atmospheric changes to enable effective climate disaster responses.

Keywords: Ecolinguistics; Climate Disaster Discourse; Pakistan Floods 2022; Media Framing; Environmental Communication; Climate Justice

ABSTRACT NO. CEMS-18-SS-134

MANAGEMENT OF BUREAUCRATIC INEFFICIENCIES AND POLITICAL INTERFERENCE IN HEALTH RESEARCH PROJECTS IN PAKISTAN: CHALLENGES AND SOLUTIONS

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Background: Health research projects in Pakistan—especially within maternal, newborn, and child health (MNCH)—are frequently hindered by bureaucratic inefficiencies and political interference. These systemic barriers delay implementation, increase costs, and reduce the overall impact of externally and nationally funded initiatives. Despite multiple reforms and donor-driven programmes, limited evidence exists on the underlying causes of these governance challenges and the context-specific solutions required to overcome them.

Objective: This study aims to identify and analyse bureaucratic and political factors that impede effective management of health research projects in Pakistan. It further seeks to assess institutional capacities, explore feasible and culturally adaptable project management models, and propose actionable recommendations to strengthen governance and project delivery.

Methods: A qualitative exploratory design will be employed. Data will be collected through semi-structured interviews and focus group discussions with project managers, researchers, policymakers, and health administrators across leading Pakistani health research institutions and government bodies. Purposeful sampling will ensure representation from MNCH and other priority health domains. Thematic analysis, supported by NVivo software, will be guided by bureaucratic management theory and stakeholder theory to interpret patterns and derive insights.

Expected Results: The study is expected to generate a comprehensive understanding of bureaucratic bottlenecks, political interference mechanisms, and their effects on project timelines, budgets, and outcomes. It will also provide evidence on the feasibility and acceptability of decentralized decision-making, enhanced stakeholder engagement, and empowerment strategies for project managers.

Conclusion: Addressing bureaucratic inefficiencies and political interference is essential for improving the effectiveness of health research projects in Pakistan. The study's findings will inform policy reforms, capacity-building initiatives, and institutional strengthening efforts, contributing to improved public health research outcomes and supporting progress towards national and global health goals.

Keywords: Bureaucratic Inefficiencies; Policymakers; Administrators; Bottlenecks

ABSTRACT NO. CEMS-18-SS-135

THE SIGNIFICANCE OF THE TREATY OF HUDAYBIYYA IN THE CONTEMPORARY WORLD

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This research manuscript examines the circumstances surrounding the Signing of the Treaty of Hudaybiyyah between the Prophet Muhammad (PBUH) and the Quraish, despite its stringent terms. This treaty holds pivotal significance as it brought numerous benefits to Muslims. It has left a short-term and long-term impact on the Muslim community and human history. Muslims at that time needed to rest and spread Islam peacefully. This agreement guaranteed peace, stability, and progress. Patience and farsightedness are the keys to success. Giving and taking in a deal of life are crucial to bringing about peace, stability, progress, and prosperity. It initially favored the people of Makkah, yet it proved to be a strategic victory for the Muslims, easing the tension between the two parties and causing the spread of Islam. The Muslims were also groomed to tackle the enemy in a composed way and were transformed into future global leaders. Then the world saw the impact of the Prophet's non-war strategy for peace, and an indelible mark was left on human history. This was an innovative and far-sighted strategy applied by the Prophet (PBUH) for the restoration of peace. Muslims surpassed the people of Makkah and progressed socially, economically, and politically, and Islam reached not only the city of Makkah but also the far-flung areas of the world. Such non-war strategies are also important for the peace and prosperity of the present world. The Quran, hadiths, history books, websites, and journals will be consulted to add value to this article in an explorative and descriptive way.

Keywords: Treaty of Hudaybiyya; Peace and Prosperity; the Prophet Muhammad (PBUH); Success in Life

ABSTRACT NO. CEMS-18-SS-136

ADDRESSING CLIMATE CHANGE THROUGH ZERO WASTE CULTURE: INSIGHTS FROM SCHOOL LEADERS IN PAKISTAN

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Climate change has become a challenge and is directly impacting the education systems, affecting learning outcomes. Conversely, it is believed that educating people, especially young ones, can lead to the adoption of mitigation and adaptation strategies. For this purpose, a study was conducted in the public schools of Islamabad. Waste management and plastic pollution were study topics. The participants were the school leaders of 432 schools and colleges of the Islamabad Capital Territory, both from urban and rural areas of the Federal Directorate of Education (FDE). Census sampling was used for the quantitative thread. 314 school heads responded to the Google Survey, and for the qualitative part, a stratified sampling approach was used with 20 heads equally by sector and gender for in-depth semi-structured interviews. The study adopted a qualitative-driven parallel mixed methods design (QUAL+quan), also discussed as a parallel mixed or

qualitatively driven concurrent design, and convergent design, where the qualitative and the quantitative data are collected and analyzed separately and then combined to provide a comprehensive picture of the greening initiatives of FDE. Descriptive statistics were produced using Microsoft Excel; 87% favored the encouragement of zero-waste culture, and 97% advocated avoiding paper waste. More than 75 % demanded adopting recycling, reusing, avoiding single-use plastics, and separating waste. The qualitative data were analyzed through NVivo 14. The qualitative results focused on the promotion of reusable cloth bags instead of single-use plastic bags. Promoting homemade lunches and involving the community in educating to segregate waste at the source were highlighted. It was concluded that schools can ultimately create a sustainable environment by promoting healthy living and eating habits. Celebrating "No to Plastic Day", reducing plastic pollution, and managing waste were believed to be the core contributors to providing significant relief from the impact of climate change. Monitoring enforcement through regulations and penalties, and community engagement for sustainable living styles, were recommended.

Keywords: Zero Waste; Waste Management; School Leaders; Sustainability; Plastic Pollution

ABSTRACT NO. CEMS-18-SS-138

BAYESIAN ANALYSIS OF A 3-COMPONENT MIXTURE MODEL OF EXPONENTIAL DISTRIBUTIONS IN RANDOM CENSORING TRIALS: A CASE OF SURVIVAL TIMES FOR CANCER PATIENTS

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The current research introduces a novel 3-component mixture model of exponential distributions (3-CMMEDs) designed for clinical trials with random censoring. Explicit forms for the Bayes estimates (BEs) and Bayes posterior risks (BPRs) for 3-CMMEDs parameters have been derived. We used both informative (Gamma) and non-informative (Jeffreys') priors and explored a variety of loss functions. Evaluating these BEs across varying sample sizes and parameter settings reveals nuanced performance insights under different loss functions. Simulations and analyses of real-world data from patients who received chemotherapy alone complement theoretical validations. Notably, our numerical findings underscore the superior performance of the Gamma prior and highlight the efficacy of the DeGroot loss function in achieving precise parameter estimates for 3-CMMEDs.

Keywords: Bayesian Estimation; Mixture Model; Exponential Distribution; Random Censoring; Loss Function; Bayes Posterior Risk

ABSTRACT NO. CEMS-18-SS-139

AI IN RECRUITMENT AND PERFORMANCE MANAGEMENT: IMPACT ON BIASES AND EMPLOYEE EVALUATIONS

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As organizations increasingly adopt AI tools for recruitment and performance management, questions arise about their impact on biases and fairness in employee evaluations. There are a number of concerns and expectations from AI like 'do AI tools reduce human biases in recruitment (e.g., screening resumes) or introduce new ones (e.g., data skew); how does AI-driven performance analytics affect employee perceptions of fairness and trust; what safeguards ensure AI systems align with organizational DEIB goals? This paper examines how AI algorithms influence hiring decisions and performance assessments, with a focus on perpetuating or mitigating systemic biases (gender, race, age). The paper will examine the relevant literature for a period of 5 year (2018–2023). It will also analyse 3 organizations using AI in hiring/performance tools. This research is expected that how AI can reduce implicit biases in initial screening but risks amplifying data biases if training data is skewed. It is also expected that the findings will address employees' perception of AI evaluations being less transparent as trust depends on explainability. In addition, the need for blend of tech and human oversight will also be validated. Research implications include AI's promise in HR hinges on ethical design, transparency, and balancing efficiency with fairness. Organizations must align AI tools with DEIB strategies to avoid reinforcing inequities.

Keywords: AI in HR; Ecruitment Bias; Performance Management; DEIB, Algorithmic Fairness

ABSTRACT NO. CEMS-18-SS-140

WORK-LIFE BALANCE CHALLENGES AND RESILIENCE STRATEGIES BY THE SINGLE MOTHERS WORKING AT MEDICAL TEACHING INSTITUTIONS (MTI)-HOSPITALS IN PESHAWAR, KHYBER PAKHTUNKHWA, PAKISTAN

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Purpose and Background: The purpose of the study shall to explore the hardships facing by the single mothers after divorce / separation or as a widow and how to well sustain the work-life balance and cope with job role, single parenting role and financial constraints.

Research Gap: In previous research, this study was conducted both in quantitative and qualitative and mixed method in different countries including Pakistan. No research topic pertaining to the research title conducted in Peshawar, Khyber Pakhtunkhwa nor MTI hospitals in Peshawar.

Research Objectives: To examine the single mothers work life balance and assess the impact of resilience strategies showing by the single mothers working at MTI hospitals, Peshawar.

Research Methodology: The study shall be conducted through "Qualitative" research design to explore in- depth study and paradigms. Time horizon shall be "Longitudinal" with mono method choice shall be "Semi Structured Interviews" from single working mothers i.e. doctors, nurses, medical technicians etc. Furthermore, shall be applying the "Themes and Coding" in the data analysis.

Expected Contribution: The expected findings shall be contributed for practitioners, employers and policymaker and academics' purpose.

Keywords: Work-Life Balance; Resilience; Hardships; MTI Hospitals

ABSTRACT NO. CEMS-18-SS-141

BRIDGING DIVIDES: EXPLORING ISLAMIC TEACHINGS AS FOUNDATIONS FOR GLOBAL PEACE AND RECONCILIATION

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One of the pressing social problems in the contemporary world is the conflicts arising from national, political, ethnic, racial, and religious differences. People have grown weary of the devastating and catastrophic struggles and conflicts and are seeking ways to establish a peaceful and non-violent society. The need for reconciliation, peace, and tolerance is more urgent than ever, given the high number of casualties in recent conflicts. Since the 1990s, millions have died in the Congo, Sudan, and other African countries, and hundreds of thousands in former Yugoslavia, Afghanistan, Iraq, Yemen, Syria, and Palestine. Over 80 percent of the casualties are civilian, and the number of refugees and displaced persons has increased sharply. This research proposal argues that religion, particularly Islam, offers valuable foundations for a culture of peace and the realization of a non-violent society. Peace is a complex concept often misused as political propaganda. Galtung defines peace as "the absence of violence in every form" (Galtung, 1996). He identifies three modalities of violence: direct violence, structural violence, and cultural violence. Direct violence includes intentional bodily harm such as killing and maiming. Structural violence results from social structures based on exploitation and repression (Galtung, 1996). Barash and Webel (2009: 3–12) make a distinction between negative and positive peace. Negative peace refers to the absence of violence, while positive peace involves the achievement of fairness, justice, and social redistribution. This aligns with Wolterstorff's (1983) view that peace includes well-being and flourishing, and Sen's (1999) idea that socio-economic development equates to freedom. Wolterstorff emphasizes that peace is often seen negatively as the absence of violence rather than positively as the presence of justice and fairness. Religions view peace as both a temporal and a metaphysical state. Followers of Hinduism, Buddhism, Christianity, and Islam are encouraged to lead disciplined lives with peace as the intended outcome. In Hinduism, peace is connected to dharma (universal principles) and ahimsa (non-violence), concepts also present in Buddhism and Jainism. In Buddhism, ahimsa supports karuna (compassion), a key virtue. Christianity and Islam consider metaphysical peace as a divine gift, with true peace achieved through reconciliation with God or Allah. Both faiths emphasize love and respect for humanity, embodied in Christian agape and Muslim

muhabat. In all four religions mentioned here, a belief-informed love sustains the pursuit of peace in this world (Gentry, C.E, 2016). For Muslims, peace is not merely the absence of war or organized violence but also the presence of justice and conditions that allow humans to realize their full potential. Human nature is inclined toward peace, and violence stems from faulty education that disconnects us from our compassionate nature. Islam came and the Holy Prophet Muhammad (Peace be Upon Him) laid the foundation of an Islamic state on Justice without discrimination, equality for all, education for all, human dignity, liberty in religion, culture, social rules, economic standards, tolerance, mutual respect, modernity, modesty, development and mutual consent. Islam gave the system of Ummah/Millat where everybody who has recited the Kalma, is a member of this Ummah. Race, color, and finance did not matter, they were brothers and sisters. Islamic teachings provide a foundation for creative peacemaking. In Arabic, salaam means peace and is one of God's holy names (Nasr, 2002). Islam is a religion of universalism, tolerance, peace, and reconciliation. It teaches that life is sacred and emphasizes upholding truth and justice. Social justice is a core principle of Islam, and pursuing justice is a duty of every Muslim (Yazdani, 2020). Concepts of peace are central to Islamic teachings, envisioning a harmonious social order of justice without violence or conflict. Islam, one of the world's major religions, has a rich tradition of teachings emphasizing peace, justice, and coexistence. This research investigates how these teachings can be harnessed to promote world peace.

Keywords: Social Problems; Differences; Reconciliation; Islamic Teachings

ABSTRACT NO. CEMS-18-SS-142

IMPACT OF INTEREST RATE CHANGES ON STOCK MARKET PERFORMANCE IN PAKISTAN

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Background/Context: Interest rate decisions are a central policy instrument influencing financial markets, investment behavior, and managerial decision-making in emerging economies. In Pakistan, frequent monetary tightening and easing cycles create uncertainty for firms, investors, and financial managers, directly affecting capital allocation and market performance. Understanding the impact of interest rate changes on stock market performance will be highly relevant to management sciences, especially in financial management, strategic investment and policy-oriented decision-making.

Research Gap: While prior studies have examined the interest rate–stock market nexus in developed economies, limited empirical evidence will exist for Pakistan reflecting recent monetary policy dynamics and sector-specific analyses linking monetary policy to managerial implications will remain underexplored.

Research Objective: This study will empirically examine the impact of interest rate changes on stock market performance in Pakistan, focusing on managerial and policy relevance within an emerging market context.

Methodology: The study will adopt a quantitative research design using secondary time-series data from the State Bank of Pakistan and Pakistan Stock Exchange. The sample will cover key macroeconomic and market indicators from 2015-2025. Correlation and regression analyses will be applied to assess the direction and significance of the relationship between interest rate changes and stock market returns.

Expected Contribution: The study will contribute to financial management and monetary policy literature by providing context-specific evidence from Pakistan. Practically, the findings will support managers, investors, and policymakers in making informed strategic and financial decisions under changing monetary conditions.

Keywords: Interest Rates; Stock Market Performance; Monetary Policy; Investment Strategy; Emerging Markets

ABSTRACT NO. CEMS-18-SS-143

IMPACT OF ORGANIZATIONAL CULTURE ON ELECTRICAL HAZARD MANAGEMENT IN PESCO/WAPDA, PAKISTAN

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Background/Context: Electrical utilities such as PESCO (Peshawar Electric Supply Company), WAPDA (Water and Power Development Authority) operate in high-risk environments where employees are regularly exposed to electrical hazards. Organizational culture plays a critical role in shaping employee attitudes, safety behaviors, and compliance with safety regulations. In Pakistan, frequent electrical accidents highlight the need to understand how safety culture, management commitment, and employee involvement influence hazard prevention in power distribution organizations.

Research Gap: Although international studies have emphasized the role of organizational culture in workplace safety, limited empirical research exists in the Pakistani power sector, particularly focusing on electrical hazards in PESCO/WAPDA. Moreover, the relationship between safety-oriented organizational culture and electrical hazard management remains underexplored in developing-country utility organizations.

Research Objective: This study aims to examine the impact of organizational culture on the management of electrical hazards in PESCO/WAPDA, with a focus on safety practices, employee awareness, and managerial commitment.

Methodology: The study adopts a quantitative research design using primary data collected through a structured questionnaire from employees of PESCO/WAPDA. Statistical analysis techniques, including descriptive statistics, correlation, and regression analysis, will be applied using SPSS to assess the relationship between organizational culture dimensions and electrical hazard management.

Expected Contribution: The study is expected to contribute to the literature on occupational safety management by providing empirical evidence from Pakistan's power sector. Practically, the findings will help policymakers and utility managers strengthen

safety culture, reduce electrical accidents, and improve overall workplace safety performance.

Keywords: Organizational culture, Electrical hazards, Workplace safety, PESCO, WAPDA.

ABSTRACT NO. CEMS-18-SS-144

TRAINING FOR AI SKILLS AND ITS EFFECT ON EMPLOYEE EMPLOYABILITY AND COMMITMENT

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This qualitative research will evaluate the psychological and behavioural impacts of artificial intelligence use among employees of educational institutions, specifically teachers. As AI technology becomes part and parcel of everyday work practices, employees become active co-workers with intelligent systems, leading to interesting questions around emotional wellbeing, autonomy, sociability and work behaviour. Incorporating the Job Demands–Resources model, Conservation of Resources theory, and Affective Events Theory, the study investigates how AI can be a job resource and a job demand at the same time. Semi-structured, in-depth interviews will be conducted with 20 teachers who are using AI tools at work to collect data. The research employs an inductive thematic analysis approach to explore the experiences of employees regarding AI adoption. It aims to examine the psychological states of employees (stress, anxiety, engagement, emotional ambivalence) and related behaviours (AI dependence, changes in work practices, adaptive versus maladaptive behaviours, social interaction changes) within the context of AI. This study contributes rich, experiential insights into the way AI changes employee emotions, behaviours, and autonomy, moving beyond quantitative, outcome-focused research. The anticipated findings will illustrate recurring patterns of complex employee experiences with AI that could potentially contribute to the human–AI relations literature.

Keywords: Artificial Intelligence; Educaional Institutions; Technology; Well-being

ABSTRACT NO. CEMS-18-SS-145

THE MEDIATING ROLE OF FINANCIAL INCLUSION ON THE IMPACT OF FINANCIAL SERVICES ON THE RURAL ECONOMIC DEVELOPMENT OF SME IN MERGED DISTRICTS OF KHYBER PAKHTUNKHWA

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Background: Rural economic development in Pakistan's merged districts of Khyber Pakhtunkhwa (KPK) remains constrained by limited access to formal financial services, weak institutional outreach, and underdeveloped small and medium enterprises (SMEs). Financial services such as credit, savings, insurance, and digital payments have the

potential to stimulate SME growth; however, their effectiveness largely depends on the level of financial inclusion among rural entrepreneurs.

Research Gap: Existing empirical studies primarily examine the direct relationship between financial services and economic development, with limited attention to the underlying mechanisms through which this relationship operates. In particular, there is a lack of context-specific evidence from the merged districts of KPK that explores the mediating role of financial inclusion in linking financial services to rural SME development.

Objective: This study aims to examine the impact of financial services on rural economic development of SMEs and to analyze the mediating role of financial inclusion in the merged districts of KPK.

Methodology: The study will adopt a quantitative research design using primary data collected through structured questionnaires from SME owners operating in rural areas of the merged districts. Data will be analyzed using structural equation modeling (SEM) to test both direct and indirect (mediated) relationships among financial services, financial inclusion, and rural economic development.

Expected Contribution: The study is expected to contribute to the literature by providing empirical evidence on the mediating role of financial inclusion in a post-conflict and underdeveloped regional context. Policy-wise, the findings may guide financial institutions and policymakers in designing inclusive financial strategies to enhance SME-led rural economic development in merged districts of KPK.

Keywords: Financial Inclusion; Financial Services; Economic Development; SME

ABSTRACT NO. CEMS-18-SS-146

ASSESSING THE IMPACT OF INEFFECTIVE EMPLOYEE PERFORMANCE EVALUATION ON GOVERNANCE OUTCOMES IN KHYBER PAKHTUNKHWA

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Purpose: This study will examine how the current Performance Evaluation Reports (PERs) and Annual Confidential Reports (ACRs) system undermines governance outcomes in Khyber Pakhtunkhwa, Pakistan. The current appraisal framework is annual, generalized, and largely subjective, lacking clear linkage with job descriptions and failing to provide real-time performance data. Consequently, it weakens accountability, reduce employee motivation, and limit administrative effectiveness. The study will evaluate the policy rationale for transitioning to a Key Performance Indicator (KPI)–based performance management system to enhance governance outcomes.

Design/methodology/approach: A mixed-methods, policy-oriented approach will be adopted. Quantitative analysis will use official file-movement records and appraisal data of 100 desk officers, while a structured survey of 300 Civil Secretariat employees will assess perceptions of the current system and readiness for KPI adoption. Qualitative insights will be drawn from legal, policy, and institutional document reviews. Structural

Equation Modeling (SEM) will be employed to explore relationships between performance measurement and governance outcomes.

Findings: The expected key finding is the misalignment of PERs/ACRs system with contemporary governance requirements, producing limited accountability, low transparency, and weak service delivery. Implementation of a legally embedded and digitally integrated KPI-based system will enhance employee motivation, accountability, administrative efficiency, and merit-based outcomes, although success will depend on political support, technical capacity, and institutional readiness.

Research limitations/implications: The study will be limited to the Civil Secretariat of Khyber Pakhtunkhwa.

Practical implications: The findings will support policy amendments and performance-linked administrative frameworks to institutionalize KPI-based evaluation.

Originality/value: The study will provide empirical evidence linking ineffective performance appraisal to governance failures and will position KPI-based evaluation as a key instrument for public sector reform in Pakistan.

Keywords: Civil Service Reform; Performance Evaluation Reports; Key Performance Indicators; Public Sector Performance; Employee Motivation, Accountability; Governance Outcomes

ABSTRACT NO. CEMS-18-SS-147

THE IMPACT OF CORPORATE GOVERNANCE ON THE EARNING RESPONSE COEFFICIENT OF LISTED NON-FINANCIAL COMPANIES OF THE PAKISTAN STOCK EXCHANGE

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Background: The current study examines the impact of corporate governance on the Earning Response Coefficient of listed non-financial companies of the Pakistan Stock Exchange. Earning Response Coefficient gain the degree to which stock prices respond to earning information and reflect the credibility of financial reporting.

Purpose: Purpose of this study is to analyze whether corporate governance mechanism increase investors' response to earning announcement in the Pakistani capital market.

Design/Methodology: A quantitative research design is adopted using panel data of non-financial firms of Pakistan Stock Exchange for the period of 2010 to 2025.

Findings: The finding of this study reveal a positive and statistically significant relationship between corporate governance and Earning Response Coefficient.

Originality/value: This study contributes to the limited literature on the corporate governance and earning response coefficient in emerging markets by providing evidence from the Pakistan. The result will be offering useful implications for the policymakers, investors and the stakeholders

Keywords: Corporate Governance; Earning Response Coefficient; Pakistan Stock Exchange; Earning Quality; Non-Financial Firms/Companies

ABSTRACT NO. CEMS-18-SS-148

ENSURING LEGAL AND SOCIAL PROTECTION FOR STREET VENDORS: OVERCOMING ECONOMIC, REGULATORY AND INSTITUTIONAL CHALLENGES

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Background: Street vendors constitute a vital segment of the informal economy, particularly in low-income urban regions, by providing affordable goods and generating employment opportunities. In cities like Peshawar, street vending plays a crucial role in daily economic activities and supports livelihoods for many marginalized groups. Despite their economic and social importance, street vendors often operate under uncertain legal and institutional conditions, facing challenges from government authorities and the public. Understanding their role, challenges, and interactions with regulatory bodies is essential for developing inclusive urban governance and social protection mechanisms.

Research Gap: Although street vending significantly contributes to employment generation and urban economies, there is a lack of comprehensive empirical research in Pakistan—particularly in Peshawar—focusing on the legal, regulatory, and social protection issues faced by street vendors. Existing studies inadequately address the absence of clear legal frameworks, the nature of interactions between vendors and authorities, and the institutional challenges arising from unregulated vending. Moreover, there is limited research incorporating perspectives of multiple stakeholders such as police, administrative officials, civil society, and the general public.

Research Objectives: The main objectives of this study are to: 1. Examine the economic and social contributions of street vendors in Peshawar. 2. Identify the key challenges faced by street vendors, including harassment, encroachment issues, and lack of legal protection. 3. Analyze the problems street vending poses for government authorities and the general public. 4. Assess the existing regulatory and institutional mechanisms governing street vending. 5. Propose a comprehensive administrative and legal framework to ensure the protection and regulation of street vendors.

Methodology: The study is based on primary data collected through a structured questionnaire survey. A total of 100 street vendors were interviewed across major markets in Peshawar, including Board Bazaar, Qissa-Khwani Bazaar, Bacha Khan Chowk, and Sadar Bazaar—areas selected due to their dense street vending activity and vibrant informal economy. Additionally, data were collected from 20 police officials across six police stations, 4 assistant commissioners, 2 deputy commissioners, 8 traffic police officials, 10 civil society members, and 30 members of the general public. Descriptive analysis was used to examine the socio-economic characteristics of vendors and the challenges faced by various stakeholders.

Expected Contribution: This study contributes to the existing literature by providing empirical evidence on the socio-economic conditions of street vendors and the institutional challenges surrounding street vending in Peshawar. The findings highlight the absence of clear laws, regulations, or a dedicated Street Vendors Act in Pakistan. Based on stakeholder insights and observed challenges, the study proposes a comprehensive administrative framework, including legal recognition of vendors, designated vending zones, licensing mechanisms, and the establishment of a vending council. These recommendations aim to support policymakers in formulating inclusive urban policies

that ensure legal and social protection for street vendors while addressing public space management concerns.

Keywords: Street Vendor; Government Authorities; Peshawar; Board Bazar Market; Qissa-Khwani Bazaar, Bacha-Khan Chowk; Informal Economy.

ABSTRACT NO. CEMS-18-SS-149

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نکاح رجسٹریشن فارم فیملی لا 1961 کے شق 1-25 کے شق وار جائزہ فقہ اسلامی کے تناظر میں

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اسلامی شادیوں میں "نکاح نامہ" سنگ بنیاد کے طور پر کام کرتا ہے جو مذہبی اور قانونی دونوں لحاظ سے اہمیت کا حامل ہے جو ایک باری بینی سے مفصل معاہدہ کے طور پر کام کرتا ہے اور ان شرائط و ضوابط کا تعین کرتا ہے جن کے تحت شادی کا معاہدہ ہوتا ہے اسی طرح یہ کہنا ہے جانہ ہوگا کہ دوہرا اور دو گنا مقصد کو پورا کرنے میں اہم کردار ادا کرتا ہے جس میں اول تو یہ کہ نکاح کے معاملے میں شفافیت اور وضاحت کے اصولوں کو برقرار رکھتا ہے یعنی اس بات کو یقینی بناتا ہے کہ اس میں شامل تمام فریقین اپنے حقوق اور ذمہ داریوں کو پوری طرح سمجھیں گے اور نبھائیں گے دوسرا یہ نبی کریم صلی اللہ علیہ وسلم کی مرتب کردہ روایت سے مطابق رکھتا ہے نبی کریم صلی اللہ علیہ وسلم نے اپنی زندگی کے دوران دیگر معاملات کی طرح نکاح جیسے اہم ترین فریضہ کے معاہدات کی دستاویزات پر زور دیا اور اس طرح یہ عمل اسلامی شادیوں میں تحریری معاہدوں کی اہمیت کو واضح کرتا ہے

قانونی آرڈیننس کی دفعہ6 کے تحت اگر کوئی مرد دوسری شادی کرنا چاہے تو اس پر چند شرائط عائد کی گئی ہے اسے پہلے اپنی پہلی بیوی سے باقاعدہ اجازت لینا ہوگی پھر یہ اجازت مصالحتی کونسل کے سامنے پیش کر کے منظوری حاصل کرنا ہوگی کون سا اجازت کے ساتھ مزید شرائط بھی لگا سکتی ہے

اگر کوئی شخص ان مراحل کو نظر انداز کر کے دوسری شادی کرتا ہے تو اسے ایک سال قید یا جرمانہ یا دونوں سزائیں ہو سکتی ہے اس قانون کی بنیاد سورہ نساء کی آیات 35 پر رکھی گئی ہے جس میں میاں بیوی کے اختلاف کی صورت میں دونوں طرف سے ایک ایک ثالث یعنی حاکم مقرر کرنے کا حکم دیا گیا ہے تاکہ وہ صلح کی کوشش کرے اسی تصور کے تحت قانون میں مصالحتی کونسل کے تشکیل دی گئی ہے جو میاں بیوی کے درمیان طلاق نان و نفقہ ہے عدت یا دیگر مسائل پر ثالثی کرتے ہیں اس کونسل میں میاں اور بیوی کے ایک ایک نمائندگی کے ساتھ ایک چیئرمین بھی شامل ہوتا ہے جو یونین کونسل کا سربراہ یا حکومت کی طرف سے مقرر کردہ فرد ہو سکتا ہے اگر فریق مقررہ وقت میں نمائندے ندے تو کونسل بغیر نمائندوں کے بھی قائم کی جا سکتی ہے

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ABSTRACT NO. CEMS-18-SS-150

دعوت و تبلیغ کے قرآنی اسلوب کا علمی جائزہ (تفسیر ذخیرۃ الجنان از مولانا سرفراز خان صفدر صاحب رحمۃ اللہ علیہ کی روشنی میں)

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اس باب میں کل تین فصول ہیں۔فصل اول میں امور بنائیہ کا تعارف پیش کیا گیا ہے۔اس میں حضرت شیخ سرفراز خان صفدررحمہ اللہ کا تعارف پیش کیا گیا ۔فصل دوم میں مقاصد قرآن کی وضاحت کی گئی جس میں اس بات کی وضاحت کی گئی کہ قرآن مجید سب سے پہلے انسان کے عقیدہ کی اصلاح کرتا ہے۔اس کو شرک و کفر کے اندھیروں سے نکالتا ہے۔اس کے اعمال کی اصلاح کرتا ہے اور ان اعمال کی طرف راہنمائی کرتا ہے جس سے خدا کی رضامندی اور خوشنودی حاصل ہوتی ہے۔اخلاق رذیلہ سے دور کرتا ہے اور اچھے اخلاق کی تلقین کرتا ہے۔فصل سوم میں دعوت،تبلیغ،امر بالمعروف ،نہی عن المنکر اور ذکر کے لغوی اور اصطلاحی معنی کو بیان کیا گیا ہے۔اس باب میں سورۃ الفاتحہ سے لے کر سورۃ الکھف کے آخر تک امر بالمعروف اور نہی عن المنکر کے قرآنی اسلوب کو تفسیر ذخیرۃ الجنان کے تناظر میں بیان کیا گیا ہے۔امر بالمعروف ونہی عن المنکر ایک اجتماعی فریضہ ہے۔حضرت شیخ صاحب نے اس بات کی وضاحت فرمائی ہے کہ امر بالمعروف فرض کفایہ ہے اور بعض افراد کے ادا کرنے سے سب کا ذمہ فارغ ہوجاتا ہے۔امر بالعروف کے لئے علم ضروری ہے۔تبلیغ دین کے لئے اس مسئلہ کا جاننا ضروری ہے جس کی تبلیغ کررہا ہے۔تمام علم کا ہونا ضروری نہیں ہے۔مبلغ کو چاہئے کہ وہ نرمی اور لطافت سے کام لے۔اچھے اخلاق اور مناسب انداز سے لوگوں کو دین کی طرف بلائے۔سخت لہجہ اپنانے سے لوگ دین اور اہل اسلام سے بیزار ہوں گے۔مبلغ کے ذمہ دین کا پہنچانا ہے۔کوئی اگر اس کو قبول نہیں کرتا تو یہ اس کی ناکامی ہے۔مبلغ کا ناکام نہیں کہا جائ گا۔قیامت کے دن کچھ نبی ایسے ہوں گے جن پر صرف چار لوگ ایمان لائے ہوں گے۔کچھ کے ساتھ تین امتی ہوں گے اور کچھ نبی ایسے بھی ہوں گے جن پر کوئی بھی ایمان نہ لایا ہوگا۔لیکن وہ تمام نبی کامیاب ہیں ،ان کو ناکام نہیں کہیں گے۔اس باب میں سورۃ مریم تا اختتام سورۃ الناس:دعوت و تبلیغ کے قرآنی اسلوب کا علمی جائزہ تفسیر ذخیرۃ الجنان کی روشنی میں پیش کیا گیا ہے۔خدا نے قرآن مجید میں مبلغین کے لئے جن صفات کا ذکر کیا ہے ان میں ایک صفت صبر کی ہے مبلغ صبر کرنے والا ہوگا۔دوسری صفت جو بیان کی گئی ہے وہ یہ ہے کہ مبلغ امثال و قصص کو بطور وعظ بیان کرے اور اس کے نتائج کو بیان کرتے ہوئ قوم کو نصیحت کرے۔اس باب میں حضرت ابراہیمؑ کے واقعات کو مبلغین کے لئے بطور مثال پیش کیا گیا ہے کہ حضرت ابراہیمؑ نے کس طرح اپنی قوم کو توحید کی طرف بلایا۔انہوں نے پوچھا کہ تم کس کی عبادت کرتے ہو۔انہوں نے کہا کہ ہمارے بت ہیں ہم ان کی عبادت کرتے ہیں۔حضرت ابراہیمؑ نے سوال کیا کہ جب تم ان کو آواز دیتے ہو تو کیا یہ تمھاری بات سنتے ہیں یا تم کو کوئی نفع یا نقصان پہنچا سکتے ہیں؟وہ جواب دیتے کہ ہم نے اپنے آباء کو دیکھا کہ وہ اسی طرح کیا کرتے تھے۔مبلغ کی ایک صفت نرمی ہے۔ خدا کو سختی مطلوب نہیں ہے بلکہ نرمی سے دین کی بات پہنچانا مقصود ہے۔فرعون جیسا نافرمان جو خدا کے مقابلہ میں خود کو خدا سمجھتا تھا اور خدائی کا دعویدار تھا ۔سینکڑوں لوگوں کا قاتل تھا۔اس نے معصوم بچوں کو ذبح کرایا لیکن جب اس کے سامنے تبلیغ کرنے کا حکم کیا گیا تو اسمیں یہ بات مد نظر رکھی گئی کہ نرمی سے بات کی جائ۔اس سے آج کے مبلغین کو سبق سیکھنا چاہئے جو درشت لہجہ کو اپنی خاصیت جانتے ہیں اور اس میں اپنی بڑائی اور فخر محسوس کرتے ہیں۔ایسے بیسیوں مبلغین ہیں جو منبر پر سخت الفاظ استعمال کرتے ہیں اور خود کو حق کا ترجمان سمجھتے ہیں،ان کو حضرت موسیؑ کے طرز عمل سے سیکھنے کی ضرورت ہے۔

ABSTRACT NO. CEMS-18-SS-151

EXPLORING MOTIVATION AND BARRIERS FOR GREEN BANKING PRACTICES IN KHYBER PAKHTUNKHWA

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Purpose: The purpose of this study will be to examine the factors that will motivate banks to adopt green banking practices and to identify the key barriers that will hinder their implementation in Khyber Pakhtunkhwa, Pakistan.

Design/Methodology/Approach: The study will adopt a cross-sectional research design, collecting data at a single point in time from 500 banking professionals. A quantitative research approach will be used. Primary data will be collected through structured questionnaires. Data will be analyzed using statistical techniques.

Findings: The findings will be analyzed and discussed after the data have been collected and processed statistically, in order to identify key motivations and barriers for green banking adoption in the region.

Research Limitations/Implications: The study will be limited to banking professionals in Khyber Pakhtunkhwa, will rely on a cross-sectional survey, and may be affected by response bias, limited sample size, and the exclusion of other stakeholder perspectives.

Practical Implications: The study will provide banks and regulators with insights to enhance the adoption of green banking practices in Khyber Pakhtunkhwa, address barriers, and leverage motivations. It will also promote sustainable financial products and environmentally responsible practices for the community.

Originality/Value: The study will be original in focusing on green banking practices in Khyber Pakhtunkhwa and will be valuable for providing practical insights to enhance sustainable banking and financial stability in the region.

ABSTRACT NO. CEMS-18-SS-153

GOVERNANCE OF GREEN FINANCE PRACTICES AND THEIR IMPACT ON SUSTAINABLE CAMPUS PERFORMANCE IN PUBLIC SECTOR UNIVERSITIES OF KHYBER PAKHTUNKHWA, PAKISTAN

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Background: In recent years, green finance has emerged as a critical instrument for promoting environmental sustainability and responsible resource management within higher education institutions. Public sector universities in Khyber Pakhtunkhwa (KP), Pakistan, face increasing pressure to improve sustainable campus performance amid financial constraints, rising energy consumption, and environmental challenges. Effective governance of green finance practices is therefore essential to ensure transparency, accountability, and optimal utilization of resources for sustainability initiatives.

Research Gap: While existing studies highlight the importance of green finance and sustainability in corporate and national contexts, limited empirical research examines the governance mechanisms of green finance practices within public sector universities,

particularly in developing regions such as Khyber Pakhtunkhwa. Moreover, the relationship between green finance governance and sustainable campus performance remains underexplored.

Objective: This study aims to investigate the governance of green finance practices and analyze their impact on sustainable campus performance in public sector universities of Khyber Pakhtunkhwa, Pakistan.

Methodology: The study will employ a quantitative research design using primary data collected through structured questionnaires administered to academic administrators, finance officers, and sustainability managers of public sector universities. Structural equation modeling (SEM) will be used to assess the relationships between green finance governance practices and key indicators of sustainable campus performance.

Expected Contribution: This study is expected to enrich the literature on green finance governance by providing empirical evidence from Pakistan's higher education sector. The findings may support policymakers and university management in developing effective green finance governance frameworks to improve sustainable campus performance in public sector universities.

Keywords: Governance, Green Finance, Sustainable Campus Performance

ABSTRACT NO. CEMS-18-SS-155

CAUSES AND CONSEQUENCES OF TIME POVERTY AMONG WORKING WOMEN IN URBAN PAKISTAN

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This paper investigates the concept of time poverty among working women in Pakistan who live in urban areas based on nationally representative data on labour Force Survey (LFS) 2021-22 (N=8,450) and the Pakistan Social and Living Standards Measurement Survey 2018-10 (N=6,780). Time poverty, which is employed [?]10.5 hours each day working paid and unpaid, applies to 47.4 per cent of urban working women. The analysis was performed by binary regression to determine determinants and OLS/ordered logit model to determine consequences and found time poverty to be systematically organized by education (0.2-year decrease probability 9,4 percentage points), Childcare burden (0-5 under decrease probability 9,4 percentage points; decrease 14.8 percentage points), marriage (0.148 percentage point increase), employment quality, and infrastructure access. The effects are dramatic: time-poor women have reduced monthly consumption by PKR 2,847 (24%), increased poor health by two times (OR=2.10), and reduced school enrolment of children by 19.6 percentage points. Time poverty is reduced, especially through infrastructure enhancement, such as piped water. Both hypotheses are verified: more educated women, having fewer caregiving duties and more household income, are less prone to time poverty, whereas economic productivity and health are negatively related to time poverty. Discover solutions to the policy intervention (such as childcare facilities, labour laws, investment in infrastructure, and social security) to escape the time trap of poverty.

Keywords: Time Poverty; Logistic Regression; Working Women; Urban Pakistan; Unpaid Care Work; Gender Inequality; Childcare Burden; Consequences; Health.

ABSTRACT NO. CEMS-18-SS-156

ASSESSING THE IMPACT OF FOREIGN DIRECT INVESTMENT (FDI), FOREIGN PORTFOLIO INVESTMENT (FPI), AND DOMESTIC INVESTMENT ON INDUSTRIALIZATION PROCESS IN A COUNTRY

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Background: Foreign Direct Investment (FDI), Foreign Portfolio Investment (FPI), and domestic investment play a significant role in shaping a country's industrialization process. Understanding their impact is crucial for policymakers seeking to promote economic growth and development.

Research Gap: Existing literature highlights the importance of FDI and FPI in industrial growth, but the role of domestic credit in this context is less explored. This study aims to fill this gap by examining the impact of domestic credit on industrialization.

Purpose: The purpose of this study is to examine the impact of FDI, FPI, and domestic investment on industrialization in 50 countries, focusing on the role of domestic credit.

Methodology: A quantitative research design will be adopted using panel data analysis to investigate the relationship between variables. The data will be collected from World Development Indicators (WDI) database, and analyzed using Stata and Smart-PLS.

Expected Contributions: The study is expected to contribute to the literature by highlighting the importance of domestic credit in industrialization, providing insights for policymakers to promote sustainable economic growth. The findings will inform policy decisions on financial sector development, investment promotion, and industrial growth strategies. By emphasizing the role of domestic credit, this study is expected to guide the policymakers in creating a conducive environment for industrial development.

Keywords: Industrialization; Domestic Credit; Foreign Direct Investment; Foreign Portfolio Investment; Economic Growth; Policymakers

ABSTRACT NO. CEMS-18-E&T -221

REVOLUTIONIZING MOSAIC WORK: THE INTEGRATION OF ADVANCED MATERIALS AND TECHNOLOGIES

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The research highlights the developmental course of the tile mosaic work. In present research, it is explained how the traditional technique gradually flourished through the ages and reached its climax in contemporary architectural surface decoration by introducing advanced materials and using technology for shaping its design compositions with durable and sustainable materials. In this context, traditional mosaics, tile mosaics, stone inlays, ceramic tiles, and smart tiles are under discussion. The research explores the transforming of traditional mosaic into modern and stylized compositions in which rectilinear and curvilinear geometrical designs enrich the architectural surfaces with use of advanced materials and the latest technologies, enlightening the future of architectural surface decoration. The study looks at how creative and complex intricate designs and advanced materials are used to maintain the traditional legacy with continuity of new materials and fulfilling the demand of present and plan for future. Mosaic work on modern buildings, particularly on the façades' external walls, gives building elevations a visually arresting style with depth, colour, and texture. Modern mosaic patterns offer rich composition to produce distinctive and striking characteristics and are also chosen for the embellishment of buildings' floors and interiors. It is a long-lasting and sustainable substance and technology that lessens the impact on surfaces.

Keywords: Mosaic Work; Architectural Surfaces; Advance Materials; Technology; Modernity

ABSTRACT NO. CEMS-18-E&T -222

A MINIMALISTIC ENCODING SCHEME WITH COLLECTIVE CRYPTOGRAPHIC ASSURANCE FOR POST-QUANTUM LIGHTWEIGHT CRYPTOGRAPHY

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This paper presents a unified framework integrating robust quantum-resistant security with native data compression for resource-constrained environments such as IoT, edge computing, and Big Data platforms. MECCA achieves 75% data reduction by combining cryptographic encoding with efficient compression using a key-dependent selection of nonlinear Boolean functions. This approach ensures perfect ambiguity and strong resilience against classical and quantum attacks, including immunity to Shor's algorithm and effective mitigation of Grover's algorithm advantages. Evolved for a fully combinational hardware implementation optimized for state-of-the-art CMOS technologies, MECCA delivers exceptional area efficiency, ultra-low power consumption, and high throughput. Beyond hardware, the scheme excels in software implementations, offering streamlined computational efficiency and adaptability across diverse platforms without compromising security or performance. MECCA outperforms existing lightweight ciphers and compression methods by providing constant-time execution and inherent side-channel resistance, enhancing protection against physical attacks in hardware and

software environments. Theoretical proofs, supported by comprehensive combinational and software simulations, validate MECCA's robust security properties and practical advantages. Benchmarking further highlights its suitability for real-time, power-sensitive, and resource-constrained applications in the post-quantum era. MECCA's scalable architecture maintains an optimal balance between compression ratio, resource footprint, and cryptographic strength, enabling seamless deployment across varied environments, including federated learning and AI systems. Its software-friendly design will facilitate integration into existing data processing pipelines and distributed computing frameworks, while the hardware-optimized implementation meets stringent area and power constraints. By harmonizing native compression with quantum-resilient encryption in hardware and software, MECCA establishes a versatile new foundation for secure communication and efficient data management tailored to the next generation of ultra-constrained computing ecosystems.

Keywords: IoT; Edge Computing; Big Data; Software; MECCA

ABSTRACT NO. CEMS-18-E&T -223

QUANTITATIVE ETHNOBOTANICAL ASSESSMENT OF THE MEDICINAL FLORA OF FATEHPUR AND SHIN VALLEYS SWAT PAKISTAN

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Background: The present study was aimed to document the indigenous knowledge of native people about the medicinal uses of local plants, and to assess the socio-economic factors responsible for the shaping, transfer, and depletion of traditional knowledge.

Methods: The present study was carried out in Union Councils Shin and Fatehpur of district Swat Pakistan. Field work for plants collection and interviews was arranged from February 2017 to October 2018. A total of 78 informants were interviewed in eight villages, which included 73 male and five female informants. Semi structured questionnaires and open-ended interviews were used for obtaining traditional knowledge from the respondents regarding plant local name, parts use, mode of recipe preparation, mode of utilization, diseases cured, precautions, dosage and duration. The data collected was analyzed by using ethnobotanical statistical indices such as use reports (URs), use values (UVs) and relative importance (RI) of the plants.

Results: In this study a total of 124 plant species, in 110 genera belonging to 65 families were documented as medicinal. Of these 58% were herbs, 26% shrubs and 16% were trees. Frequently used medicinal part of the plants were leaves (40%), followed by roots (12.8%). The most important plants of the area were *Berberis lycium* with 38 use reports (UR), 0.475 use value (UV) and 1.5 relative importance (RI); *Ajuga bracteosa*, with 29 UR, 0.362 UV and 0.93 RI; *Fumaria indica* had 23 UR, 0.287 UV and 0.94 RI, *Acorus calamus* had 19 UR, 0.237 UV and 1 RI, *Isodon rugosus* with use reports 14, use value 0.175 and relative importance 0.37, *Mentha longifolia* with use reports 13, use value 0.1625, and relative importance 0.51. These taxa were used by the inhabitants for digestive disorders, liver complaints, urinary blader and kidney ailments, blood purification, cardiovascular diseases, respiratory tract infections, skin diseases, diabetes and also as tonic and for general body weakness.

Conclusion: The results show that the area is rich in medicinal plants diversity and the local inhabitants are traditionally using medicinal flora for their primary health care. Mostly the elderly, rural, cattle rearing farmers had greater degree of knowledge.

Keywords*: Ethnobotany; Use Values; Relative Importance; Fatehpur Valley; Swat

ABSTRACT NO. CEMS-18-E&T -224

ANTIBACTERIAL EFFICACY OF SILVER NANOPARTICLES FROM THYMUS LINEARIS, A HIGH VALUED MEDICINAL HERB

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The synthesis of metal nanoparticles via the green route is a simple, ecofriendly, and economical method with numerous biological applications. Biosynthesized silver nanoparticles (AgNPs) have been found effective in the control of pathogenic microorganisms. This study presents, the green synthesis of AgNPs from the aqueous leaf extract of *Thymus linearis* Benth., (TL-AgNPs) and its antibacterial potency against plant pathogenic bacteria. *T. linearis* plant extract was used for phytochemical evaluation and antioxidant potential. HPLC analysis of the methanolic leaf extract revealed 16 phenolic bioactive compounds. The highest total phenolic contents (TPC) 49.01 mg GAE (gallic acid equivalents)/g were found in the methanolic extract, while the total flavonoid contents (TFC) were prominent at the concentration of 1000 μg/mL equivalent to 60.07 mg QE (quercetin equivalent)/g. The Uv-Visible analysis showed a highest absorbance at the wavelength of 430 nm. The FTIR study showed various functional groups existing on the surface of silver nanoparticles. The SEM, TEM and XRD characterization showed spherical shaped particles with an average size of 38 nm for cubic crystals of TL-AgNPs. Additionally, the antibacterial efficacy of TL-AgNPs were checked against phytopathogenic bacteria, including *Erwinia carotovora, Ralstonia solanacearum, Xanthomonas campestris* and *Xanthomonas oryzae.* Maximum antibacterial efficacy was observed for the combined solution of silver nanoparticles and leaf extract (AgNPs-LE) in 1:1 ratio. The effectiveness of AgNPs-LE was due to the presence of plant important secondary substances that increased inhibitory effects of silver metals. Our findings provide an optimize protocol for the control of plant pathogens using biosynthesized silver nanoparticles. Biosynthesized nanoparticles can have promising prospects in the control of plant diseases thereby ensuring food security and agricultural sustainability.

Keywords: Antibacterial Activity; Pathogenic Bacteria; Nanoparticles; Antioxidant Activity, *Thymus linearis.*

ABSTRACT NO. CEMS-18-E&T -225

MANIPULATION OF ROTARY PHOTON DRAG IN SODIUM ATOMIC MEDIUM AND SIO2 SLAB USING BRAGG'S DIFFRACTION LAW

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The manipulation of light–matter interaction in rotating media has attracted significant attention in quantum optics due to its potential applications in optical information processing and image manipulation. In particular, the rotary photon drag effect, which arises when light propagates through a spinning dispersive medium, provides a powerful mechanism for controlling optical rotation and image displacement. The present study investigates the manipulation of rotary photon drag in a four-level sodium atomic medium embedded within a crystalline silicon dioxide (SiO_2) slab using Bragg's diffraction law. Methods: A theoretical model based on density matrix formalism is developed for a four-level sodium atomic system doped into a SiO_2 crystalline slab. The interaction of probe, control, and coupling fields is analyzed by solving the optical Bloch equations to obtain the probe coherence. The electric susceptibility, refractive index, and group index of the medium are derived, incorporating the effects of Bragg's diffraction angle and Miller indices. Numerical simulations are performed using Mathematica to examine the dependence of rotary photon drag on spatial coordinates, Bragg angle, and spinning angular velocity of the medium. Results: The results reveal significant normal rotary photon drag under Bragg diffraction conditions. For a spinning angular velocity of ±20 rad/s and medium length of $L = 100\lambda$, the rotary photon drag varies within the range $0 \leq |\theta\_d| \leq 0.03$ rad. The magnitude and distribution of rotary photon drag exhibit strong dependence on Bragg angles and Miller indices, leading to the enhancement and degradation of Bragg peaks. Increasing the Bragg angle results in a higher number of rotary photon drag peaks, confirming precise controllability of optical rotation in the doped medium. Conclusion: This study demonstrates that Bragg's diffraction law provides an effective mechanism for manipulating rotary photon drag in a sodium atomic medium embedded in a SiO_2 slab. The controllable enhancement of normal photon drag through structural and optical parameters highlights the potential of this system for applications in image rotation, dual image coding, and slow-light-based photonic devices.

Keywords: Rotary Photon Drag; Bragg's Diffraction; Sodium Atomic Medium; Silicon Dioxide; Quantum Optics

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CHALLENGES AND SOLUTIONS IN ADOPTING SCALED AGILE FRAMEWORK FROM AGILE SOFTWARE DEVELOPMENT TEAM PERSPECTIVE

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The process of software development has been changed due to large adoption of agile methods. Agile methods provide dynamic approaches, principles and practices specifically related to small software projects, where the flexibility and responsiveness is more visible. The desire to apply the same methods to larger, more complex projects has

been motivated by the success of agile at small projects. Scaling agile to large-scale projects and organizations poses several challenges. To address these challenges, numerous Large-scale Agile Software Development (ASD) frameworks have been developed to make the process of applying agile at large in more effective way. The most popular and widely used agile scaling framework is Scaled Agile Framework (SAFe). SAFe is an emerging agile framework with structured methods for implementing agile techniques at large-scale. Even though SAFe has become very popular, it is important to note that it is still a relatively new like any other framework. This study focuses on investigating the specific challenges that the ASD teams encounter while adopting the SAFe. After exploring these challenges from the ground up, we also aim to provide practices/solutions for the identified challenges. Our goal is to shed light on the potential challenges and offer solutions to overcome them, ultimately helping companies and organizations to harness the full potential of agile at scale using the SAFe. This study employed a two-tiered methodology to investigate the challenges and potential solutions associated with the SAFe adoption. Initially, a comprehensive systematic literature review (SLR) was undertaken to establish the current state of knowledge and extract pertinent data from existing scholarly literature. This SLR provided a foundational understanding of the challenges encountered by practitioners in implementing the SAFe. To complement the SLR and validate its findings, an online survey was conducted with ASD practitioners. Through this dual-phase approach, the study identified a total of 8 distinct challenges faced by practitioners in their SAFe adoption efforts. Corresponding to these challenges, a set of 47 potential solutions were determined, offering valuable guidance for organizations seeking to successfully implement the SAFe.

Keywords: Agile Framework; Agile Software; Challenges; SLR; Online Survey

ABSTRACT NO. CEMS-18-M&HS-321

EFFECT OF LIPID-BASED MULTIPLE MICRONUTRIENTS SUPPLEMENTATION IN UNDERWEIGHT PRIMIGRAVIDA PRE-ECLAMPTIC WOMEN ON MATERNAL AND PREGNANCY OUTCOMES: RANDOMIZED CLINICAL TRIAL

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Background and Objectives: In pre-eclampsia, restricted blood supply due to the lack of trophoblastic cell invasion and spiral artery remodelling is responsible for adverse pregnancies and maternal outcomes, which is added to by maternal undernutrition. This study was designed to observe the effect of multiple nutritional micronutrient supplements on maternal and pregnancy outcomes of underweight pre-eclamptic women.

Materials and Methods: A total of 60 pre-eclamptic, underweight primigravida women from the antenatal units of tertiary care hospitals in the Khyber Pakhtunkhwa Province, Pakistan, were randomly divided into two groups (Group 1 and Group 2). The participants of both groups were receiving routine treatment for pre-eclampsia: iron (60 mgs) and folic acid (400 ug) IFA daily. Group 2 was given an additional sachet of 75 gm LNS-PLW daily till delivery. The pregnancy outcomes of both groups were recorded. The clinical parameters, haemoglobin, platelet count, and proteinuria were measured at recruitment and delivery.

Results: The percentage of live births in Group 2 was 93% compared to 92% in Group 1. There were more normal vaginal deliveries (NVDs) in Group 2 compared to Group 1 (Group 2, 78% NVD; group 1, 69% NVD). In Group 1, 4% of the participants developed eclampsia. The frequency of caesarean sections was 8/26 (31%) in Group 1 and 6/28 (22%) in Group 2. The number of intrauterine deaths (IUDs) was only 1/28 (4%) in Group 2, while it was 2/26 (8%) in Group 1. The gestational age at delivery significantly improved with LNS-PLW supplementation (Group 2, 38.64 ± 0.78 weeks; Group 1, 36.88 ± 1.55 weeks, p-value 0.006). The Apgar score (Group 2, 9.3; Group 1, 8.4) and the birth weight of the babies improved with maternal supplementation with LNS-PLW (Group 2, 38.64 ± 0.78 weeks: Group 1, 36.88 ± 1.55; p-value 0.003). There was no significant difference in systolic blood pressure, while diastolic blood pressure (Group 2, 89.57 ± 2.08 mmHg; Group 1, 92.17 ± 5.18 mmHg, p-value 0.025) showed significant improvement with LNS-PLW supplementation. The haemoglobin concentration increased with the LNS-PLW supplement consumed in Group 2 (Group 2, 12.15 ± 0.78 g/dL; Group 1, 11.39 ± 0.48 g/dL, p-value < 0.001). However, no significant difference among the platelet counts of the two groups was observed.

Conclusions: The pregnancy and maternal outcomes of underweight pre-eclamptic women can be improved by the prenatal daily supplementation of LNS-PLW during pregnancy, along with IFA and regular antenatal care and follow-up.

Keywords: Pre-eclampsia; Lipid-based Nutritional Supplements; Pregnancy Outcome; Maternal Outcome; Khyber Pakhtunkhwa

ABSTRACT NO. CEMS-18-M&HS-322

NANO BOOST: ENHANCING ANTIBACTERIAL EFFICACY OF CEFTRIAXONE WITH MAGNESIUM OXIDE NANOPARTICLES TO TACKLE ANTIMICROBIAL RESISTANCE

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Background: Antimicrobial resistance is a leading issue for one health perspective. Researchers are working to cope with this issue through different approaches like discovering new antibiotics, Peptide-like substances, computer aided antibiotics, nano biotics etc. The antibacterial effect of metallic nanoparticles (NPs) has been observed but they are cytotoxic at higher doses. In this study, we are aimed to determine the boosting of antibacterial effect of resistant antibiotic (Ceftriaxone) using nanoparticles [Magnesium oxide nanoparticles (MgO NPs)] and thus obtaining a good antibacterial effect of NPs at lower doses.

Methodology: Salmonella typhi and MRSA stain were selected as test organism as it is not susceptible to Ceftriaxone. The MgO NPs was synthesized as prescribed by Narendran et al. (2019). Conjugation of MgO with Chitosan (CS) to prepare CS-MgO NPs. Then, CS-MgO NPs was conjugated with ceftriaxone to obtain Ceftriaxone-CS-MgO. Invitro drug release

kinetics was performed through membrane dialysis technique. The conjugation ability of ceftriaxone was assessed and characterization of Ceftriaxone-CS-MgO NPs was done through the use of visible spectroscopy, transmission electron microscopy and X-Ray diffraction. The antibacterial efficacy of Ceftriaxone, MgO NPs and Ceftriaxone-CS-MgO NPs against S. typhi and MRSA strains was evaluated using disc diffusion method. The Minimum inhibitory concentration (MIC) of ceftriaxone, MgO NPs and Ceftriaxone-CS-MgO NPs was assessed on 96 well plates.

Results: The size of MgO NPs, CS-MgO NPs and Ceftriaxone-CS-MgO NPs ranges between 6 to 18nm, 37nm and 40nm respectively and all had spherical shape. The ceftriaxone-CS-MgO NPs have enhanced antibacterial activity than MgO NPs and Ceftriaxone alone. The highest reduction in the MIC of ceftriaxone-CS-MgO NPs was noted against tested strains ranging from 22% to 96%. Ceftriaxone-CS-MgO NPs have no cytotoxic effects on normal cells at low doses.

Conclusion: The study successfully enhanced the antibacterial effect of Ceftriaxone through conjugation with MgO NPs. This research holds promise to address antimicrobial resistance by producing high antibacterial outcomes at low doses of antibiotics and explore potential of ceftriaxone-CS-MgO NPs to combat multi drug resistant bacterial infections.

Keywords: Antibacterial Efficacy; Ceftriaxone; Nanoparticles; Antimicrobial Resistance

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ARTIFICIAL INTELLIGENCE TRANSFORM MICROBIAL ANALYSIS IN MICROBIOLOGY LABORATORIES

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Recent advances in advanced microbiology generate complex datasets in the form of high-resolution microscopy image and colony morphology that has been converted into genomics, metagenomics, and multi-omics. It requires computational methods with the strength to manage large-scale high dimensional data sets. Artificial intelligence (AI) which allows the microbiology laboratories to detect and analyze microbes faster, and accurately. Conventional microbiology techniques, including culture-based, microscopic tests, and manually colony counter are both time consuming, intensive and more chances to manual error. AI, machine learning (ML) in particular, offer the tools to help counter all of these challenges, introducing pattern recognition, predictive modeling, and automation into the laboratory processes. Image-based analysis is considered one of the major uses in microbiology laboratories. AI-assisted microscopy allows monitoring of cellular changes, study microbial physiology, and cell division. Similarly, time-lapse imaging combined with AI can measure the microbial growth rates, morphological transitions, and population heterogeneity, providing insights into microbial adaptation under environmental or chemical stressors. In genomics and metagenomics, whole-genome sequences or shotgun metagenomic datasets can identify known and novel microbes, and emergence of resistance genes. Similarly, analyze microbial community composition, dynamics, and functional potential in soil, water, and bioreactor systems. In conclusion, AI represents a transformative technology, enhancing diagnostic speed, accuracy, and

reproducibility while enabling novel insights into microbial behavior and adaptation. The traditional laboratory methods combine with computational intelligence, supports a new era of high-throughput, data-driven microbiology.

Keywords: Artificial Intelligence; Microbial Analysis; Microbiology; Genes; Resistance

ABSTRACT NO. CEMS-18-M&HS-324

AUTOMATED PNEUMONIA DETECTION FROM CHEST X-RAY IMAGES USING TRANSFER LEARNING WITH DENSENET ALGORITHM

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Pneumonia is a disease that poses a serious threat to global health, particularly among children and elderly populations. The chest X-Fray imaging is extensively applicable with the diagnosis of pneumonia although manual interpretation may be time-consuming and be subject to human error. This paper introduces a system of automated pneumonia detection based on deep learning and transfer learning methods. The suggested system follows a pre trained DenseNet121 Convolutional Neural Network (CNN) as a feature extractor) and uses personal classification layers to classify chest X-ray images into \textit{normal} and pneumonia using binary classification. Image pre-processing involves resizing, normalization and data augmentation to increase model strength and decrease overfitting. The model is trained and tested using the publicly available Chest X-ray Pneumonia dataset. Accuracy, precision, recall, F1-score, confusion matrix, and ROC-AUC are used to calculate performance. As evidenced by the experiment, the proposed method is associated with high-quality classification, which indicates that it can be used as a trusted computer-aided diagnostic tool to facilitate radiologists in the timely detection of pneumonia.

Keywords: Pneumonia; Chest; X-Ray; Global Health; Population; Children

ABSTRACT NO. CEMS-18-M&HS-325

THE IMPACT OF DIGITAL FINANCIAL INCLUSION AND ESG DISCLOSURE ON SUSTAINABLE ECONOMIC GROWTH: EVIDENCE FROM GLOBAL PERSPECTIVE

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This study investigates the impact of digital financial inclusion and ESG on sustainable economic growth. This study is based on panel data analysis for which data is collected from World Bank and IMF websites, respectively, from 2014 to 2023. This study uses data portal G20, FII developed by GPFI powered by World Bank's Data Group. Various indicators powered by these groups are aggregated through PCA method into various dimensions and these dimensions resulting in an Index. The research paper uses the panel

regression OLS with fixed effect to examine the association between digital financial inclusion, environmental, social and governance dimensions and sustainable economic growth by applying two-step system GMM (generalized model of moments) to determine the endogeneity issues of the variables. The control variable used in this research are population growth, government expenditure, inflation, unemployment with advance education, population density. The study identified that DFI has positive and significant impact on sustainable economic growth. ESG has positive and significant impact. Finally, based on the empirical findings, the study recommends some policy implications to the regulators of DFI and ESG on SEG. The result show that digital financial inclusion and ESG could strengthen the sustainable economic growth.

Keywords: DFI; ESG; SEG; Population Growth Rate Population; Density; Government Expenditure on Education; Inflation; Unemployment

CONFERENCE POLICY BRIEFINGS

Executive Summary

The 18th EMS International Research Conference brought together multidisciplinary scholars to explore how data, technology, and innovation can advance economic freedom and prosperity. To sustain the intellectual momentum generated in Makkah, this policy brief proposes a structured framework for developing a high-impact, globally visible, and policy-relevant *Conference Proceedings Book*.

The proceedings should evolve beyond a compilation of abstracts into a strategically curated academic and policy document that contributes to research excellence, institutional reputation, and international collaboration.

Policy Problem

Conferences are being conducted by different institution wherein researchers present their papers and share ideas that carry solution to the problems. However, it has beeb found that conference abstract books document participation and is kept as a record. The result is limited international indexing and citation visibility and do not translate research into actionable policy insights. This approach tends to miss opportunities for institutional branding and global partnerships.

Given the caliber of keynote speakers—including academic leaders and international policy experts such as representation from Atlas Network—the proceedings book must reflect global academic standards and policy relevance.

Policy Objective

The purpose of this Abstract Book is not only to compile the participants but to develop a peer-reviewed, thematically structured document and to disseminate it internationally. This will enhance academic credibility and citation impact; strengthens EMS's institutional brand; translate research into policy and practice; builds long-term international research networks; and positions EMS conferences toward Scopus-indexed proceedings in the future.

Policy Implications

Managerial Recommendations

Alignment with SDGs	This will enhance usability for policymakers, development partners, and academic institutions.
Internationalization & Indexing Strategy	Obtain ISBN; develop a digital open-access version via the EMS website; submit for indexing in Google Scholar and other recognized databases; and long-term goal: transition toward Scopus-indexed conference proceedings within 3–5 years.
Branding & Institutional Visibility	Foreword by Conference Chair; message from Vice Chancellors; section on International Collaboration; acknowledgment of global partners; highlight keynote insights and institutional leadership contributions to reinforce EMS's academic credibility.

Top 10 Research Insights

1. **AI is Transforming HR and Employee Experience:** AI tools can reduce implicit bias in recruitment but may amplify algorithmic bias if training data is skewed. Employee trust depends on transparency and explainability.

2. **Financial Inclusion is a Critical Mediator of Rural SME Growth:** Access to credit alone is insufficient—financial inclusion mechanisms significantly mediate rural economic development in merged districts of Khyber Pakhtunkhwa.

3. **Governance Failures Undermine Public Sector Performance:** Traditional PERs/ACRs appraisal systems in KP lack KPI linkage, weakening accountability, transparency, and service delivery.

4. **Bureaucratic Inefficiencies Delay Health Research Impact:** Political interference and administrative bottlenecks significantly reduce effectiveness of MNCH and other public health projects.

5. **Time Poverty Severely Affects Urban Working Women:** Nearly half of urban working women experience time poverty, leading to reduced income, poorer health, and lower educational outcomes for children.

6. **Green Finance Governance Enhances Sustainable Campus Performance:** Effective governance of green finance practices directly improves sustainability performance in public sector universities.

7. **Interest Rate Volatility Influences Investment Strategy in Emerging Markets:** Frequent monetary tightening cycles in Pakistan create uncertainty in stock markets and corporate financial planning.

8. **Organizational Culture Determines Workplace Safety:** In high-risk sectors like PESCO/WAPDA, safety-oriented culture strongly predicts effective electrical hazard management.

9. **Zero-Waste School Culture is a Viable Climate Mitigation Strategy:** School leaders show strong support for plastic reduction, recycling, and community-based sustainability initiatives.

10. **Adaptive & Technological Innovations Drive Sectoral Transformation:** From post-quantum cryptography to adaptive clothing and green nanotechnology, technology-enabled innovation is reshaping health, agriculture, architecture, and data security.

Top 10 policy recommendations

1. **Institutionalize Ethical AI Governance Frameworks:** Adopt AI transparency standards, bias audits, and hybrid human–AI decision models in recruitment and performance systems.

2. **Expand Financial Inclusion Infrastructure in Merged Districts:** Promote digital banking, microcredit, SME training, and credit guarantee schemes to strengthen rural enterprise ecosystems.

3. **Transition to KPI-Based Performance Systems in Public Sector:** Digitally integrated KPI frameworks should replace subjective ACR/PER systems to enhance governance efficiency.

4. **Decentralize Health Research Project Management:** Empower project managers with decision authority and reduce bureaucratic approval layers in health institutions.

5. **Introduce Urban Childcare and Flexible Work Policies:** Public-private childcare facilities and flexible labor laws can significantly reduce time poverty among working women.

6. **Mandate Green Finance Governance in Universities:** Public universities should create sustainability finance committees and allocate green budgets tied to measurable outcomes.

7. **Strengthen Monetary Policy Communication:** Clear forward guidance from the State Bank can reduce investor uncertainty and stabilize emerging markets.

8. **Embed Safety Culture Programs in Utility Organizations:** Mandatory safety audits, employee training, and leadership accountability frameworks should be institutionalized in power distribution companies.

9. **Implement School-Based Climate Action Policies:** Introduce zero-waste campaigns, plastic bans, and sustainability curriculum integration at federal and provincial levels.

10. **Develop Legal Framework for Informal Economy Protection:** Introduce a Street Vendors Act ensuring licensing, designated zones, and social protection mechanisms for urban informal workers.

Conclusion

The 18th EMS International Research Conference demonstrated intellectual diversity and policy relevance across social sciences, management, health, technology, and sustainability. To truly "Build the Future," the conference proceedings must move from documentation to strategic knowledge production.

A well-structured, peer-reviewed, policy-oriented proceedings book will position EMS as a regional leader in research dissemination and global academic engagement.

Conference Statistics

Total Received Abstracts	**186**
Total Accepted	**67**
Total Registered (in Person)	**25**
Total Registered (Virtual)	**22**
Total Presented	**47**