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THE MALDIVES NATIONAL UNIVERSITY

INTERNATIONAL CONFERENCE 2025

Evolving Paradigms: Merging Research, Evidence, and Practice

18 - 20 AUGUST | The Maldives National University

ABSTRACTS

Theveli

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About Theveli Conference 2025

Theveli is a multidisciplinary research conference, held annually since 2017, with an overarching theme for each year. The theme for 2025 is "Evolving Paradigms: Merging Research, Evidence, and Practice".
For this year, papers are categorized under the following sub-themes:

- Innovative Approaches and sustainable practices in Ocean and Environmental Sciences
- Bridging Theoretical Knowledge with Educational Practices
- Data-Driven and Evidence-Based Insights in Integrative Approaches to Public Health
- Merging Evidence-Based Research with Clinical Expertise and Patient Centred Care
- Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement
- Innovative Expressions Merging Artistic Creativity, Cultural Contexts, and Linguistics
- Bridging Science, Policy, and Sustainable Practices in Fisheries and Agriculture
- Innovative Strategies for Business and Organizational Management:
- Merging Emerging Future Ready Technologies with Practical Applications
- Bridging Smart and Sustainable Innovations in the Built Environment with Practical Engineering Challenges
- Integrating Emerging Trends with Tourism and Hospitality Practices
- Faith and Knowledge: Integrating Islamic Principles with Contemporary Practice
- Blending Traditional Jurisprudence with Contemporary Legal Practices and Access to Justice.
- Merging International Relations Theory with Geopolitical Practice
- Exploring innovations in training, injury prevention, sports psychology, and performance enhancement.
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"Theveli" is a Dhivehi (Maldivian language) word which means rays spread on the sea (or water) at sunset or sunrise. The Maldives National University strives to spread rays of knowledge throughout the nation, region and beyond.

Keynote Speakers



Ass Professor Dr. Nurazzura Mohamed Diah

Dr. Nurazzura Mohamad Diah is an Associate Professor at the Department of Sociology and Anthropology, AHAS KIRKHS, International Islamic University Malaysia (IIUM). She received her PhD from the University of Western Australia, Perth in the field of Medical Anthropology. Later, she obtained her Diploma in Digital Entrepreneurship from LRN, UK. Prior to that, she has completed the Digital Entrepreneurship training with Malaysia Digital Economy Corporation (MDEC) and has been teaching Digital Entrepreneurship as part of the course syllabus since 2018. In 2022, she was appointed as the Head of Academic & Social Entrepreneurship in the Entrepreneurship Development Centre by the university and later received certification as entrepreneurial leader by the Higher Education Leadership Academy (AKEPT). She received several certifications like Google Educator, Cooperative Management, Risk Management. For record, she has trained more than 340 students in Digital Entrepreneurship at the department, coaching students in business pitching, skills, networking and planning. Currently, she trains entrepreneurs in the community.



His Honour Judge Malcolm Simmons

His Honour Judge Malcolm Simmons is a UK-qualified lawyer and judge. Currently, he is Resident judge and His Majesty's Coroner of the Falkland Islands, South Georgia, South Sandwich Islands and the British Antarctic Territory. He is also a judge of the Supreme Court of St. Helena. Judge Simmons has served as an international judge for over 20 years. In 2004, he was appointed an international judge of the Court of Bosnia and Herzegovina, assigned to the war crime and serious organised crime panels. In 2008 he was appointed an international judge of the Supreme Court of Kosovo and presided in many war crimes and serious organised crime cases. In 2014, he was appointed President of EU international judges. Judge Simmons has also served on judicial councils in Bosnia & Herzegovina and Kosovo. In addition to his judicial role, since 2017, Judge Simmons has been an international justice adviser and has worked in Maldives, Pakistan and Serbia. At the request of the Maldives Judicial Academy, Judge Simmons assessed the Judicial Training curriculum and advised on reform of judicial training and developed training modules and materials. Most recently, Judge Simmons developed and rolled-out a judicial performance evaluation scheme in the Maldives. In 2022, Judge Simmons was invited to lead the European Commission project, 'Supporting Justice Reform and Anti-Corruption' in Maldives. Following the successful completion of that project, he was requested by the European External Action Service to assist in designing the EU's continuing engagement with the Maldives judiciary. Judge Simmons is a judicial trainer at the Judicial Education Institute and has delivered training across the Caribbean.



Professor Dr Christian Bueger

Christian Bueger is a professor of international relations at the University of Copenhagen and a research fellow at the United Nations Institute for Disarmament Research (UNIDIR). He is the author of Understanding Maritime Security (Oxford University Press, 2024, with Timothy Edmunds) and has explored questions of international security and global governance in more than 200 publications. He is a regular speaker at international maritime events, and has briefed the UN Security Council, the European Parliament among others. He holds a PhD from the European University Institute. Further information is available on his personal website.



Dr. Scott G. Blair

Scott G. Blair, PhD, is Content Development Editor at Sulitest Impact, a social enterprise dedicated to assessing sustainability literacy in higher education. His recent roles include Director of Accreditation and Quality Assurance at AIAASC; Vice President of CANIE-Europe; and Affiliate at the Gateway International Group, LLC. He served on the faculties of the University of New Haven, the Institut National des Sciences Politiques, the Institut National des Langues et Civilisations Orientales, and the American University of Paris. He was Resident Director at Boston College Paris and Director of Assessment & Sustainability at TEAN. His research appears in Frontiers, Routledge and Stylus publications and he is a regular speaker at educational conferences on learning outcomes assessment and international program design around sustainability literacy, ecopedagogy, and the UN Sustainable Development Goals. Blair holds a doctorate in history from the Sorbonne, an MA from Georgetown University, and a BA from Miami of Ohio.

Abstracts

A total of 239 abstracts were submitted for this year's conference. This year the number of accepted abstracts is 198.

Authors affiliated with institutions from Maldives, United Arab Emirates, Thailand, Germany, Malaysia, United States of America, Nigeria, India, Egypt, Kenya, Pakistan, Sri Lanka, United Kingdom, Palestinian Authority, Hungary, France, Australia, and Bangladesh are to present their papers at this conference.

This year's abstracts are compiled in the following pages, arranged by sub-themes 1 to 15.

Sub-theme 1: Innovative Approaches and Sustainable Practices in Ocean and Environmental Sciences

23 Abstracts



Assessing Sustainability Knowledge Among Academic Staff at The Maldives National University

Aminath Shiyama, Raheema Abdul Raheem, Mohamed Shareef, Aminath Shaahy
The Maldives National University

Abstract
Sustainability knowledge is vital for fostering environmentally responsible behaviours and advancing national and global Sustainable Development Goals (SDGs). As the leading higher education institution in the Maldives, The Maldives National University (MNU) holds a strategic role in embedding sustainability into education and institutional practices. However, there is limited baseline data on the current level of sustainability awareness within its community. This study aimed at assessing the sustainability knowledge of MNU academics through a structured survey designed to evaluate understanding across the three pillars of sustainability: environmental, social, and economic domains. Key focus areas include climate change, waste management, energy conservation, and sustainable policy awareness. The survey was designed to identify sustainability knowledge for each domain. Preliminary data analysis shows a gap between the knowledge levels for each domain of sustainability where environmental sustainability knowledge is more common. The data collected served as a foundational benchmark to inform targeted interventions, including curriculum development, staff and student training, and awareness campaigns. These initiatives will contribute to achieving MNU's strategic sustainability goals and align with the Maldives' broader commitment to sustainable development. Further, the outcome of this research stands to provide valuable insights for other Small Island Developing States (SIDS) facing similar sustainability challenges. By building on this baseline, MNU can lead by example in integrating sustainability into higher education in the region.

Keywords: *sustainability awareness, higher education, Maldives, sustainable development goals, MNU, SIDS, climate education*

Empowering Island Communities: The Parley Maldives AIR Challenge in Combating Marine Plastic Pollution and Fostering Sustainable Practices

Fathimath Nafha Asim
Parley, Maldives

Abstract

Parley Maldives, a local chapter of Parley for the Oceans, is advancing systemic responses to marine plastic pollution through its AIR Strategy (Avoid. Intercept. Redesign). This strategy is primarily implemented through the school AIR Challenge (a network of intercepting hubs across the country) and collaboration mechanisms with the hospitality industry, corporates and government agencies. The Parley school AIR Challenge has emerged as a key driver of behavioral change, empowering students to apply the AIR Strategy in daily life—refusing single-use plastics, intercepting waste through collection points, and redesigning solutions via creative reuse and advocacy. This hands-on engagement fosters lasting environmental stewardship and peer-led change across communities. By 2025, the initiative had mobilized 72,348 participants, including 47,702 youth across 154 schools and a diverse network of partners. Interception activities now span 121 islands, engaging 70 resorts, 58 island councils and women development committees (WDCs), 54 cafes, 17 guesthouses, 112 schools, 89 households, 51 government/corporate/non-governmental organization bodies, and 68 boats. Through 737 cleanup events, over 135,605.9 kg of plastic has been recovered, contributing to 3,144.54 metric tonnes exported and repurposed as Ocean Plastic, a symbol of circular innovation. Alongside interception, Parley Maldives School AIR program facilitated 139 Avoid, 53 Intercept, and 103 Redesign activities, aimed at changing behaviors and design mindsets. Educational programs such as Reef and Me have reached 650 children, and 3,617 family members have been engaged, deepening intergenerational commitment to ocean stewardship. An estimated 4.3 million plastic items were prevented from entering the environment, underscoring how local action can achieve measurable impact at scale. This paper examines the initiative's community-driven, data-informed strategies and highlights the power of regional collaboration, environmental literacy, and interdisciplinary partnerships in addressing plastic pollution in Small Island Developing States.

Keywords: *waste minimization, plastic pollution, parley air strategy, plastic interception, ocean conservation*

Application of Satellite Derived Vegetation Indices to Quantify Island-Scale Coastal Erosion

Aishath Udhuma Ahmed[1], Nashwan Matheen[2]
1.Housing Development Corporation, 2. Maldives Space Research Organization

Abstract

More than 97% of inhabited islands in the Maldives reported beach erosion in 2004, of which 64% reported severe beach erosion. However, quantifying the scale and strength of erosion on an island-by-island basis using traditional surveying resources is challenging due to the natural geographical dispersion of the islands. The aim of this study is to demonstrate a method to determine coastal erosion in a systemic manner over large spatial extents, including the number of islands which are eroding, the rates of this erosion, and whether there are existing spatial patterns to this erosion. This study uses atmospherically corrected Sentinel-2 imagery at 10-meter resolutions to extract NDVI (Normalized Difference Vegetation Index) contours which best correlate with the outermost vegetation line of the island. Evaluating the area represented by this contour over time signifies a change in the stable vegetated core, and thereby coastal erosion. This method utilises remote sensing techniques and data within Geographic Information Systems that are open access and freely available, which allows us to observe changes in the size of islands from 2016 onwards, which can be directly correlated with island erosion. The method has been initially applied to five islands spanning the length and breadth of the Maldives. It presents an opportunity to gather a comprehensive dataset on coastal change within the Maldives over past 10+ years, improving our understanding of island dynamics, determining the criticality of coastal erosion for the islands, and providing the foundation for implementation of improved and effective coastal erosion mitigation strategies.

Keywords: *erosion, NDVI, Sentinel-2, GIS, Maldives*

Synchrony on the Reef: How Environmental Factors Shape Coral Spawning Patterns in Acropora Corals in The Maldives

Amelia Errington
Reefscapers

Abstract

Elucidating our knowledge on the reproductive phenology of scleractinian corals and the environmental drivers of reproductive synchronicity is pivotal for assessing gene flow between populations and the potential for ecosystem recovery. The timing of gamete release in sessile broadcast spawning corals is key to successful reproduction and is dependent on a complex interaction between an organism's genes and external environmental factors. In this study, we assessed the effect of various environmental factors on the spawning timing and synchronicity of Acropora corals in the Maldives. A total of 3,026 colonies from 24 species of Acropora were recorded spawning between October 2021 and May 2024: 1,709 from 20 species in North Male Atoll and 1,317 from 18 species in Baa Atoll. Generalised linear models (GLMs) were used to estimate the effect of average daily wind speed, total daily precipitation, tide depth, and mean sea surface temperature (SST) over a 30-day period prior to spawning, on the proportion of colonies to spawn per day and the spawning day deviation to full moon. Models were run for all Acropora corals, and three species with over 30 days of spawning observations: A. secale, A. tenuis, and A. humilis, to determine species-specific relationships. We found that SST change does not determine the likelihood of spawning in each month but significantly predicts the number of colonies spawning per month. SST as a predictor of probability or synchronicity can be species specific. Daily precipitation showed a significant, positive correlation with spawning proportion, with interspecies variation. A higher proportion of colonies spawned closer to the full moon, and these events were significantly correlated with lower tide depths across both atolls. These findings support targeted conservation measures, such as in-situ larval settlement, and highlight the importance of environmental and species-specific factors in predicting Acropora spawning.

Keywords: *coral, spawning, reproduction*

A Data-Driven Classification to Identify the Islands Most at Risk in The Maldives and To Evaluate Their Climate Change Adaptation Potentials

Ahmed Waheed[1], Gerd Masselink[2], Timothy Poate[2], Lauren Biermann[2]
1.The Maldives National University, 2. University of Plymouth

Abstract

Coral atoll islands, such as those in the Maldives, demonstrate landscapes acutely vulnerable to climate change-driven sea-level rise (SLR) and related coastal hazards. These challenges, including recurrent flooding, shoreline erosion, and salinization of freshwater lenses, directly threaten the sustainability of human habitation and livelihoods. Building on insights from previous studies, atoll islands continue to exhibit inherent dynamism, offering paths for adaptive responses that will complement ecological resilience with engineered solutions. This research employs clustering to classify Maldivian islands based on critical variables, including demographic density, wave energy exposure, and the extent of coastal defences. The analysis reveals six distinct island typologies, each characterized by specific socio-environmental challenges and opportunities for adaptation. Findings stress the critical need for tailored adaptation frameworks specific to islands reinforcing the importance of avoiding generalized approaches, promoting the equitable allocation of resources to enhance resilience across diverse island contexts. The findings of this study maybe useful for shaping adaptive policies in atoll nations facing similar climate challenges worldwide.

Keywords: *coral atoll islands, sea-level rise (SLR), natural island adaptation*

Adaptation Archive: Field Notes from Tracking Climate Adaptation in The Maldives

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Abstract

As a low-lying island nation, the Maldives faces unique challenges in implementing climate adaptation measures. This research provides the first comprehensive documentation of climate adaptation projects in 11 islands spanning five atolls, examining the implementation and effectiveness of these projects on the ground. This study aimed to create a systematic inventory of adaptation initiatives, document their status, and analyse the relationship between project design, implementation approaches, and community engagement. It evaluates the gap between adaptation planning and on-ground realisation, while identifying best practices and challenges for stakeholders. The research employed semi-structured interviews (n=115) with 70 key stakeholders in adaptation projects including Council Members, Women's Development Committee members, civil society organisations, and project managers. Data collection combined formal interviews using Kobo Toolbox as a primary data collection tool, as well as observations and documentation review to supplement findings. Following this, the data was analysed qualitatively. The findings suggest that the Maldives is actively working towards climate adaptation, with projects in all 11 islands visited. Of the 115 projects identified, 76% of the projects primarily fall into infrastructure and engineering ('hard' adaptation), which remains the national government's preferred approach to adaptation. Sociocultural, behavioural and educational approaches ('soft' adaptation) make up 24% of the projects logged, and are pursued primarily by Island and Atoll Councils, international agencies, civil society, and schools. While majority of the projects focus on urgent developmental needs which then translates to increased adaptive capacity, preserving on-island livelihoods is seen as an important requisite to guarantee adaptation. The main challenges to adaptation identified are timely implementation of projects, lack of funding and expertise, community engagement (consultation and awareness), as well as island depopulation. This project yields important lessons on how an adaptation stocktake can be carried out on a national level, especially for Small Island Developing States (SIDS).

Keywords: *climate change adaptation, adaptation stocktake, climate resilience, Small Island Developing States (SIDS), climate adaptation practices*

Understanding Marine Plastic Pollution: Awareness Among Secondary School Students in the Maldives

Nadhiya Abdulla, Mariyam Shahuneeza, Aishath Shaheen Ismail, Ismail Azzam Wajeeh, Shazla Mohamed, Fathimath Ahlam Niyaz
The Maldives National University

Abstract

Environmental awareness and educating children about environmental issues during their formative years supports the development of long-term pro-environmental behaviours. This study explored the awareness and practices of secondary school students in the Maldives regarding marine plastic pollution. A quantitative cross-sectional design was adopted, employing a self-administered, validated questionnaire. The survey targeted students in Key Stage 3 and 4 across 8 randomly selected schools in Male' (Male', Villimale, and Hulhumale'). A total of 480 students completed the survey, surpassing the statistically required sample size of 378. Findings reveal that 87.7% of respondents had heard of marine plastic pollution, primarily through school, social media, and traditional media. The majority identified plastic bottles as the leading pollutant, followed by bags and fishing gear. Awareness of environmental impacts was high, with 92% recognizing harm to marine life, 88% to coral reefs, and 76% to beaches and coastal areas. Notably, 72% were familiar with microplastics and over 70% understood their potential harm to human health. Although 48% felt adequately informed to act, a significant number still lacked detailed behavioural knowledge. Students demonstrated familiarity with alternatives to plastic, most notably glass and wood. Many participants reported that they use single-use plastics often or sometimes, and many also reported reusing them; only 29% stated they never or rarely reuse such plastics. Interestingly, 86% indicated they throw plastic into the bin when found on beaches or shores. Most participants had taken part in beach cleaning or expressed interest; however, 16% reported no interest in participating. The results underscore the effectiveness of schools in awareness-raising and highlight the potential of students as change agents. The study recommends targeted educational interventions, integration of environmental education into school curricula, and broader community engagement to bridge knowledge-behaviour gaps. Establishing robust awareness and behaviour change programs in schools can support national efforts in mitigating marine plastic pollution.

Keywords: *marine plastic pollution, secondary school students, environmental awareness, microplastics, Maldives*

Exploratory Analysis on the Influence of Artificial Light on Whale Shark (Rhincodon typus) Encounters in the Maldives

Hamdha Rasheed[1], Mariyam Nashath[1], Jessica Harvey-Carroll[2], Irthisham Zareer[2]

1.The Maldives National University, 2. Maldives Whale Shark Research Programme

Abstract

Investigating the effects of Artificial Light at Night (ALAN) on the behaviour and movement of whale sharks is crucial in managing the conservation of this protected species. 'Light pooling' is an unofficial term used to describe the practice of using artificial lights at night (ALAN) to attract planktivorous fish, which is hypothesized to influence the behaviour and movement of whale sharks. This study explores the influence of ALAN on whale shark (Rhincodon typus) encounters in the Maldives using citizen science, to support guidelines that minimize harmful impacts on the species. We quantify the number of whale sharks per light pool encounter, ranging from one to six, map spatial changes with an increase in regions utilised over time, and quantify differences in encounter duration. Furthermore, we investigate consecutive day sightings and remora (Echenidae sp.) occurrence using encounter data. The findings indicate that there have been significant changes in the region, duration and number of whale sharks in light pool encounters from 2013 through 2024. Only a small number of individuals were sighted consecutively during daytime following a night encounter, while remora occurrence was significantly more frequent in light pool encounters in comparison to that of consecutive day sightings. Long-term exploration of light pool encounters can enhance understanding of whale shark behaviour and movement, providing valuable insights for conservation strategies that mitigate anthropogenic pressures on this endangered species.

Keywords: *Artificial Light at Night, whale shark, light pooling*

Improving Ex-Situ Coral Culture Outcomes: Growth and Survival Responses of Galaxea fascicularis Recruits to Supplemental Feeding

Ben Yuen, Jarrod Cooper, Johanna Leonhardt, Solene Jonveaux, Morgane Dierkens, Holly Kyprianou
Soneva Foundation Coral Restoration programme

Abstract

Nutritional supplementation may improve coral recruit performance by enhancing growth and survival—two key metrics for the success of sexually propagated reef restoration. We investigated the effects of three feeding regimes (no feeding, once weekly, and twice weekly) using powdered commercial coral feed on Galaxea fascicularis recruits over a 23-week period. Growth was assessed weekly as polyps per recruit, and survival was analysed using Kaplan–Meier methods. Log-rank tests revealed significant differences among treatments, with the twice-weekly feeding group consistently exhibiting higher survival probabilities than the control and once-weekly groups. A linear mixed-effects model showed significant main effects of Treatment and Week, and a significant Treatment × Week interaction. Post hoc comparisons indicated that from week 12 onward, growth in the twice-weekly treatment was significantly greater than in the other groups. These findings suggest that frequent supplemental feeding promotes both improved survival and accelerated growth in G. fascicularis recruits, offering practical implications for optimizing coral propagation and restoration strategies.

Keywords: *coral, propagation, feeding*

Development of Shark Diving Management Options in Fuvahmulah, Maldives: Codes of Conduct for Shark Interactions and Scoping Shark Guide Certification

Jamie Small[1], Gonzalo Araujo[2], Gemma Scotts[2], Irthisham Hassan Zareer[3], Muhusina Abdul Rahman[4], Beth Flavell[1], Aishath Amal[4],
1.Ocean Country Partnership Programme, 2. Marine Research and Conservation Foundation, 3. Maldives Whaleshark Research programe, 4. Ministry of Tourism and Environment

Abstract
In recent years, Fuvahmulah, a UNESCO Biosphere Reserve in southern Maldives, has gained international recognition as an exceptional shark diving destination. It also boasts the largest recorded tiger shark aggregation globally, where up to 40 tiger sharks can be encountered on a single dive at its 'Tiger Harbour' site. The island's dive industry has grown exponentially, with over 11 dive centres, contributing an estimated $15.75 million to the local economy in 2023. To date, the industry has operated with little formal regulation or management. As the industry continues to expand, stakeholders have identified the need for standardized operational practices to ensure diver and shark safety, and the long-term sustainability of the industry. To address this need, the United Kingdom's Ocean Country Partnership Programme contracted international shark experts to develop species-specific Codes of Conduct in collaboration with local and national authorities and the Fuvahmulah dive industry. Guidelines for thresher sharks, non-provisioned predatory sharks, and provisioned tiger sharks, were formulated through stakeholder consultations, review of international best practices, and structured workshops with the dive industry, culminating in a consensus-driven framework. Key guidelines emerging from this work include maintaining safe distances, restricting direct interaction, defining dive procedures and introducing enforcement mechanisms to promote responsible dive practices. Additionally, recognizing the critical role of dive guides in ensuring safe and responsible shark interactions, the feasibility of a Shark Dive Guide Certification programme was explored. Stakeholders overwhelmingly supported the establishment of a formal certification process, emphasizing the need for local knowledge integration and continuous professional development. Insights from global shark diving operations further highlighted the need for specialized training in shark behaviour, diver management, emergency response, and medical preparedness. Future steps include pilot implementation, policy integration considerations and ongoing monitoring to review and refine these initiatives, contributing towards a well-regulated, sustainable shark diving industry in Fuvahmulah.

Keywords: *shark diving, Biosphere Reserve, sustainable management*

A Robust Cloud Masking Algorithm for Satellite Images Over the Maldives

Imeel Saleem, Nashwan Matheen
Maldives Space Research Organisation

Abstract
Given the challenges of collecting environmental data using traditional surveying methods across the geographically dispersed islands of the Maldives, cloud-free satellite images present an invaluable tool for carrying out environmental monitoring in an economically viable and sustainable manner. This is especially true when it comes to implementing automated environmental monitoring programs over large spatial scales, using several years' worth of satellite data. However, it is challenging to reliably determine scenes of satellite images which are free of clouds, and therefore useful for environmental and maritime analysis. Most cloud masking algorithms are unable to accurately distinguish between clouds, cloud shadows, and cloud-free areas, with several algorithms routinely misclassifying the white sandy beaches of islands, sections of the reef, and the dense vegetated core of the islands. This research aims to address the lack of robust cloud masking algorithms over Maldives by implementing the newly developed deep learning model, OmniCloudMask, which has been trained on global images from Sentinel-2, Landsat and Planetscope. The algorithm was retrained with satellite images of the Maldives, resulting in a more specialized cloud masking algorithm. The performance of the Maldives-specific OmniCloudMask is compared to existing cloud masking algorithms such as Fmask, S2cloudless, and the default globally trained OmniCloudMask to evaluate their relative accuracies. The results of this analysis are used to create 10+ years of monthly cloud-free basemaps which cover the geographical extent of the Maldives. This dataset presents an invaluable resource which can be used to carry out large scale analysis and environmental monitoring at minimal cost.

Keywords: *cloud mask, OmniCloudMask, environment monitoring, basemaps*

Status of Common Breeding and Migratory Birds in the Maldives

Ifham Hassan Zareer[1], Sebastian Steibl[2], Hulwa Khaleel[3], Michael Fox[2], Hassan Nidham, Irthisham Hassan Zareer, Ahmed Leevan[4], Yoosuf Rilwan[4], James Russell[2]

1. New Mexico State University, 2. The University of Auckland, 3. Isles Consulting, 4. Environment Protection Agency

Abstract

The largest island archipelago in the Indian Ocean, the Maldives, comprise of 26 atolls and about 1,200 islands. A variety of breeding, migratory, and overwintering birds occur here, that are deeply intertwined with the local culture and traditional ecological knowledge. This Ocean Country Partnership (OCPP) funded study produced, for the first time, a national assessment of common breeding and migratory birds in the Maldives. The study focused on 29 protected bird species selected using conservation-priority criteria (breeding species and regular non-breeding visitors) and provides archipelago wide breeding and nonbreeding distributions of 25 species on an atoll-level. Standardised interviews (n=37) carried out with experts and traditional ecological knowledge holders from all 20 administrative atolls reported that of the 29 species shortlisted, 10 seabird species, four heron, three rail, and two native land bird species are breeding in the Maldives. Interviewees noted a decline in seabird population throughout the Maldives, and at times, the disappearance of breeding colonies from islands. The Crab-plover (Theyravaa; Dromas ardeola), formerly widespread and abundant, was noted to have almost entirely disappeared from the Maldives within the last 20–30 years. Though rails, herons and landbirds are less affected, some widespread residents are noted to be threatened by deforestation. The main threats identified include island development, sand mining, deforestation, egg and bird poaching for pet-trade, and direct disturbance to nesting islands by people. The conservation priorities identified in this study include ground-truthing rare breeding species and key nesting sites, establishing standardised long-term monitoring protocols, working with resorts and developers to mitigate development impacts on breeding seabirds, confirming taxonomic status of potentially endemic subspecies in the Maldives, and increasing public awareness about the occurrence and diversity of birds and their sociocultural value in the Maldives.

Keywords: *protected birds, traditional ecological knowledge, seabird decline, species conservation priorities*

Assessing the Socio-Economic Value of Sea Turtles to The Maldives' Tourism Industry in 2022 (Post-Pandemic)

Stephanie Koehnk, Julian Gervolino, Olivia Forster, Isha Afeef, Risha Ali Rasheed, Stephanie Koehnk
Olive Ridley Project

Abstract

The viewing of marine megafauna is a rapidly growing sector of the global tourism industry recognised as an important source of economic benefit for many coastal communities. In the Maldives, assessments of the socioeconomic value of species such as manta rays and sharks have been conducted, while the value of sea turtles is largely undocumented, except a preliminary small-scale survey for 2019 estimating the socioeconomic value to be at least US$1.08 million in direct revenue. This study conducted for 2022 obtained a more comprehensive understanding of the socioeconomic value, particularly following the disruption caused by COVID-19. Additionally, we aimed to identify tourism pressure on turtle hotspot areas which may require specific protection measures. Survey responses were collected from tour operators from May-October 2023, focusing on operations related to sea turtle excursions in 2022, including the direct spend on sea turtle excursions, and the perceived value of sea turtles to both tourists and operators. We received responses from 116 tour operators across 12 major atolls in the Maldives, with 67% from resort operators (n=78), 29% from local island operators (n=34), and 4% from liveaboards (n=6). Maldivian nationals made up 55% of respondents (n=64) and there were an estimated 628 people working, directly or indirectly, on sea turtle excursions in 2022. The direct revenue generated by sea turtle tourism in the Maldives is estimated at US$10.9 - 14.4 million in 2022, with sea turtle snorkel trips accounting for 77% of this value. Hotspot sites generated an estimated up to US$605,384 in direct revenue. These findings underscore the significant economic and social importance of sea turtles to the tourism industry in the Maldives, matching that of manta rays and sharks, and highlights the need for improved conservation efforts to safeguard local sea turtles' populations and their associated benefits for Maldivian communities.

Key words: *sea turtles, sustainable tourism, conservation, non-consumptive use*

Satellite Telemetry of Post-Rehabilitation Sea Turtles in The Indian Ocean

Edward Hodges, Katrina Himpson, Thais Weinstein, Marie Saleem, Thomas Le Berre
Reefscapers

Abstract
Satellite tagging is a widely used technique in sea turtle research and conservation globally. Currently published literature focuses primarily on nesting populations, with some species, notably olive ridleys (Lepidochelys olivacea) being heavily under-represented. Indian Ocean marine turtle populations are the least studied of any ocean basin. Our study utilised juvenile and adult olive ridley (L. olivacea, n=20), green (Chelonia mydas, n=12), and hawksbill (Eretmochelys imbricata, n=3) turtles of both sexes, rescued, rehabilitated and released in Republic of Maldives from 2010-2024. The primary reason for rehab admission was injury caused by ghost gear entanglement. We investigated migration status via distance travelled from release site, speed of travel, behaviour of tagged animals relative to current direction and strength ('swimming effort'), and potential impact of biological factors such as species, sex, age, and physical injury (primarily flipper amputation) on these data. We utilised 'SPOT' and 'SPLASH' tags designed by Wildlife Computers Inc. for use in hard shell sea turtles. Tags were attached using supplied attachment kits and instructions at least 24 hours prior to release, allowing accurate tag calibration. Tag transmission duration was 1-349 days (mean = 92), with distance covered ranging from 27.4-4959.2km (mean = 2345.4km). Of the turtles tracked, 25 swam out of the atoll into open ocean ('migrated'), while 4 turtles remained ('did not migrate'); remaining animals were not tracked long enough to determine migration status. Average travel speed was 23.85 km/day, with no significant difference between species, sex, weight, or amputation status. Green and olive ridley turtles swam actively with and against ocean currents, heavier animals demonstrated greater swimming effort than lighter individuals, and swimming effort was higher in shallower water and stronger currents. Long-term survival and impact of rehabilitation duration thereupon are currently being analysed and will be vital to understand the efficacy of rehabilitation in a conservation context.

Keywords: *satellite telemetry, sea turtle, rehabilitation*

Billfish Fishery in the Maldives

Ahmed Jauharee
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Abstract

The Maldives has a longstanding but small-scale billfish fishery, where fishers have traditionally produced salted dried billfish for export while supplying fresh and frozen products to the Malé fish market and local outlets for domestic consumption. Historically, this fishery operated at a subsistence level, but with the rapid expansion of the tourism industry, fishers have gained access to new markets, and big game fishing has emerged as a lucrative activity. This study examines the scale, dynamics, and economic significance of the billfish fishery in the Maldives, combining qualitative and quantitative data to assess its current status. Field interviews were conducted with 15 fishers and 3 processors across key fishing communities to gather information on fishing methods, landing trends, processing techniques, and market chains. Customs export data from the past two decades was also analyzed to evaluate trade patterns. Findings indicate that billfish—primarily sailfish—are targeted year-round using dropline and troll line gear, while also being caught as bycatch in the handline yellowfin tuna fishery. However, due to inconsistent reporting by fishers, the total catch volume remains uncertain. Export records show that salted dried billfish is predominantly shipped to Sri Lanka, whereas fresh swordfish was previously exported to Europe during the active phase of the longline fishery. Billfish exports peaked in 2018 at nearly 1,600 metric tons, though domestic consumption levels remain undocumented. The decentralized nature of landings across multiple islands poses a significant challenge for fisheries authorities in collecting accurate catch data. Without improved monitoring and reporting mechanisms, the sustainability of this fishery remains uncertain. This study underscores the need for enhanced data collection and management strategies to ensure the long-term viability of the billfish fishery in the Maldives.

Keywords: *billfish fishery, Maldives, billfish*

Baseline Study of Microplastics in Fish Species around K. Thilafushi

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Abstract

Thilafushi has served as the Maldives' waste disposal site for over thirty years. The exponential increase in waste due to industrial progress has led to the production of unprecedented amounts of microplastics. These microplastics, which are smaller than 5 mm in size, have integrated into the surrounding marine ecosystems and are likely accumulating within human bodies. This research aims to analyse the composition of microplastics in fish species surrounding Thilafushi and evaluate their implications for marine and human health. Organs from fifteen fish (n=30) samples, representing various trophic levels, were collected from the waters surrounding Thilafushi, along with a control specimen from a site 30 nautical miles from the sample site. Gills and gut tissues were dissected, digested in a KOH–NaClO solution, and filtered to isolate microplastic particles. These were then classified by morphology under microscopy and compared with known microplastic profiles using reference imagery. Statistical correlations between organ metrics and microplastic counts were analyzed using Pearson's correlation coefficient. 234 microplastic particles were identified, predominantly as fragments (42.3%) and fibres (26.5%). Tertiary consumers, particularly tuna species, contained the highest concentrations, indicating trophic-level biomagnification. Notably, microplastic levels in the dogtooth tuna near Thilafushi exceeded those in the control yellowfin tuna from the control site. The types of microplastics found, consistent with polyethylene, nylon, and polyester, suggest origins in common consumer waste and packaging materials. The findings confirm widespread microplastic contamination in Thilafushi's marine ecosystem, with significant implications for food safety and public health in the Maldives. This study highlights the urgent need for waste management reform and comprehensive monitoring of microplastic pollution to mitigate ecological and human health risks.

Keywords: *microplastics, bioaccumulation, biomagnification, contamination, spectrometry*

Between The Atolls: Sea Turtle Nesting in The Maldives from 2018-2024

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Olive Ridley Project

Abstract

Sea turtles are a vital part of the marine ecosystem in the Maldives. While five species have been recorded in the country, only two can be found in relevant numbers: Hawksbill and Green Turtles. Historically, both species have been recorded to nest throughout the country, but consistent long-term data is not available. In this study, we present cumulative data from targeted nest monitoring from 2018 to 2024, in addition to ad hoc reports from citizen scientists and marine biologists across the country, with the aim of providing a comprehensive multi-year dataset on sea turtle nesting activity in the Maldives. Targeted monitoring included documentation of nests and false crawls, nesting females when possible, hatching and excavation data. Sea turtle nests are recorded from islands in nearly all atolls throughout the country. Most of the nests reported, with 1087 out of 1213, were green turtle nests. 47 hawksbill nests we recorded, as well as an unexpected 15 olive ridley turtle nests. Nesting occurs year-round, with a peak in overall activity during the south-west monsoon season from June to September. However, nesting seasonality varies between atolls, as well as between the calendar years. Consistent data from Lhaviyani and Laamu atoll was used for a more in-depth analysis of the green turtle nests. Between 2018 and 2024, 519 nests and 386 false crawls were reported from these atolls. Overall median hatching success rate was high with 92.23% (SD = 15.87) and incubation lasted between 46 and 76 days (median: 59 days, SD = 4.79). Nest inundation and illegal take were identified as the main threats to sea turtle nests in the country, while incidences of egg predation were an exception. The findings of this study will help to clarify conservation priorities and management strategies for sea turtles in the Maldives.

Keywords*: sea turtle, nesting, Maldives*

Variation in Environmental Factors and Primary Productivity of a Reef with Depths in K. Villimale'

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Abstract

Coral reef ecosystems are among the most productive ecosystems of the world despite its environmentally challenging conditions. Their high primary productivity is attributed to the critical role of several primary producers which use inorganic components including carbon dioxide available in the water to produce energy, organic products and oxygen. The primary production by these primary producers can be quantified as gross and net primary productivity (GPP and NPP respectively). Primary production can be influenced by multiple factors including depth of water column. Since primary productivity forms the basis of the innumerable services provided by these ecosystems, it is crucial to understand the factors that influence it, especially for the Maldives. Nevertheless, primary productivity of coral reefs is an area that is understudied in the Maldives. This study examines how environmental factors and primary productivity of a reef changes with depths in K. Villimale'. The data was collected by obtaining water samples from the Northwestern reef in K. Villimale' at depths of 0, 10, and 20 meters. The dissolved oxygen concentrations, biological oxygen demand, GPP, and NPP of the sample were estimated. The results show a general downward trend in both GPP and NPP with the highest NPP and GPP at the surface. The mean values showed that the NPP initially increases at 10m then decrease lower than the surface at 20m. Although these results are inconclusive about changes in PP with depth, a further analysis of the physical factors of the water samples suggests a potential connection to depth or the physical factors. Furthermore, there are other compounding factors such as water currents that can influence measurements. Hence, long-term studies which examine the influence of environmental factors are needed.

Keywords: *spatial analysis, primary productivity, water sampling, coral reef, water column*

Power, Gender, and Climate: Exploring the Intersections of Decentralization and Climate Adaptation in the Maldives

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Abstract:
This study examines how decentralization and gender inclusive governance shape subnational climate change adaptation efforts in the Maldives, a small island developing state acutely vulnerable to climate impacts. While the 2010 Decentralisation Act aimed to empower local councils and improve public service delivery, implementation challenges such as fragmented authority, political centralization, and resource constraints have limited the effectiveness of local governance. At the same time, Women's Development Committees (WDCs), mandated to promote gender participation in local governance, often face structural and cultural barriers that inhibit their influence on decision-making, especially in climate-related initiatives. Drawing from theories of decentralization and feminist governance, this research explores the ways in which decentralized institutions interact with gender dynamics to either enable or constrain local adaptation. Using a pragmatist qualitative approach, the research design includes document analysis, semi-structured interviews, and comparative case studies across six islands and two cities with varying governance structures, climate vulnerabilities, and WDC engagement. Thematic analysis, supported by NVivo, will focus on structural governance challenges, gendered power relations, and policy (mis)alignments across scales. Preliminary insights suggest that while local governments are well positioned to understand community specific risks, their adaptive capacity is often hindered by limited fiscal autonomy, poor coordination with national actors, and underutilization of gendered knowledge systems. The study aims to offer policy relevant insights to improve the design and implementation of climate adaptation initiatives that are locally grounded, gender responsive, and governance integrated. This research contributes to the growing body of literature on multilevel climate governance in SIDS and highlights the need for intersectional approaches that centre both institutional reform and social equity in building climate resilience.

Keywords: *decentralization, gender, climate adaptation, governance, Maldives*

Empowering Island Communities: The Parley Maldives AIR Challenge in Combating Marine Plastic Pollution and Fostering Sustainable Practices

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Abstract

Parley Maldives, a local chapter of Parley for the Oceans, is advancing systemic responses to marine plastic pollution through its AIR Strategy (Avoid. Intercept. Redesign). This strategy is primarily implemented through the school AIR Challenge (a network of intercepting hubs across the country) and collaboration mechanisms with the hospitality industry, corporate and government agencies. The Parley school AIR Challenge has emerged as a key driver of behavioural change, empowering students to apply the AIR Strategy in daily life; refusing single-use plastics, intercepting waste through collection points, and redesigning solutions via creative reuse and advocacy. This hands-on engagement fosters lasting environmental stewardship and peer-led change across communities. By 2025, the initiative had mobilised 72,348 participants, including 47,702 youth across 154 schools and a diverse network of partners. Interception activities now span 121 islands, engaging 70 resorts, 58 island councils and women's development committees (WDCs), 54 cafes, 17 guesthouses, 112 schools, 89 households, 51 government/corporate/non-governmental organization bodies, and 68 boats. Through 737 cleanup events, over 135,605.9 kg of plastic has been recovered, contributing to 3,144.54 metric tonnes exported and repurposed as Ocean Plastic, a symbol of circular innovation. Alongside interception, Parley Maldives School AIR program facilitated 139 Avoid, 53 Intercept, and 103 Redesign activities, aimed at changing behaviours and design mindsets. Educational programs such as Reef and Me have reached 650 children, and 3,617 family members have been engaged, deepening intergenerational commitment to ocean stewardship. An estimated 4.3 million plastic items were prevented from entering the environment, underscoring how local action can achieve measurable impact at scale. This paper examines the initiative's community-driven, data-informed strategies and highlights the power of regional collaboration, environmental literacy, and interdisciplinary partnerships in addressing plastic pollution in Small Island Developing States.

Keywords: *waste minimization, plastic pollution, Parley air strategy, plastic interception, ocean conservation*

Successes of Community-Based Conservation Model of Laamu Sea Turtle Rangers

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1.Olive Ridley Project, 2. Environmental Protection Agency of the Maldives

Abstract

Velaa Heylhi, the southwestern beach of L. Gaadhoo, remains one of the Maldives' most important nesting sites for green sea turtles. Historically supporting around 240 nests annually in the 1980s, nesting numbers declined by about 40% by 2015. From 2018 to 2022, the Olive Ridley Project (ORP) recorded an average of 64 suspected nests per year. Despite its designation as a Protected Area in 2021, illegal egg harvesting exceeded 50% through 2022. Regular monitoring began in January 2023 through a multi-stakeholder initiative involving the Environmental Protection Agency, ORP, Laamu Atoll councils, and AgroNat. This effort launched the Maldives' first Sea Turtle Ranger program, pioneering a community-based conservation model. In 2024, 69 surveys recorded 134 nesting activities—50 suspected nests and 84 false crawls—yielding a 37.3% nesting success rate, down from 2023. Beach erosion, coral debris, and storm surges were key environmental pressures. Nesting peaks occurred in April, June, and September, with declines during monsoonal transitions. Illegal harvesting rose slightly to 11% of nests in 2024 (from 2% in 2023), mostly in April and May, pointing to the need for consistent monitoring. Excavations of three nests revealed a median clutch size of 99 eggs and a 56.7% emergence success rate, below the national average of 76%, likely due to environmental stressors and obstructions. Rare anomalies, including a twin embryo and a hatchling with kyphosis, were observed. Early 2025 saw reduced nesting and increased illegal harvesting, coinciding with lower staffing and severe weather. Despite challenges, outreach remained strong: 89 community members participated in awareness efforts, and 12 received hands-on training. These findings underscore the importance of sustained, locally led monitoring to protect sea turtle populations and serve as a model for conservation across the Maldives.

Keywords: *sea turtle, illegal trade, green sea turtle*

Spatial Analysis of Macro-Invertebrates and Associated Benthic Substratum in K. Villimale

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Abstract

Zonation of benthic macroinvertebrates and substrata is a severely unexplored area of research in the Maldives. Although studies are often conducted during development projects, there are rarely any follow-up reports on how the benthic substrates are affected after the development is complete. This study investigates the spatial variation and zonation of benthic macroinvertebrates and other associated substrates at depths of 10, 20, and 30 meters on the house reef of K. Villimale', Maldives, which is subjected to significant environmental stress due to ongoing bridge construction and reclamation projects on reefs that are in close proximity to the island. Using photo-transects taken in a span of two months, analyzed using CoralNet, a web tool designed to assist in analysing benthic data. The analysis revealed that while 10 meters depth hosts the highest species richness, the greatest total benthic cover occurs at 20 meters. These spatial patterns in macroinvertebrate distribution suggest that some species may migrate to deeper zones as a refuge from stressors such as sedimentation and temperature fluctuations. These results provide critical baseline data for reef conservation and future impact assessments related to climate change and coastal development on specific reefs. Further research in this field must be carried out to determine whether other environmental factors also play a role in the changes that are seen. Data could also be collected more extensively on the interactions between the substrates and mobile species such as fish and other invertebrates.

Keywords: *macroinvertebrates, zonation, conservation, benthic cover, species richness*

Assessing Seagrass Species and Cover Spatially Across Laamu Atoll, Maldives

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Abstract

Despite making up less than 0.2 percent of the ocean floor, seagrass meadows are vital to global ecosystems, helping to stabilize coastal sediments, support biodiversity, and absorb carbon. This study aimed to evaluate the spatial distribution and species composition of seagrass across oceanward and leeward zones of Laamu Atoll, Maldives. Field surveys were conducted at four islands—Kalaidhoo, Fonadhoo, Hithadhoo, and Maavah—using quadrat sampling along 50-meter transects. Data was collected on both Oceanward and Leeward sites of the island. At each location, document general information, including the observer's name, date, time, and water depth if the point is subtidal. Species type, percent cover, and associated environmental parameters were recorded and analyzed. Significant differences in species composition, substrate type, and seagrass cover were observed across sites. Thalassia hemprichii was the dominant species, particularly in coarse, desiccation-prone sediments, while *Cymodocea rotundata* and *Syringodium isoetifolium* were more abundant in finer, calmer substrates. Oceanward zones exhibited greater species diversity, influenced by dynamic wave action and heterogeneous sediment conditions, whereas leeward zones offered more stable environments with lower diversity. Elevated epiphyte and algal cover indicated nutrient enrichment and anthropogenic stress, negatively impacting seagrass health. These results highlight the ecological significance of seagrass meadows in Laamu Atoll and the threats they face, underscoring the urgent need for coordinated conservation efforts, community engagement, and long-term monitoring. This study provides essential baseline data to support sustainable management and protection of these critical coastal ecosystems.

Keywords: *seagrass meadows, Laamu atoll, Oceanward, Leeward.*

Sub-theme 2: Bridging Theoretical Knowledge with Educational Practices

43 Abstracts

Exploring Barriers to Interprofessional Collaboration During a Short Interprofessional Education Workshop: A Qualitative Study

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Abstract

Interprofessional Education (IPE) is a practical pedagogical approach to foster interprofessional collaboration (IPC) among healthcare students. As healthcare delivery becomes increasingly complex, IPE plays a pivotal role in promoting interprofessional collaboration, which is essential for safe, efficient, and patient-centred care. However, despite its recognized value, several context-specific barriers hinder its effective implementation. This study explored the barriers that impede the development of IPC among healthcare students from different domains who participated in a short IPE workshop conducted at the Maldives National University. A qualitative descriptive design was employed, with data collected through focus group discussions (FGD) and semi-structured interviews. Two focus groups were conducted with physiotherapy students, and six semi-structured interviews were conducted with nursing students and faculty from Nursing, Medicine, and Physiotherapy who had participated in the IPE workshop. Data triangulation, utilizing multiple participant groups (students and faculty across disciplines) and methods (focus groups and interviews), was used to enhance the credibility and depth of the findings. Participants included 15 students, with a mean age of 26.57 ± 6.1 years, comprising twelve females and three males. Additionally, four lecturers participated, with a mean age of 38.7 ± 5.5 years. The transcribed data were thematically analysed using Braun and Clarke's six-phase framework for thematic analysis. The analysis revealed several challenges, which were organized into four key thematic barriers. The themes were: (1) Institutional Silos and Scheduling Conflicts, (2) Disconnected Communication, (3) Limited Understanding of Professional Roles, and (4) Disengaged Minds and Hierarchical Thinking. The identified barriers reflect the need to address not only isolated challenges but also broader systemic and cultural issues within health professions education. Addressing these barriers through structural and cultural reforms in higher education is crucial for fostering authentic and sustainable interprofessional education experiences. This, in turn, will promote meaningful IPC and contribute to the improvement of patient-centred care within the Maldivian healthcare context.

Keywords: interdisciplinary learning, healthcare education, team-communication,

Impact of Nursing Education on Job Performance and Career Progression: Qualitative Insights from a Tracer Study

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Abstract

Nursing education aims to equip students with essential knowledge and skills, although concerns remain regarding graduates' readiness for clinical work. This study explores how the Maldives National University (MNU) nursing training supports job performance and career growth. A qualitative descriptive approach was utilized, involving participants who graduated from Diploma, Bachelor, or Master of Nursing programs since 1991. Data were collected through four focus group discussions, each consisting of 8-10 participants, using a semi-structured interview guide. Thematic analysis was employed to interpret the data. Five key themes emerged: 1) Balancing theory and practice, 2) Smooth transition to practice, 3) Professional growth opportunities, 4) Benefits of being a nursing graduate, and 5) Challenges for local graduates. The study highlights the need for ongoing revisions of various nursing curricula to ensure that graduates are well-prepared for success in their careers.

Keywords: *nursing education, tracer study, effectiveness*

Nursing Students' Perception on the Effectiveness of Debate to Develop Critical Thinking Skills

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Abstract

Critical thinking is a vital skill for healthcare professionals, yet its development in nursing education is often hindered by reliance on traditional, lecture-based teaching. This qualitative descriptive phenomenological study explored the effectiveness of debate as a teaching strategy to enhance critical thinking among undergraduate nursing students. Grounded in constructivist learning theory and Vygotsky's Zone of Proximal Development, the study involved eight 5th-semester Bachelor of Nursing students selected through convenience sampling. Participants engaged in structured classroom debates on ethically complex topics: open visitation in Intensive Care Units and disclosing terminal diagnoses against family wishes. Students were divided into balanced groups, given time to prepare both sides of the argument, and participated in two rounds of debate. Following the debates, individual semi-structured interviews were conducted to gather personal insights into the experience. Thematic analysis revealed four key themes: Enhanced analytical skills, improved decision-making, Growth in critical thinking, and Greater acceptance of diverse perspectives. Students also reported increased awareness of ethical issues and improved ability to evaluate multiple viewpoints. The study concludes that debate is an effective, student-centred pedagogical approach for developing higher-order thinking skills in nursing education. It addresses a gap in research on active learning strategies in undergraduate nursing curricula.

Keywords: *critical thinking, nursing education, debate as a teaching strategy, active learning*

The impact of Problem-Based Learning on Improving the Critical Thinking Skills of Undergraduate Nursing Students

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Abstract

This study investigates the effectiveness of Problem-Based Learning (PBL) in enhancing critical thinking skills among undergraduate nursing students at the Maldives National University (MNU). Despite the emphasis on critical thinking in nursing, MNU continues to rely on traditional lectures, limiting students' ability to develop clinical reasoning. Grounded in Constructivist Learning Theory, the study used a pretest-posttest control group design to compare PBL and traditional methods among 54 second-year students. The Short Form Critical Thinking Disposition Inventory measured students' skills before and after the intervention. Results showed no change in the control group, while the experimental group improved significantly. An independent t-test confirmed a statistically significant difference. Findings highlight the positive impact of PBL and support its integration into nursing curricula to strengthen clinical competence and prepare students for real-world practice.

Keywords: *critical thinking, problem-based learning, nursing education, nursing practice*

Lost in Transition: Unpacking the Gaps in the Educational Transition to Higher Secondary and Higher Education

Ali Fawaz Shareef, Aishath Shanoora, Adam Khalid, Aminath Shiyama, Ashia Leela Ahmed, Asim Abdul Sattar, Asiya Ibrahim, Nadhiya Ahmed, Roza Ibrahim, Zeenath Solih
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Abstract

The Maldives excels in offering access to secondary education throughout a geographically dispersed nation. However, students who complete secondary education face several barriers to transition to higher secondary and higher education. This study, conducted as part of the broader research project Lost in Transition, explores the relevance of the Maldivian education system in preparing students academically for this transition. A secondary data analysis used school enrolment statistics and examination results from the past ten years. These datasets were examined to identify patterns and trends in student transitions from lower secondary to higher secondary education, and from higher secondary to tertiary education. Findings reveal a critical concern: only 60% of students who complete their secondary examinations qualify to advance to the next level- higher secondary education or foundation programs for higher education. This significant quantitative indicator highlights systemic inefficiencies that warrant urgent and comprehensive investigation. An additional barrier is the limited subject combinations available at the secondary level, which restrict students' ability to pursue a diverse range of fields at the tertiary level (Shafeeu, 2019). These limitations may inadvertently divert students from lucrative or socially important career paths, thereby hindering the creation of a versatile and future-ready workforce. The impact of this extends beyond individual outcomes, limiting the nation's socio-economic development by shrinking the talent pool for specialised professional sectors. A thorough evaluation of the education system's relevance is necessary, including analyses of curriculum design, pedagogical approaches, resource allocation, and the socio-economic factors influencing student performance and career decisions. Policy interventions must focus on ensuring equitable access to education and address institutional obstacles that constrain students' educational and professional choices.

Keywords: *Maldives, curriculum relevance, educational barriers, education access, higher education, secondary education.*

Lost in Transition: Barriers Faced by Students in Their Educational Journey from Lower to Higher Secondary and Higher Education in the Maldives

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Abstract
Educational transitions in the Maldives from lower secondary to higher secondary and higher education present significant challenges, especially for disadvantaged students, those with disabilities, and across gender lines. This paper reports on the qualitative findings of the barriers faced by students in their educational journey from lower to higher secondary and higher education. Participants included students, school leavers/dropouts, first-year undergraduate students, parents, teachers, policymakers, island council members, and employers from seven selected atolls, Male' region, and two resorts. Data were collected through eighty-six focus group discussions using a semi-structured interview guide and analysed thematically. Key barriers identified include systemic gaps, financial constraints, limited career access, societal norms, low student motivation, and the dilemma between foundation and A-Level pathways. The findings highlight the urgent need to strengthen transitional support and improve access to higher secondary and higher education.

Keywords: *barrier, transition, higher education*

A Bibliometric and Science Mapping Analysis of Publications on Multi-Grade Teaching

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Abstract
Multi-grade teaching (MGT) is an essential educational approach in many rural and under-resourced settings worldwide. Despite its significance, research on MGT is very limited, even at a global level. This paper presents the preliminary findings of bibliometric and science mapping analysis of publications on MGT for the past 33 years. Bibliometric data was collected from the SCOPUS databases using the keywords 'multigrade teaching, education, class, and schools. Data were examined in terms of publications, citations, collaboration, co-citation, and keywords. Microsoft Excel and VOSviewer were employed for conducting these analyses. The results indicate that despite an overall increase in the number of publications on the topic, there are lots of fluctuations in the number across the years. The normalised citation was almost one across all years. USA, South Africa, UK, and Turkiye are the top three contributors to publications in that order. However, the biggest collaborators are the USA, UK, Chile, Australia, and Finland. Analysis of the intellectual structure shows three distinct schools of thought (i) teacher preparation and student outcome (ii) instructional strategies, and (iii) curriculum adaptation. The most significant themes of knowledge are (i) school readiness for MGT, (ii) pedagogy and assessment, and (iii) context of rural and primary schools in relation to MGT. The current study identified the most influential schools of thought that are embedded in the scholarly work on MGT, and the thematic studies that have been conducted. These would be useful for future researchers.

Keywords: *bibliometric analysis, inclusive education, science mapping, multigrade teaching, rural education*

Academic Confidence of Undergraduate Students in the Maldivian Higher Education Institutions

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Abstract

The value of higher education in promoting socio-economic development is widely recognised globally, and this holds true for the Maldives as well. The government has invested heavily in the higher education sector, with a particular focus on providing free first-degree programs to students in public institutions. However, despite these efforts, the success rate of undergraduate students in the country still needs to improve. To address this issue, this study was conducted, aiming to evaluate the academic confidence of undergraduate students in Maldivian higher education institutes. The study utilised the Academic Behavioural Confidence scale developed by Sander and Sanders and employed a quantitative research design. A total of 302 undergraduate students enrolled in Maldivian higher education institutes were surveyed to gather data. The findings indicate that Maldivian undergraduate students exhibit only moderate confidence in their academic performance. Academic confidence was also found to vary significantly by age, academic discipline, and type of funding. These findings highlight the need for targeted strategies that focus on enhancing specific sub-scales of academic behavioural confidence, such as attendance, grades, studying, and verbalising, as well as addressing demographic disparities. For example, interventions such as discipline-specific mentoring programs, financial counselling, and age-appropriate academic skills workshops may help boost student confidence and, in turn, performance. In conclusion, strengthening academic confidence through such strategies could potentially enhance overall student outcomes. Future research should explore the relationship between academic confidence and actual academic performance. Establishing this connection would support evidence-based policy development and institutional practices aimed at improving student retention, engagement, and success in Maldivian higher education.

Keywords: higher education, undergraduate, academic confidence.

Simulation for the Development of Critical Thinking Skills among Nursing Students: A Review

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Abstract

Simulation is a well-established educational intervention widely utilised in nursing education to enhance nursing students' cognitive skills. Over time, its integration into nursing curricula has grown substantially. It provides a safe, controlled environment for experiential learning, enabling students to practice decision-making and clinical reasoning. This approach allows nursing students to translate theoretical knowledge into real life scenarios, fostering the development of their critical thinking skills. Consequently, evaluating the effectiveness of simulation in enhancing critical thinking skills is essential for improving the overall quality of nursing education. This systematic review aims to understand the effectiveness of simulation in enhancing critical thinking skills among nursing students. A comprehensive literature search was conducted in the electronic databases; PubMed, CINAHL, Google Scholar, Cochrane Library, and Web of Science sources published in English between 2015 to 2025. A total of 11 studies were reviewed using Joanna Briggs Institute Critical Appraisal tools. Nine studies reported a significant positive effect of simulation on the development of critical thinking skills among nursing students. This review provides evidence that simulation plays a pivotal role in enhancing critical thinking skills among nursing students compared to traditional teaching strategies. However, due to limitation in some primary studies such as sample size, measurement tools, there is a need for comprehensive research to further explore within the context of nursing education. In addition, further analysis is required to identify the most effective simulation approaches that optimizing the development of critical thinking skills.

Keywords*: critical thinking, nursing students, simulation, non-simulation, nursing education.*

Enhancing Nursing Students' Learning Motivation and Knowledge Retention through Gamified Flipped Classrooms: A Targeted Coaching Approach Informed by Action Research

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Abstract

This research study investigates the impact of gamification within a flipped classroom model on knowledge retention and learning motivation among third-semester nursing students. Conducted in two cycles, the first phase employed a traditional lecture-based approach followed by a quiz, while the second phase implemented a flipped classroom model, where students accessed preparatory materials such as lecture notes, instructional videos, and online quiz prior to class and engaged in interactive, gamified activities during class using tools like Kahoot. The study follows a reflective and iterative process aligned with action research principles and incorporates coaching strategies to enhance student learning and engagement. Findings indicate that integrating gamification into flipped learning environments significantly improves both knowledge acquisition and student motivation. These results suggest that gamified flipped classrooms, supported by coaching strategies, offer a promising pedagogical approach for enhancing nursing education.

Keywords: *gamification, flipped classroom, action research, nursing education, knowledge retention, student engagement, coaching strategies*

Lost in Transition: What Drives or Derails Student Progression in the Maldives?

Roza Ibrahim, Adam Khalid, Fawaz Shareef, Aminath Shiyama, Aishath Shanoora, Asim Abdulsattar, Leela Ahmed, Nadhiya Ahmed, Asiya Ibrahim, Zeenath Solih
The Maldives National University

Abstract

In the Maldives, the transition from lower secondary to higher secondary and higher education is a crucial phase in the educational journey of every student and several students experience barriers that interrupt this pathway. Hence, exploring the reasons for this disruption is critical for designing effective policies to facilitate student retention, equity, and access to higher education. This paper explores the factors that affect these transitions based on findings from the broader Lost in Transition project. The project employed a concurrent mixed-methods approach, collecting both qualitative and quantitative data following ethical approval from all relevant bodies. This presentation examined the key drivers of educational decisions among Grade 10 and Grade 12 students obtained from a survey data. From a total of 2,606 students recruited for this study, 55% were females and 45% were male students. The study indicated that gender significantly influenced factors such as financial concerns, sociocultural dynamics, personal motivation, and peer influence, with males and females facing distinct challenges. Parental background, especially mothers' education, notably impacted financial and sociocultural aspects of students' learning, highlighting the key role of family in shaping motivation and educational persistence. The study emphasizes how socioeconomic, and population disparities can derail students' educational intentions and transitions. The results highlight financial and sociocultural dimensions as the most sensitive drivers for students' educational progression. These results stress the significance of equity-driven educational approaches and contextualized measures to facilitate seamless transition through the Maldivian education system.

Keywords: *lost in transition, education transition, lower secondary, higher secondary, barriers and drivers*

Lost in Transition: Tracking Educational Pathways in the Maldives

Aishath Shanoora, Ali Fawaz Shareef, Adam Khalid, Ashia Leela Ahmed, Asim Abdul Sattar, Asiya Ibrahim, Aminath Shiyama, Nadhiya Ahmed, Roza Ibrahim, Zeenath Solih,
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Abstract

In small island nations such as the Maldives, where geographic dispersion and socioeconomic disparities significantly influence access to continuous education, educational transitions are pivotal in shaping individual life courses and contributing to national development. This study, conducted as part of the broader research project Lost in Transition, examines the transition rates over the past decade from lower to higher secondary education and from higher secondary education to higher education in the Maldives. A secondary data analysis was conducted using national-level data sources, including school enrolment records from the past decade. The study reveals a significant decline in enrolment from Grade 10 to Grade 11, with only 45% of students progressing to the next grade. Furthermore, this trend highlights pronounced disparities across different atolls. While Grade 12 enrolment remains relatively stable, it falls short of Grade 11. The gender gap begins to widen from Grade 10 onwards, characterised by low male enrolment rates. There is a 5 to 6 per cent decrease in enrolment from Grade 10 to Grade 11, followed by an additional drop of 1 to 2 per cent between Grade 11 and Grade 12. This gap further expands in higher education, where the female-to-male ratio is 65 to 35. Persistent gender and regional disparities are evident, with female and urban students demonstrating a higher likelihood of advancing to higher education. The findings emphasise the critical need for targeted policy interventions to enhance student retention, especially among marginalised groups. Addressing disparities in educational access necessitates implementing programs and promoting alternative pathways that will foster a more equitable educational landscape and lead to better student outcomes.

Keywords: *enrolment trends, Maldives, secondary education, gender disparities, disparities by geolocation, Maldives education system*

Our Earth our Futures: Implementing Education for Sustainable Development and Global Citizenship Education in the Primary School Classroom

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Abstract

The Our Earth Our Futures (OEOF) project aimed to explore the impact of innovative, intercultural, justice-oriented classroom projects on teachers' professional development and students' learning and sense of self as global citizens with responsibility for the environment, and identify the support needed for teachers to employ transformative pedagogies within existing curricular and institutional frameworks. This project also explored further scholarships in the field of Education for Sustainable Development and Global Citizenship (ESDGC) by offering empirically tested examples of how Target 4.7 of the UN's Sustainable Development Goals might be achieved in practice through nature-based learning and learning that explored social and environmental justice. This paper aims to present the preliminary findings this project. Teachers from three schools in the Maldives and 4 schools in Oxfordshire, UK planned and implemented classroom projects/lessons with a focus on empathy, global citizenship, sustainability and social and environmental justice. Teachers and researcher across the two contexts communicated online and used Moodle as a platform for cross-cultural communication. Crossing over one academic year researchers worked with teachers gathered data as classroom observations, interviews, and visual and documentary data supported by researcher reflections in the field. Thematic analysis was used to analyse textual data while visual analysis was used for visual data. Findings demonstrate teacher willingness to incorporate ESDGC principles into the curriculum provided focussed and constructive support to do so. Student learning was prominent when the learning was in connection with 'learning for the other' and when expressed through art. Minimal changes into how classroom lessons structuring enabled a smooth integration of ESDGC principles harmonising student learning to develop global citizenship skills and values. These findings support how curriculum innovation can enable the incorporation of ESDGC into existing formal curriculum.

Keywords: *our earth our futures, education for sustainable development and global citizenship, UK, Maldives, curriculum innovation*

Our Earth our Futures: Enhancing Learning Through Incorporating Sustainable Development and Global Citizenship Education in the Primary School Classroom

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Abstract
This paper reports on the "Our Earth Our Futures (OEOF)" project that aimed to explore the impact of innovative, intercultural approaches to curriculum innovation on teachers' professional development and students' learning of self as global citizens. In doing so, this project also explored the support needed for teachers to employ transformative pedagogies within existing curricular and institutional frameworks through expertise facilitator support. This paper reports on the latter through research reflections on identifying ways and approaches for teacher professional development and learning from a facilitator lens. The OEOF project had 3 schools in the Maldives and 4 schools in Oxfordshire, UK implementing classroom projects/lessons with a focus on empathy, global citizenship, sustainability and social and environmental justice. In this presentation we use the data of researcher/facilitator reflections that were either made as individual reflections or group's reflective conversations. These discussions were written down and thematically analysed to identify 'what works' and under 'what conditions' to identify teacher professional development and learning provisions. As facilitators, we noted that bringing all teachers together to build a common understanding played a foundational role. We observed that when given time and space to explore teachers' existing misconceptions and current practices, they became more open to change. Experiencing new pedagogies firsthand, especially the arts-based approaches for ESDGC emerged as a significant enabler, as it allowed teachers to engage with these methods more confidently. We also observed that opportunities for interaction and reflection, both individually and collectively, deepened teachers' learning and supported the integration of new strategies into their practice. Importantly, our facilitative stance of withholding judgment created a trusting environment where teachers felt safe to experiment, reflect honestly, and grow. These findings highlight the critical role of collaborative, experiential, and non-judgmental facilitation in fostering meaningful and sustained pedagogical growth among teachers.

Keywords: *Our Earth Our Futures, education for sustainable development and global citizenship, UK, Maldives, researcher reflections*

Effectiveness of Active Learning Strategies in Enhancing Student Engagement and Learning Outcomes in Large Classroom Settings

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Abstract

Active learning strategies have gained attention for their potential to improve student engagement and academic outcomes, particularly in large classroom settings where traditional lecture methods can limit interaction. This systematic review aims to explore the effectiveness of active learning strategies in large classroom settings within higher education institutions, by synthesizing existing research on their impact on student engagement, knowledge retention, and academic performance. The objective is to identify the most effective strategies. Using PRISMA guidelines, relevant literature from 2019 to 2024 was identified and analyzed, drawing from databases such as CINAHL, ERIC, and ResearchGate. The comprehensive literature search yielded 12 studies that met the inclusion criteria. The review identified four key themes: (1) The positive correlation between active learning and attitude change, (2) The flipped classroom approach, (3) The use of digital tools in enhancing the learning experience, and (4) Faculty engagement and support as pivotal for successful implementation. Findings indicate that active learning fosters deeper engagement, improves knowledge retention, and enhances student motivation by providing student-centred learning environments. Active learning strategies offer significant benefits in large classroom settings. However, for optimal effectiveness, institutions must support faculty in transitioning from solely depending on traditional lecture-based approaches. Barriers such as institutional norms, lack of professional development, and technical constraints are some challenges identified for its implementation in large classrooms. Further research is recommended to explore long-term impacts and refine specific methods for diverse learning environments.

Keywords: *active learning, large classroom, student engagement*

Teacher Perceptions on Stress Factor Impact on Teaching Quality

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Abstract

Teaching is hardly the profession it was years ago. The resilient new world in which schools find themselves, has changed considerably and children and parents have evolved with societal changes. This puts an ever-increasing pressure on teachers to prove themselves, against benchmarks and societal expectations as well as maintaining a balanced personal life. This paper ponders into the following research questions. What are the day-to-day challenges that teachers' face in meeting the demands of the curriculum and public expectations from them? What changes can help them perform better? To address these questions, qualitative data in the form of semi-structured interviews of 15 teachers from Maldivian schools are collected using purposive sampling. Thematic analysis of their responses indicate that teachers are extremely stressed out due to the demanding workload that leads them to not being able to balance work and personal life. Thus, effecting their performance. Findings also suggest the utmost need and urgency for relieving academic teachers from extra-curricular activities especially uniform activities.

Keywords: *stress factor, curriculum, societal expectations, workload, performance*

Teachers' Perspectives on the Challenges Faced by the Maldivian Key Stage 2 Students in Understanding Mathematical Concepts

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Abstract

Mathematics is an essential component of the education curriculum, yet it can be challenging for students worldwide, including those in the Maldives. The phenomenon is particularly prevalent among Key Stage 2 (KS2) students in the Maldives who experience significant difficulties in comprehending basic Mathematical concepts. This qualitative study examines the challenges perceived by KS2 mathematics teachers regarding students' experience with mathematical concepts and aims to identify effective pedagogical strategies to address these challenges. Literature suggests cognitive, emotional, and instructional concerns as pivotal to learning difficulties. This study addresses three main research questions: the types of difficulties faced by KS2 students, the specific mathematical concepts that prove most challenging, and the strategies adopted by teachers to mitigate these challenges. Semi-structured interviews were conducted with six KS2 mathematics teachers selected through purposive sampling, each with a minimum of two years of experience teaching KS2 students. Thematic analysis of interview transcripts revealed five dominant themes associated with learning challenges: foundational weaknesses, cognitive barriers, instructional overload, attitudinal obstacles, and time constraints. Fractions, long division, and non-concrete reasoning exercises, such as algebra and word problems, were identified as particularly challenging for students. Interventions adopted include multimodal strategies such as visual aids, hands-on practice, real-world applications, peer learning, and differentiated instruction tailored to varying student abilities. The findings suggest a shift from rote learning to concept-based pedagogical practices, emphasizing the need for enhanced teacher training using innovative pedagogies. Recommendations stemming from this study include increasing support for instructional differentiation, integrating visual and contextual tools into the curriculum, and implementing targeted professional development for mathematics teachers

Keywords: *mathematics education, Key Stage 2, conceptual understanding, learning difficulties, Instructional strategies*

Confirmatory Factor Analysis for Validating a Questionnaire on the Application of Personalized Mathematics Learning among Pre-university Students

Mausooma Mohamed

Abstract

The study aims to examine the validity of a questionnaire designed to assess personalized mathematics learning (PML) in Moodle-based educational settings through confirmatory factor analysis (CFA). The design of this instrument is structured with nine latent factors derived using exploratory factor analysis (EFA). The factors include performance expectancy, social influence facilitating conditions, hedonic motivation, habit, student commitment, intrinsic motivation, behavioural intention, and usage behaviour. Data was administered to 255 randomly chosen pre-university students using a structured questionnaire with 33 items on the five-point Likert scale. A pooled CFA was conducted using the statistical tool AMOS-IBM-28 which resulted in the elimination of two items with factor loading < 0.60 while 31 items were retained with factor loading ranging from 0.68 to 0.93 to measure the PML constructs. The Pooled-CFA results confirmed that all latent constructs surpassed the minimal level of threshold of 0.5 for Average Variance Extracted (AVE) and exceeded 0.6 for composite reliability (CR) ensuring a greater internal consistency. Therefore, the findings validate the measurement models' reliability proving the questionnaire to be a robust tool for predicting the application of PML in mathematics education.

Keywords: *Confirmatory Factor Analysis (Cfa), Average Variance Extracted (Ave) Personalized Mathematics Learning (Pml), Composite Reliability (cr) instrument*

Effect of Social Media on Academic Performance and Engagement in Maldivian Higher Education

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Abstract
Social media use, while beneficial in various aspects such as collaboration and networking, may have adverse effects on academic outcomes when used excessively. Theories such as Cognitive Load Theory (CLT) suggest that multitasking and task-switching between academic and social media use could overload a limited working memory capacity in the brain, hindering academic outcomes. Prior research has also linked social media overuse, multitasking, and frequent task-switching with negative outcomes for students' performance and engagement. However, no such study has been conducted within the context of higher education in the Maldives, where the issue of digital distractions has become increasingly relevant. This study aimed to investigate the relationship between social media use habits (daily hours spent) and academic performance (GPA scores), as well as multitasking and task-switching habits, with academic engagement. A mono-method quantitative study was conducted among 225 undergraduate and postgraduate students at selected higher education institutions in Male' via an online, structured survey questionnaire. Descriptive and correlational statistics were performed using SPSS to analyse the data. Contrary to existing literature, the correlational analysis revealed no significant relationship between the hours spent on social media and GPA scores. While task switching and academic engagement showed a statistically significant positive relationship, no significant relationship was found between multitasking and academic engagement. Qualitative data from open-ended questions revealed that boredom and push notifications were the main drivers for task-switching. Students offered diverse opinions on limiting social media and strategies to coexist with social media more effectively. Together, these results suggest the possibility of mediators and non-linear dynamics between the variables, which may explain the contradictory findings in this research. Nevertheless, this study offers novel insights into the complex relationship between social media usage habits and academic outcomes within Maldivian education, underscoring the need for robust conceptual frameworks to inform policy and practice.

Keywords: *social media; multitasking; task-switching; digital distractions; academic engagement*

Influence of Student Well-Being on Student Academic Performance and Career Preparedness: The FHTS Experience

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Abstract

Student wellbeing in the tertiary education sector is vital in influencing both academic and professional outcomes. However, there is a dearth of studies in the Maldives, exploring the role of student wellbeing on career preparedness. The study aimed to examine the relationship between student wellbeing and career preparedness among hospitality and tourism students at the Faculty of Hospitality and Tourism Studies (FHTS), The Maldives National University. Drawing from Seligman's PERMA model theory that comprises of positive emotion, engagement, relationships, meaning and accomplishment, the study sought to explore the relationship between psychological wellbeing and career preparedness. A quantitative research design was employed, and data were collected utilizing validated survey questionnaires instruments, the PERMA profiler for measuring wellbeing and career resources questionnaire for assessing career preparedness. Statistical analysis was conducted using Pearson correlation to determine the direction and strength of the relationships between variables. Pearson correlation analysis indicated a moderate positive association between overall wellbeing and career preparedness, suggesting that students who report higher levels of wellbeing are more likely to be confident and well equipped for career opportunities. The correlation did not meet the conventional statistical significance threshold; however, the results indicate a meaningful relationship facilitating further exploration. An independent sample t-test was conducted to examine the gender-based differences between PERMA wellbeing and career preparedness. The results indicated that there were no statistically significant differences between genders of students at FHTS which indicates that the perceptions of wellbeing and career preparedness are consistent across genders. The study highlights the significance of incorporating wellbeing frameworks into academic programs to support the development of students holistically to enhance career preparedness.

Keywords: *student wellbeing, perma model, career preparedness, hospitality and tourism-education*

A Qualitative Study Investigating the Effectiveness of Formative Assessment in Enhancing Academic Performance in Science Among Key Stage 2 Students in the Maldives.

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Abstract

This study investigated the effectiveness of formative assessment in enhancing academic performance in science among KS2 students in the Maldives. It also investigated the effectiveness of formative assessment practices to enhance academic performance in science and examined how teachers implement formative assessment practices in science lessons. A phenomenological research design was adopted in the study. The data were collected through semi-structured interviews with KS2 science teachers selected using purposive sampling. Data were analyzed using thematic sampling and six major themes emerged from the participants' responses, which included formative assessment as a responsive and ongoing classroom practice, differentiated and interactive assessment strategies, feedback for enhanced learning, resource limitations, learner diversity hindering consistent practice, and the role of professional development and practical tools in supporting assessment practices. The findings of this study highlight that effective formative assessment practices contribute positively to students' academic performance. However, it is limited by challenges such as varying individual students' needs and limited resources. In conclusion, this study highlights the importance of targeted teacher training and resources to enhance formative assessment practices in science among KS2 students in the Maldives

Keywords: *formative assessment, Key Stage 2, science classrooms, challenges, academic progress.*

Class Size and Its Effects on Delivering Differentiated Instructions in Key Stage 2 in the Greater Male' Area - A Qualitative Study.

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Abstract

The topic of crowded classrooms has emerged as a growing concern in the Greater Male' area among primary teachers. This has significantly impacted the effective delivery of differentiated teaching and learning in classrooms. This study explored the effects of large class sizes on delivering differentiated instruction in Key Stage 2 and aimed to identify the strategies teachers currently use to overcome these challenges. Using a qualitative research design, interviews were conducted with seven educators from a selected primary school, including the principal. The findings indicate that current classroom ratios range from 28 to 39 students per class, resulting in limited one-on-one attention, increased teacher stress, behavioural management issues, and noticeable learning gaps among students at various levels. Teachers have reported that the current teacher-student ratio does not help meet the diverse academic needs of learners, especially those students who require additional support. A lack of time, resources, and inadequate training further hinders the delivery of differentiated instruction. However, teachers have noticed that peer-assisted learning, mixed-ability groups, and the integration of digital tools have helped alleviate the challenges of teaching in crowded classes. Additionally, they emphasize the need for smaller class sizes, classroom support, improved digital tools, and professional development programs. These findings are crucial for schools and the Ministry of Education, as they underscore the importance of implementing systemic interventions to ensure favourable learning and teaching experiences for both students and teachers. By addressing short-term needs and planning for long-term improvements, this research contributes to the development of inclusive and responsive educational practices in classrooms of the Greater Male' area.

Keywords: *crowded classrooms, differentiated instruction, primary education, teacher-student ratio, greater male*

Public Understanding of Science Among Youth in the Maldives

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Abstract

This study investigates the current state of scientific literacy and public understanding of science among Maldivian youth, a critical demographic for the nation's sustainable development. Through a comprehensive survey of 303 respondents aged 18-35, we examine knowledge levels, attitudes, and engagement patterns with scientific topics in the unique island context of the Maldives. Our findings reveal a paradoxical situation: while youth demonstrate strong interest in applied sciences like environmental studies and healthcare, significant gaps exist in fundamental scientific knowledge, particularly regarding basic biological concepts and technological principles. The analysis highlights how socioeconomic factors, educational background, and limited STEM career pathways influence science engagement. Notably, the study identifies a disconnect between youth's general appreciation for science's societal benefits and their limited awareness of local scientific research initiatives and government science policies. The study provides valuable insights for policymakers and educators, suggesting the need for more contextualized science curricula, improved science communication strategies, and expanded STEM opportunities tailored to the Maldivian context. These measures could empower youth to better address pressing national challenges, from climate change adaptation to public health improvements, while fostering a more scientifically engaged citizenry.

Keywords: *scientific literacy, public perception of science, stem education,*

Game on: Leveraging Gamification to Enrich the Learning Experience in Entrepreneurship Courses

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Abstract

This study explores the integration of gamification into entrepreneurship education at the International Islamic University Malaysia (IIUM) as a strategy to enhance student engagement, motivation, and learning outcomes. Gamification, defined as the application of game design elements in non-game contexts, has gained traction in higher education for its potential to foster active participation, critical thinking, and real-world problem-solving skills. Traditional lecture-based teaching methods often fail to sustain students' interest or provide experiential learning opportunities, particularly in entrepreneurship courses where practical application is essential. The research aims to identify effective strategies for incorporating gamification into the entrepreneurship curriculum. A qualitative methodology was adopted, with in-depth interviews conducted among 19 entrepreneurship educators selected through purposive sampling. Thematic analysis of the interview data revealed that gamification significantly contributes to transforming the learning environment from passive to active. Educators reported that gamified learning activities empower students by offering them greater control over their learning journey, which in turn enhances their critical thinking, creativity, and problem-solving capabilities. Additionally, gamification was found to support the development of a growth mindset, as students were more willing to take risks, learn from failure, and collaborate in dynamic team settings. Overall, the study concludes that implementing gamification in entrepreneurship courses not only improves student engagement but also aligns educational experiences with real-world entrepreneurial challenges. The findings underscore the need for structured strategies and educator training to effectively embed gamification in course design, thereby enriching the learning experience and outcomes for future entrepreneurs.

Keywords: *active learning, gamification, students' engagement*

Understanding Low Enrolment in Library and Information Science Courses: A Quantitative Study Based on the Theory of Planned Behaviour

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Abstract
The Library and Information Science (LIS) courses at the Maldives National University (MNU) have experienced persistently low enrolment since their inception in 2010, despite the increasing global demand for information professionals. This study seeks to investigate the underlying factors influencing students' intention to enrol in LIS courses at MNU, using a quantitative approach based in Ajzen's Theory of Planned Behaviour (TPB). The literature review reveals that low awareness, financial constraints, negative perceptions about LIS careers, and insufficient institutional promotion are recurrent barriers to enrolment across global contexts. However, these issues remain underexplored in the Maldivian context. The study aims to test four hypotheses related to awareness, financial constraints, career misconceptions, and institutional support, and their influence on enrollment intentions. A cross-sectional survey design will be employed, targeting 250–300 respondents, including final-year secondary school students, first-year MNU students from non-LIS courses, and career guidance counsellors in Malé. Data will be collected using a structured questionnaire and analysed through descriptive statistics, correlation, and multiple regression using SPSS. Expected findings include identifying significant relationships between the proposed variables and enrolment intentions, thus providing empirical insights into the barriers that hinder student enrolment. The study's implications are twofold: firstly, it will inform MNU's recruitment strategies by highlighting the need for targeted awareness campaigns, improved career counseling, and financial support mechanisms. Secondly, the research contributes to regional and global efforts to strengthen LIS education by offering data from a developing country context. The results will serve as a foundation for evidence-based interventions to improve visibility, reshape public perception, and enhance enrolment in LIS courses at MNU.

Keywords: *library and information science education, enrolment barriers, Theory of Planned Behaviour (TPB), student career perceptions, quantitative study in higher education*

Lost in Transition - Policy Relevance of the Current Education System of The Maldives in Supporting Transitions to Higher Education and Life

Zeenath Solih, Asim Abdul Sattar, Asiya Ibrahim, Nadhiya Ahmed, Fawaz Shareef, Aminath Shiyama, Aishath Shanoora, Leela Ahmed, Roza Ibrahim, Adam Khalid
The Maldives National University

Abstract
The Maldives has made notable progress in expanding access to education through a series of legislative and policy reforms in recent years. These efforts reflect a strong national commitment to ensuring that all children can access formal education. However, despite this progress, persistent challenges remain particularly around the relevance and responsiveness of existing policies to the actual needs of students, especially during key transitions to higher secondary and tertiary education. Ensuring quality and inclusive education that equips students for these critical stages remains a pressing concern. This paper investigates the extent to which current education policies support smooth transitions within the Maldivian education system, based on findings from the Lost in Transition project. The project employed a concurrent mixed-methods approach, combining both qualitative and quantitative data, with ethical clearance from all relevant bodies. This presentation specifically focuses on the document analysis strand of the study, examining key policy documents, acts and regulations, national strategic education plans, and government circulars relating to education issued between 2015 and 2023. The gap analysis assesses how effectively research questions related to specific government documents address continuity and progression within the education system, emphasizing equitable access to quality education up to the age of 18. The analysis contributes to addressing the research question, revealing a disconnect between policy intent and implementation, particularly concerning equitable access to resources between Malé and the outer atolls. The study underscores the need for more context-sensitive and equity-driven policies that align more closely with national development goals. These findings offer critical insights for policymakers seeking to build a more equitable, inclusive, and resilient education system in the Maldives.

Keywords: *lost in transition, policy review, relevancy of education, secondary education, higher education*

Visual Literacy Theory-Practice Mapping: Teaching Gen Z Literature through Graphic Novels in Post-Pandemic Classrooms

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Abstract:
The COVID-19 pandemic introduced Gen Z in Bangladesh to online learning, paving the way for visual literacy, including visual narratives and sequential art, which the proliferation of AI tools and applications has further accelerated. This paper is significant because no paper has discussed teaching English literature through graphic novels. Therefore, this paper's objective is to explore visual literacy theories (e.g., Clark and Paivio's Dual Coding Theory, 1991; Jakobson's Intersemiotic Translation, 1959) and map them to the learning practices of Gen Z students in private universities so that academics in English studies can effectively teach English literature through graphic novels. The qualitative research adopted a case study approach, which mapped educational practices of the English department of a private university in Bangladesh with visual literacy theories that cater to Gen Z, which will potentially enable academics to teach English literature through graphic novels. Focus group discussions (FGDs) were conducted with English department students to get their opinions about English literature texts (novels and dramas) and the graphic novel versions of those texts. Faculty members who taught those texts were also interviewed to get their views about teaching English literature through graphic novels. Based on the opinions of students, teachers, and document analysis (i.e., English literature curriculum, course outlines), and text analysis of original and graphic novel texts, visual literacy theory-practice mapping was done. The findings suggest that while the English department Gen Z students, in general, prefer graphic novel versions of literary texts because of visual literacy factors, the teachers who teach the literature courses, who were millennials, Gen X and Baby Boomers, were not thrilled at the prospect of teaching through this genre (i.e., graphic novels). A few said that graphic novels may be introduced to whet the students' appetite, but the original texts must ultimately be taught—there cannot be a trade-off.

Keywords: *visual literacy theory-practice mapping, Gen Z, graphic novels and visual narrative, post-pandemic classroom, Bangladeshi private universities*

Influence of Psychological Capital on Student Engagement of Faculty of Hospitality and Tourism Studies, The Maldives National University

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Abstract

The tertiary education expectation is different for students entering into the university life. To successfully navigate student life in tertiary education setting requires students to be equipped with the necessary coping skills and be adequately engaged with studies for a meaningful study experience. The aim of this study therefore was to assess the influence of psychological capital (PsyCap) on student engagement (SE) in Faculty of Hospitality and Tourism, The Maldives National University (FHTS-MNU). PsyCap consists of four dimensions; Hope, Efficacy, Resilience and Optimism (HERO) that can be developed, managed, and measured to improve the performance of a student. Student engagement consists of Affective and Cognitive engagement and is the student connection with the educational establishment, peers, faculty staff and learning in general. Therefore, understanding PsyCap and its relationship with SE can be imperative in creating a favourable learning environment for students in higher education settings. The study employed a quantitative research design by employing a survey method to test the strength of relationships between PsyCap and SE. A total of 134 students enrolled into various academic programs at FHTS-MNU were surveyed to gather the data. Upon analysing the data, it was found that PsyCap had a moderate positive relationship with SE. The dimensions that most contributed to SE were optimism and resilience. Furthermore, it was also found that PsyCap majorly contributed to Cognitive student engagement compared to Affective engagement. These findings help and facilitate to understand significant areas to consider when designing curriculum, teaching and designing of learning materials. The research also facilitates further research on understanding how PsyCap can be further enhanced in order to attain adequate SE.

Keywords: *psychological capital, student engagement, FHTS*

Perceptions of School Leaders on Current Teacher Education Programme Adequacy for Graduate Transition into the Teaching Profession in the Maldives.

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Abstract

Amid growing demands for quality teachers and relevant professional practice, how well teacher preparation programs equip graduates with the competencies required for the realities of the classroom has been a key question. This paper is part of a larger project aiming to "Investigate School Leaders' perceptions on the Performance of MNU graduates". Guided by the career EDGE framework which emphasizes the integration of experience, content knowledge, generic skills, emotional intelligence, and self-efficacy, the project is framed around three core objectives: assessing the relevance and adequacy of teacher education curricula, identifying key strengths and weaknesses in graduate competencies, and evaluating the extent to which graduates meet employer expectations in areas such as content and pedagogical knowledge, classroom management, communication skills, and professional conduct. Findings presented in this paper are drawn from phase one of the project, which employed qualitative methods to gather data from school leadership teams comprising principals, deputy principals, leading teachers, and practicum coordinators of three schools in the Malé region and one rural school via focus group discussions. Thematic analysis was employed to systematically code, categorize, and interpret patterns within the data, enabling the identification of salient themes related to perceived curriculum strengths and limitations in relation to graduate performance. Findings indicate that while graduates exhibit strong pedagogical knowledge and contemporary teaching strategies, there is a recognized need for greater emphasis on the development of soft skills and professional ethics. In response, the paper proposes a framework for evaluating the effectiveness of initial teacher training from the perspectives of the employers, and outline implications for curriculum reform, policy development, and future empirical research. By centering the voices of school leaders, the paper contributes to the discourse on teacher education reform and highlights the importance of contextually grounded program evaluation in small island developing states.

Keywords: *preservice training, teacher education curriculum, graduate competency, school leader perceptions, curriculum relevance and adequacy*

Examining the Impact of AI on Teaching and Learning: Educators' Perspective from Maldives National University

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Abstract:
The rapid proliferation of Artificial Intelligence (AI) in teaching and learning has provided extensive new opportunities as well as challenges in the realm of education sector worldwide. Despite the growing integrations of Ai tools in teaching and learning, a lack of research was evident in the context of higher education in the Maldives. Hence, this study aimed to fill the research gap by studying the impact of Ai on teaching and learning at Maldives National University from the perspective of educators based on three core research objectives: perceived benefits, expected challenges and strategies to mitigate those challenges posed by Ai. Drawing from prior research, it is evident that Ai tools like ChatGPT and Bard has significantly contributed towards streamlining content delivery, improving instructional efficiency and supporting personalized learning of students. However, concerns persist around plagiarism and academic integrity along with the absence of proper institutional policies. Hence by employing semi structured interviews, qualitative phenomenological research was conducted among five selected lecturers teaching degree level courses from three different faculties at MNU. Thematic analysis was used in identifying the key patterns form the data collected. Findings from the research revealed that Ai had positively contributed towards teaching aspects like content development, lesson planning and student engagement. However, educators concern over limited Ai detection tools, ethical issues like inaccurate citation along with over reliance on Ai tools was evident from the results analyzed. Educators further recommended capacity building, policy development and redesigning the assessment structure as major mitigation strategies. The finding of this study has widespread practical implications for stakeholders like educational policy makers and higher educational institutes as it bridges the research gap in the subject area while allowing them to develop informed decision in regards to Ai practices in the education sector.

Keywords: *artificial intelligence, higher education, teaching and learning, chatgpt, Maldives, educator's perspective, ethical use, education policy*

Using Dialogic Feedforward to Enhance Student Learning in Higher Education: An Action Research

Fathimath Haleem, Aminath Waseela
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Abstract

Educators struggle to find more effective approaches to provide student feedback that enhances student learning and satisfaction. Feedforward is an evolving concept that is gaining immense acceptance in relation to facilitating learning in higher education. Literature indicates that feedforward strategy enhances students' learning experience and academic performance. Using the three-stage model proposed by Beaumont et al. (2011), this action research investigated how feedforward strategy focuses on guiding future assignments, affects the learning experience of students enrolled in a blended mode Master of Nursing program. From a cohort of 24 students, 7 students volunteered to participate in semi structured interviews guided by a predefined protocol. To supplement the interview data, classroom observations were also conducted to assess student's engagement, interaction and confidence during learning activities. 4 key themes emerged from the analysis: enhanced learning, dialogic interaction, motivation, personalized feedback. Data from observations revealed that students were actively engaged in discussions and their coursework. Students demonstrated a strong motivation to learn through inquiry, confident in asking questions, clarifying doubts, and assurance in the quality of their work. It was also observed that feedforward strategies enhanced student-teacher relationship. The use of dialogic feedforward strategies helped students to actively engage in their learning, improve their understanding, and work towards achieving their academic targets. These strategies also helped students interpret feedback comments more positively, encouraging and motivating them to progress. Students expressed satisfaction with the personalized feedback received, noting that it boosted their confidence. Overall, the integration of feedforward approaches across the phases of the adopted model was found to have a positive influence on the students' learning experience leaving them both satisfied and content with the process.

Keywords: *feedback, dialogic feedforward, enhance learning experience, higher education*

Exploring the Role of Teachers in Developing English Literacy Skills in Grade One: A Qualitative Case Study

Aminath Nazeeha, Aminath Waseela
The Maldives National University

Abstract

This study investigated the crucial role teachers play in developing English literacy skills among grade one students based on Vygotsky's socio-cultural theory, Bandura's social learning theory, and the Emergent literacy framework. It examined the instructional strategies used, the effectiveness of those strategies, interventions, and the challenges encountered by teachers in developing early literacy skills. A qualitative research design was used, incorporating a case study approach. The data was gathered through semi-structured interviews with six English literacy teachers from a private school in Male', using purposive sampling. Thematic analysis was used to analyse the data. The findings revealed five major themes: instructional strategies, assessment and monitoring, support for struggling learners, challenges in literacy instruction, and teachers' professional development and resources. Teachers reported using repetition, phonics-based structured programs like Jolly Phonics, reading aloud, and the use of visuals to support literacy development. Formative assessment methods, such as daily reading checks and daily work reviews, were used to monitor progress and identify the students who require additional support. Challenged students received support classes, pull-out sessions, small-group instruction and one-to-one support. Despite receiving institutional support such as smartboards, internet and regular professional development, teachers faced challenges, including learner diversity, inconsistent prior exposure to phonics, and limited planning time. In conclusion, the study highlighted the necessity of utilising interactive learning practices for the students and equipping teachers with evidence-based strategies and ongoing professional development. The findings also emphasised the importance of designing targeted teacher training programs. When teachers receive structured training and institutional support, they are better able to implement effective literacy practices and respond to the diverse needs of learners. Strengthening teacher capacity through continuous PD and providing adequate planning time and flexibility are essential for improving literacy development among grade one students in the Maldives.

Keywords: *English literacy, grade one, effective strategies, teacher interventions, struggling learners, professional development*

Building Hearts and Minds: Stakeholder Perspectives on a School-Based Social and Emotional Learning (SEL) Programme in a Maldivian School

Nadheema Abdul Sattar, Aminath Waseela, Ihusana Shareef
The Maldives National University

Abstract

Social and Emotional Learning (SEL) is increasingly recognized as a critical component of holistic education, supporting students in developing social and emotional skills such as self-awareness, emotional regulation, empathy, and positive relationships. This study explored the perceptions of students, teachers, and parents regarding an SEL programme implemented in a public school in the Maldives. The programme adopted a whole-school approach, delivering SEL through a dedicated instructional period across all grade levels, aiming to develop students' self-awareness, emotional regulation, social awareness, relationship skills, and responsible decision-making. Using a qualitative case study approach, data were gathered via focus group discussions (FGDs) from a purposively selected sample of 24 participants, including teachers, students, and parents from Key Stages 3 and 4. Findings revealed that all stakeholder groups viewed the programme as beneficial, particularly in fostering students' emotional development, communication skills, and social understanding. Teachers reported that the SEL programme significantly supported students' emotional and social growth, helping them become more expressive, self-aware, and empathetic, which fostered a more inclusive classroom environment. In addition, teachers reported experiencing both personal and professional growth, gaining deeper insights into their students and integrating SEL strategies into their daily practice. Students reported benefits in emotional awareness, communication, problem-solving, and relationships with peers and teachers. Parents observed improvements in their children's emotional expression and conflict-resolution skills, expressing strong support for the programme's continuation. They appreciated the focus on healthy emotional management, empathy, and acceptance of differences. These findings underscore the importance of integrating culturally and religiously relevant SEL programmes into school curricula and provide guidance for policies supporting students' social and emotional well-being in the Maldivian schools.

Keywords: *social and emotional learning (sel), student well-being, teacher and student perceptions, parent perspectives, social and emotional development*

Fostering Reflective Writing Skills Through Academic Coaching to Enhance Critical Thinking in First-Year Nursing Students: Action Research

Farzana Sabiq
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Abstract

Reflective writing is increasingly recognized as a transformative pedagogical tool in nursing education, especially for developing critical thinking skills. Academic coaching transforms reflective writing into a structured process that promotes deeper analysis. This action research study aimed at exploring the effectiveness of reflective writing in enhancing critical thinking among first-year nursing students during their initial clinical placements through structured academic coaching sessions. Grounded in the GROW coaching model and Gibbs' Reflective Cycle, the study utilized participatory action research over two coaching cycles. Two first year nursing students were purposively selected. Each maintained a reflective journal for five consecutive days per week across both cycles, resulting in 20 entries per student. Academic coaching sessions were provided before each cycle. Two separate focus group discussions (one per cycle), each involving both participants, were conducted. The same students who maintained the journals participated in the focus groups. The Holistic Critical Thinking Scoring Rubric (HCTSR) was used to evaluate the depth of critical thinking in the reflective journals. Thematic analysis of journals and focus group discussions revealed four key themes: reflective writing as a catalyst for critical thinking, development of self-awareness and emotional regulation, identification of barriers and enablers of reflective practice, and the educational significance of reflection in clinical nursing. Comparative analysis of journal scores between cycles demonstrated a clear improvement in students' levels of reflectivity and critical thinking based on HCTSR criteria, evident through deeper content and more complex reasoning. The findings highlight the value of integrating structured reflective writing and academic coaching into nursing education to strengthen students' critical thinking and clinical competence.

Keywords: *reflective writing, reflective practice, critical thinking, academic coaching, clinical education*

Self-Directed Learning Readiness among Nursing Students at Maldives National University

Aminath Shafia[1], Nongkran Viseskul[2], Areewan Klunklin[2], Nonglak Chaloumsuk[2]
1.The Maldives National University, 2. Chiang Mai University

Abstract
Readiness for self-directed learning (SDL) is a significant indicator of university students' self-regulation, interests, and learning abilities. SDL readiness is crucial for nursing students to adapt to ever-changing healthcare environments and is associated with better learning outcomes, particularly through lifelong learning processes. Consequently, understanding the level of SDL readiness in undergraduate nursing students can inform curriculum development and support strategies. This study aimed to identify the level of SDL readiness among undergraduate nursing students at Maldives National University (MNU). A cross-sectional descriptive design was applied using the Self-Directed Learning Readiness Scale for Nursing Education. The target population was undergraduate nursing students who joined the course through different learning pathways, including direct and alternate pathways. A total of 182 participants were selected randomly based on power analysis, using G*Power software for a priori power analysis for a t-test analysis. Descriptive statistics, independent sample t-test, and ANOVA were used for data analysis. Findings showed that the undergraduate nursing students demonstrated a high level of SDL readiness for both direct (M = 155.76, SD = 16.22) and alternate (M = 158.16, SD = 14.67) pathways. However, there were no significant differences in the mean scores of SDL readiness between direct and alternate pathway students as well as within the year of studies. Nevertheless, there was a significant difference in the mean scores of the self-control domain between direct and alternate pathway students ($t180 = -2.0$, $p < .05$). Alternate pathway students demonstrated a significantly higher level of self-control (M = 61.85, SD = 6.28) compared to direct students (M = 59.87, SD = 6.93), $P<.05$. The results of this study imply that learning pathways need to be considered in designing teaching strategies to improve undergraduate nursing students SDL readiness. Further research is recommended to explore contextual factors influencing SDL readiness in the Maldivian nursing education context.

Keywords: *self-directed learning readiness, nursing education, learning pathway, undergraduate student*

Fostering the Critical Writing of an Undergraduate Nursing Student through Academic Coaching: An Action Research

Aishath Zeeshan
The Maldives National University

Abstract

Academic coaching has emerged as an effective intervention in higher education, supporting students in areas such as study skills, time management, and critical thinking. It is defined as a structured, collaborative, and goal-oriented process that enhances self-awareness and academic performance. In today's information rich era, critical writing, which is rooted in analysis, argumentation, and evidence, is essential for academic and social competence. However, many undergraduate students, including those in the Maldives, struggle with developing critical writing skills. This action research aimed to improve a final-year nursing student's critical writing through academic coaching, guided by Kemmis and McTaggart's action research spiral model and the CLEAR coaching framework. The study was conducted over three days in two action research cycles. On Day 1 (Cycle 1), a coaching contract and action plan were collaboratively developed following a baseline assessment and a pre-intervention interview. On Day 2, the first coaching session focused on foundational concepts of critical writing. Three days later, Cycle 2 began with a revised coaching plan informed by reflections from Cycle 1. On Day 3, the second coaching session emphasized practical writing tasks such as making claims, building arguments, and integrating a critical voice. Both sessions were delivered online, each lasting two hours and tailored to the participant's learning needs. Data were collected through pre and post intervention interviews, critical writing samples, participant reflective journals, and researcher session notes. Writing was evaluated using the VALUE Rubric for Critical Thinking. Thematic analysis was conducted, and key themes identified included challenges in critical writing, perceived impact, and coaching effectiveness. The participant showed limited critical engagement initially but developed greater confidence, argumentation skills, and reflective thinking through coaching. Personalized feedback and interactive strategies promoted higher-order thinking. Findings suggest academic coaching is a valuable approach to enhancing critical writing skills in nursing education.

Keywords: *academic coaching, critical writing, clear coaching framework, nursing education, higher education*

Lost in Transition – Regret, Realities, and the Cost of Leaving School Early

Aminath Shiyama, Leela Ahmed, Aishath Shanoora, Asiya Ibrahim, Ali Fawaz Shareef, Zeenath Solih, Asim Abdul Sattar, Roza Ibrahim, Nadhiya Ahmed, Adam Khalid
The Maldives National University

Abstract
Early school leaving remains a significant challenge in many countries, including the Maldives. Exiting the education system before completing higher secondary school has long-term consequences for individual well-being and national development. In the Maldivian context, early school leaving can restrict access to stable employment, financial independence, and personal growth. This paper explores the reasons behind early school leaving and its lasting effects, based on findings from the broader Lost in Transition project. The project employed a concurrent mixed-methods approach, collecting both qualitative and quantitative data following ethical approval from all relevant bodies. This presentation focuses on qualitative insights from interviews with five early school leavers from Malé and atolls. Due to the informal nature of this specific group of participants, interviews were conducted as walking conversations, with participants' consent. Field notes captured during these conversations were developed into narratives and analysed thematically to identify recurring patterns. Findings highlight several drivers of early school leaving, such as financial pressures, the lure of immediate income, material aspirations, and early success in sports. While these factors initially offered promise, participants later expressed regret over leaving school. In particular, those who pursued sports found their careers short-lived, with few options available after their peak. They faced challenges like unstable work, limited progression, limited transferable skills, and difficulty returning to education due to adult responsibilities. These stories underscore the high personal and social cost of early school leaving. Stronger transitional support, better career guidance, and accessible second-chance education pathways are essential to help at-risk students remain in school until the age of 18 years.

Keywords: *regret in early school leaving, education transition, youth employment, career pathways*

Is AI a Good Fit for STEM Education in Schools? A Systematic Literature Review

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Abstract
STEM (Science, Technology, Engineering and Mathematics) education is critical for preparing students with future-ready skills. In the Maldivian context, challenges such as limited infrastructure, a shortage of qualified STEM teachers, and small student populations on remote islands hinder effective STEM teaching. These barriers highlight the need for alternative strategies such as the integration of Artificial Intelligence (AI) tools in classrooms. This study presents a systematic literature review (SLR) examining how AI is used in STEM education and identifying strategies for its effective integration in schools. A Total of 32 peer-reviewed articles published between 2020 and 2025 were selected based on specific inclusion criteria. Articles were retrieved using Boolean searches across three academic databases: IEEE Xplore, ScienceDirect, and Springer Nature. Using the PRISMA model for screening the papers, thematic analysis was used to extract key findings. Findings indicate that AI tools such as ChatGPT, virtual labs, robotics, and immersive technologies like virtual reality (VR) and augmented reality (AR) enhance student learning by supporting the understanding of complex concepts and promoting critical thinking. These tools also help teachers develop personalized and student-centred lessons. The paper also highlights that effective implementation requires teacher and student training, as well as investment in devices that support AI applications. The review concludes that AI is a good fit for STEM education in schools, especially in settings with limited resources. It recommends school leaders organize targeted training programs and urges policymakers to establish clear guidelines to support AI integration.

Keywords: *artificial intelligence, stem education, remote/ rural/ underserved setting*

Action Research on Scenario-Based Learning for Advanced Certificate Social Work Students at The Maldives National University

Zeenath Shakir
The Maldives National University

Abstract

Scenario-based learning (SBL) is a widely used approach in higher education to increase student engagement in classroom learning. While social work education has been globally evolving in recent years by incorporating mentoring experiences and diverse pedagogical approaches, such as experiential learning, there is limited literature on examining the effectiveness of scenario-based learning (SBL) in social work education settings. The present study was designed to address this gap by getting social sector field experts who used SBL as a pedagogical teaching strategy, who came as guest lecturers to influence student engagement within the classroom. The study aimed to find out how the guest lectures impacted student engagement and what were the students' experiences towards the guest lectures who used SBL as a teaching pedagogy. The study used action research consisting of two cycles where student feedback was collected after the first cycle to improve how the guest lectures would be conducted in the next cycle. Purposive sampling was used to select eight students enrolled in the subject Family and Domestic Violence from the Advanced Certificate in Social Services course. Data collection techniques were focus group discussions with students to gather their experiences towards the guest lectures using SBL approaches and observations made by the researcher to find out the student engagement during the guest lecture. Thematic analysis was used to analyse observation field notes and focus group discussions where three central themes emerged from the study indicating that guest lectures using SBL approaches enhanced student understanding of domestic violence and ways of responding to such problems in Maldivian context and increased students' interest towards the subject matter. The study demonstrated that utilising field experts to use SBL as a teaching pedagogy was an effective way to increase student engagement in the classroom.

Keywords: *scenario-based learning, social work education, field experts*

Exploring the Role of Teachers in Developing English Literacy Skills in Grade One: A Qualitative Case Study

Aminath Nazeeha, Aminath Waseela
The Maldives National University

Abstract

This study investigated the crucial role teachers play in developing English literacy skills among grade one students based on Vygotsky's socio-cultural theory, Bandura's social learning theory, and the Emergent literacy framework. It examined the instructional strategies used, the effectiveness of those strategies, interventions, and the challenges encountered by teachers in developing early literacy skills. A qualitative research design was used, incorporating a case study approach. The data was gathered through semi-structured interviews with six English literacy teachers from a private school in Male', using purposive sampling. Thematic analysis was used to analyse the data. The findings revealed five major themes: instructional strategies, assessment and monitoring, support for struggling learners, challenges in literacy instruction, and teachers' professional development and resources. Teachers reported using repetition, phonics-based structured programs like Jolly Phonics, reading aloud, and the use of visuals to support literacy development. Formative assessment methods, such as daily reading checks and daily work reviews, were used to monitor progress and identify the students who require additional support. Challenged students received support classes, pull-out sessions, small-group instruction and one-to-one support. Despite receiving institutional support such as smartboards, internet and regular professional development, teachers faced challenges, including learner diversity, inconsistent prior exposure to phonics, and limited planning time. In conclusion, the study highlighted the necessity of utilising interactive learning practices for the students and equipping teachers with evidence-based strategies and ongoing professional development. The findings also emphasised the importance of designing targeted teacher training programs. When teachers receive structured training and institutional support, they are better able to implement effective literacy practices and respond to the diverse needs of learners. Strengthening teacher capacity through continuous PD and providing adequate planning time and flexibility are essential for improving literacy development among grade one students in the Maldives.

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Keywords: *Academic Coaching, Critical Writing, CLEAR coaching framework, Nursing education, higher education*

Sub-theme 3: Data-Driven and Evidence-Based Insights in Integrative Approaches to Public Health

21 Abstracts



Chewing Areca Nut and Its Effect on Oral Health

Aishath Hassan
The Maldives National University

Abstract

Areca nut chewing is a common cultural and habitual practice globally especially in Asian countries. Thus, research studies have shown that there is a strong correlation between this habit and growing risk of developing oral diseases such as oral sub-mucous fibrosis, oral cancer, leukoplakia and periodontal diseases. Therefore, the review aims to explore oral health risks linked with chewing areca nuts and analyse evidence-based methods for areca nut cessation. To identify the relationship between areca nut and oral diseases and to identify intervention strategies, a systematic search on articles published between 2020 and 2025 was undertaken from databases including PubMed, Elsevier, EBSCOhost, Research4life and Google scholar. The results highlight that potentially malignant oral diseases such as oral submucous fibrosis, leukoplakia periodontal diseases, and malignant disorders such as oral cancer are strongly associated with a chemical constituent inside areca nut called arecoline. Areca nut consumption has harmful effects on the oral mucosa by increasing collagen production and causing activation of fibroblast, leading to hardening of soft tissue. The findings indicate, arecoline and arecoline N-oxide as main constituents of areca nut initiates inflammation and genotoxicity increasing the risk of developing potentially malignant oral diseases and malignant oral disease. In addition, these constituents have carcinogenic effects, addictive effects and mutagenic effects, which result in areca nut induced malignant transformation in oral sub-mucous fibrosis. The studies assert that cognitive behavioural programs and raising community awareness on the potential health risks of areca nut chewing demonstrate promising results for areca nut cessation. Also, pharmacological interventions such as use of antidepressants deliver positive outcomes for areca nut cessation.

Keywords: *areca nut, oral disease, areca nut cessation*

Case Study: Establishing and Operating a Cancer Support Group in Maldives-Impact on Mental Wellbeing of Patients, Survivors and Caregivers.

Abdul Malik, Hussain Rasheed Moosa, Juwairiya Saeed, Aminath Shafaq
Cancer Society of Maldives

Abstract:
The Cancer Society of Maldives (CSM), a non-governmental organization established in 2012, initiated the first Cancer Support Group (CSG) in the Maldives in 2016 to create a platform where cancer patients, survivors, caregivers, and technical experts share experiences and provide mutual support. This study explores the processes surrounding the formation of CSG, highlighting its impact on mental wellbeing of members. A qualitative method, with an emphasis on secondary data from CSG meeting records and key informant interviews with primary drivers of the group. Starting with six members, the CSG gradually expanded to include a diverse membership: 39% caregivers, 28% patients, 27% survivors, and 6% technical experts. Initial challenges included societal stigma surrounding cancer and hesitation in participation. The group grew in resilience now hosting over 25 regular attendees and engaging 280 individuals through a dedicated Viber Community. The adaptation to hybrid format during and after COVID-19 further enhanced inclusivity, allowing participation from individuals receiving treatment abroad or residing in islands. Weekly meetings now serve as consistent sources of psychosocial support, empowering members to publicly share their stories through various media platforms. Since 2016, over 30 patients and survivors have contributed to podcasts, videos, and public forums, significantly reducing stigma. All participants gave credit to CSG for positively influencing their emotional health during and after treatment. The study concludes that CSG is a pivotal and sustained initiative of CSM, significantly benefiting members by alleviating emotional stress associated with cancer. The study requires further research, while the findings underscore the value of support groups and call for their expansion across the Maldives.

Key words: *cancer support group, psychosocial support, mental wellbeing*

The Effect of Peritoneal Dialysis on the Quality of Life of Patients With End-Stage Renal Disease

Adliyyath Adil
The Maldives National University

Abstract

End-stage renal disease (ESRD) severely impairs patients' quality of life (QOL), necessitating renal replacement therapies (RRT). Peritoneal dialysis (PD) has emerged as a method for improving Health-related Quality of life (HRQOL). The literature review aimed to explore the effect of PD and nursing care management required to improve the QOL of ESRD patients undergoing PD and offer recommendations to improve nursing care and patient experience of QOL. The methodology was based on a comprehensive literature review using peer-reviewed sources published in databases such as EBSCO, PubMed, CINAHL, Web of Science, Research4Life, and Google Scholar, between 2014 and 2024. Key words used include: "end-stage renal disease", "dialysis modalities", "peritoneal dialysis", "quality of life"," nursing management"," nursing intervention", "patient education". Articles on PD, QOL, nursing management, and patient education techniques were included in the study. Inclusion criteria were articles related to PD, QOL, and nursing education. Only articles in English, original qualitative and quantitative research studies, clinical trials, systematic reviews, meta-analyses, and cohort studies were selected for the review. The review excludes articles from unreliable sources, other languages, and publications from 10 years ago. Out of 70 studies, 50 studies were included. Articles were appraised using the JBI and PRISMA tools. All the articles were tabulated, and findings were thematically analyzed using Braun and Clark's six-step method. Three themes emerged. 1.PD improves the QOL of ESRD patients. 2.Nursing interventions and education improve PD patient outcomes. 3.Family involvement and social support improve patient outcomes. The findings suggest that PD significantly improves patients' overall QOL, for it is home-based, low complication nature. The review recommends implementing a holistic care approach, telecommunication, patient health education, and establishing community-health nursing to support sustainable outcomes. The study concludes by emphasizing the need for continued research to enhance the QOL of ESRD patients across the country.

Keywords: *end-stage renal disease, dialysis modalities, peritoneal dialysis, quality of life, nursing management, nursing intervention, patient education*.

Epidemiology and Visual Impairment of Ocular Toxoplasmosis in The Maldives: A Descriptive and Analytical Study

Fathimath Rifa Moosa[1], Aish Afnan Ahmed[1], Aishath Shadha Nashid[1], Fathimath Zukaa Saleem[1], Firasha Hassan[1], Mohamed Azzam[2], Razana Faiz[1], P Shaik Syed Ali[1].

1.Maldives National University, 2. Indira Gandhi Memorial Hospital

Abstract

Ocular Toxoplasmosis is the leading cause of permanent blindness in the Maldives, between the ages 10 to 40 years. This study aims to describe the demographics and clinical characteristics of OT among the patients at Indira Gandhi Memorial Hospital (IGMH) and from Aasandha database (Vinavi) between the years 2021 to 2024.The study demonstrates the association of the visual outcomes of OT based on age, gender, socioeconomic factors, contact with pets, comorbidities and clinical characteristics. This is a retrospective cross-sectional study comprising 60 participants, which utilized census sampling to identify patients diagnosed with OT in IGMH database (HINAI), as well as from Aasandha database (Vinavi) from 2021-2024. Sociodemographic data was collected via phone interviews following verbal consent, whereas the clinical data was extracted from the respective databases. Findings from the study reveal the most participants with OT were young (40%), females (56.7%), from central region of Maldives (50%), utilized mixed types of drinking water (43.3%) and had no history of exposure to pets (71.1%). A large percentage of OT patients did not exhibit any visual impairment (75%), while 15% was found to have mild to moderate visual impairment and 10% had severe. Visual impairment was found to be significantly associated with the location of lesion ($p = 0.002$), type of scar ($p = 0.022$) and having an underlying comorbidity ($p = 0.042$). This study revealed a higher prevalence among young adults, females, and individuals residing in the central region. A statistically significant association was found between visual acuity and location of lesion, type of lesion and comorbidities which was consistent with numerous studies studying the factors affecting visual loss in patients with OT.

Keywords: *ocular toxoplasmosis, visual impairment, permanent blindness*.

Case Study: The Power of Shared Experiences; Establishing and Leading a Cancer Support Group to Improve Mental Wellbeing in the Maldives

Abdul Malik, Hussain Rasheed Moosa, Mohamed Kaleem, Juwairiya Saeed
Cancer Society of Maldives

Abstract:
The Cancer Society of Maldives (CSM), the only non-governmental organization in the country dedicated exclusively to cancer prevention, treatment, and support, recognized the urgent need for a structured psychosocial intervention for cancer-affected individuals and established the nation's first Cancer Support Group (CSG) in 2016. The CSG aims to support the mental wellbeing of patients, survivors, and caregivers by providing a space for shared experiences, emotional healing, and mutual encouragement. Through therapeutic engagement and regular group sessions CSG emphasizes that a cancer diagnosis is not a death sentence, promotes positive attitudes toward treatment, and empowers participants to become advocates. Weekly meetings conducted confidentially in hybrid mode to include members receiving treatment abroad and residing in islands to prioritize inclusivity, especially crucial in the context of Maldives dispersed close-knit communities. The support group has grown to over 280 members via a Viber Community and continues to expand through outreach during atoll awareness and screening campaigns. New members are actively encouraged to share their experiences, with facilitators fostering trust and ensuring everyone has a voice. The group has faced challenges in initial engagement and member retention. However, key learnings that have emerged include structured activities enhance therapeutic value and team cohesion strengthens the support process. Additionally, interdisciplinary contributions from medical and psychosocial professionals improve participation, and empowers members who speak publicly to contribute to cancer awareness and stigma reduction. The CSM is now laying groundwork for establishing similar support networks across the islands, recognizing the transformative role of peer-based emotional support in comprehensive cancer care.

Keyword: *cancer support group, mental wellbeing, advocacy, stigma reduction*

CASE STUDY: Covering 170 islands across 20 Atolls by Land, Air and Sea - Cancer Awareness and Screening in the Maldives

Abdul Malik, Hussain Rasheed Moosa, Mohamed Kaleem, Juwairiya Saeed
Cancer Society of Maldives

Abstract

In a geographically dispersed island nation like Maldives, delivering cancer prevention and early detection services requires innovative, coordinated approaches to reach populations across vast distances. Since 2013, the Cancer Society of Maldives (CSM) has addressed this need through nationwide awareness and screening programmes focused on major preventable cancers. These efforts, now comprising approximately ten outreach trips annually, are designed to reach island communities that are underserved by conventional health systems. Till date 170 islands from all 20 Atolls have been screened. While public healthcare facilities exist across the country, there remains limited emphasis on structured services for cancer prevention, screening, and early detection. In the absence of a national screening framework, CSM's interventions play a critical role in bridging this gap. The programmes are implemented in collaboration with Local Councils, Women's Development Committees, Health Centres, Schools, offering education on cancer risk factors, symptoms, early detection, and availability of screening. Each trip, teams of 15–20 healthcare professionals travel by air or sea to selected Atolls, conducting awareness sessions midweek across multiple islands, followed by weekend screenings on a designated island, with individuals from neighbouring islands transported by speedboat. In many low-resource settings, baseline knowledge about cancer is minimal. Individuals with suspected symptoms are referred to Malé for diagnostic evaluation and are supported by CSM throughout the process. These outreach efforts have significantly increased community participation in screening activities and contributed to broader public preparedness for a future national screening programme. Findings from these initiatives also inform ongoing advocacy for the institutionalisation of a national cancer prevention and early detection policy. This experience highlights two critical insights; firstly, that targeted outreach in underserved communities can improve early detection and health-seeking behaviour; and secondly, that a sustainable national screening infrastructure is essential to reduce the long-term burden of cancer in the Maldives.

Key words: *cancer screening/awareness, early detection, outreach*

Preliminary Insights into Psychological Distress Among Cancer Patients in The Maldives Using a Culturally Adapted Screening Tool

Aminath Shafaq[1], Mohamed Shifan[1], Fathimath Sofiya Rasheed[2], Fathimath Rishtha Abdul Majeed[2], Shanooha Mansoor[2]
1. National Cancer Centre, 2. National Centre for Mental Health

Abstract
Psychological distress is a well-documented concern among cancer patients worldwide, with studies highlighting its adverse effects on treatment adherence, quality of life, and clinical outcomes. Screening instruments such as the Distress Thermometer, a brief self-report questionnaire developed by the National Comprehensive Cancer Network (NCCN), have been validated across a range of clinical and cultural settings. However, their use remains limited in low- and middle-income countries, including the Maldives, where structured psychosocial assessment in oncology is not routinely practiced. To address this gap, the National Cancer Centre (NCC), in collaboration with the National Centre for Mental Health (NCMH), initiated a pilot study implementing a culturally adapted version of the Distress Thermometer, translated into Dhivehi. Adult oncology patients at the NCC were invited to complete the questionnaire by rating their psychological distress on a scale from 0 to 10, with scores of 4 or above considered indicative of clinically significant distress. A structured problem checklist was used alongside the tool to identify contributing factors across five domains: physical, emotional, social, religious, and practical. While responses were linked to patient records for clinical follow-up, confidentiality was strictly maintained throughout the process. Descriptive analysis was conducted to summarize distress levels and identify the most frequently reported sources. Preliminary findings suggest that a substantial proportion of patients experience mild to moderate levels of distress. Emotional concerns—including loneliness, sadness, worry, and feelings of being a burden—were most reported. Physical symptoms such as pain and fatigue were also prevalent. Practical issues, especially logistical challenges faced by patients traveling from other islands for treatment, were highlighted. Early demographic patterns suggest variation in distress experiences across subgroups, indicating the need for tailored psychosocial interventions. These findings support the integration of culturally adapted psychosocial screening tools into oncology care in the Maldivian context.

Keywords: *cancer support, psychosocial support, mental health, distress thermometer*

Towards Age-Responsive Cancer Screening: Surgical Insights from Breast Cancer Cases at The National Cancer Centre, The Maldives

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Abstract

Breast cancer is the most common malignancy among women globally, with a median age at diagnosis typically between 60 and 69 years in high-income countries—largely due to established screening programs and robust healthcare infrastructure. In contrast, emerging evidence from South Asia and small island developing states indicates a higher incidence at younger ages, often linked to more aggressive disease and poorer outcomes. Although not a low-income country, the Maldives faces considerable healthcare challenges, including geographical isolation, limited access to timely imaging and molecular pathology, workforce shortages, and the absence of a functional centralized cancer registry or formal screening guidelines. This study aimed to evaluate the age distribution of breast cancer patients who underwent surgery at the National Cancer Centre Maldives, through a retrospective review from 2018 to 2024. Surgical excision remains the primary treatment for non-metastatic breast cancer. Our findings revealed a median of 50, a full decade earlier than Western limits, with a substantial proportion under 40, suggesting a younger age of onset in our population, presenting unique challenges, with maximum range of 84 and minimum 25 years at diagnosis. However, this trend may also reflect the absence of a national screening program. Without population-based screening, cases are often diagnosed when symptomatic, potentially skewing data toward younger, more clinically apparent presentations. With widespread screening, including asymptomatic individuals, a shift toward older age groups might become evident. These results underscore the need for age-responsive, context-specific screening strategies, in alignment with international guidelines, while accounting for local barriers. Strengthening early detection, improving diagnostic infrastructure, and enhancing referral systems are essential. This study provides foundational data for the National Cancer Control Plan and highlights the need for sustainable, evidence-based screening initiatives in the Maldives.

Keywords: *breast-cancer-Maldives, early-onset-breast-cancer, evidence-based-screening, low-resource-setting, small-island-developing-states*

Foetal Outcomes in Gestational Diabetes Mellitus: A Case-Control Study at Indira Gandhi Memorial Hospital (IGMH)

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Abstract

Gestational diabetes mellitus (GDM) is a condition that affects millions globally, with a higher incidence within the Southeast Asian region when compared with other parts of the world. However, no published research has investigated GDM and how it affects foetal outcomes in the Maldives. This case-control study analyzed secondary data from 280 pregnant women who delivered at Indira Gandhi Memorial Hospital (IGMH), between January and December 2024. Cases (n=140) were identified using a census sampling of the National Diabetes Centre (NDC) registry of the hospital, which included women aged 20 to 35 years and diagnosed with GDM. Controls (n=140) were matched by age were selected from the Reproductive Health Centre (RHC) registry of the same hospital and included women with no history of GDM. Following the completion of data collection, descriptive and inferential analysis were conducted to assess the associations between GDM and foetal outcomes. The results showed that there was a significant association between GDM and higher Amniotic Fluid Index (AFI) (OR = 2.414, p = 0.048), preterm delivery (OR = 2.416, p = 0.047), foetal distress (OR = 2.692, p = < 0.001), Large for Gestational Age (LGA) (OR = 3.281, p = 0.002), poor 1-minute APGAR scores (OR = 6.472, p = 0.016) and Neonatal Intensive Care Unit (NICU) admission (OR = 1.738, p = 0.023). These findings suggest that neonates born to mothers with GDM exhibited a higher risk for various clinical complications, emphasizing the need for early screening, diagnosis, close monitoring and effective management of GDM during pregnancy.

Keywords: *case-control study, Gestational Diabetes Mellitus (GDM), foetal outcomes, Maldives.*

Understanding Socio-Economic Drivers of Low Fertility in the Maldives Through Qualitative Inquiry

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Abstract

Fertility rates in the Maldives have declined substantially, with the Total Fertility Rate falling considerably below the population replacement level. This trend raises critical concerns about long-term demographic sustainability and calls for an in-depth understanding of the socio-economic drivers behind low fertility. This study explores these drivers using qualitative research methods, including seven focus group discussions and twelve semi-structured interviews, to gain insights from a diverse range of participants: women across three age groups (18–25, 26–35, 36–49) unmarried women aged 18–35, fathers with at least one child, policymakers, and healthcare professionals. Thematic analysis of the data revealed several interlinked factors contributing to declining fertility. Women's FGDs highlighted structural barriers such as high childrearing costs, limited housing, inadequate childcare support, reproductive health conditions, and psychological stress from managing work and family responsibilities. Cultural shifts toward autonomy and changing lifestyle preferences have also reshaped ideals around family size. Fathers echoed concerns over financial instability, urban overcrowding, delayed marriage, and the absence of paternity leave, though many acknowledged the positive role of religious values in supporting childbearing. Healthcare professionals pointed to increasing infertility rates driven by PCOS, obesity, and stress, alongside concerns about unsafe abortions, poor maternity care experiences, and a lack of reproductive education. Policymakers highlighted the absence of a national fertility strategy and stressed the need for improved housing, workplace flexibility, and better communication on family-friendly policies. Generational differences were evident, with younger women prioritizing education and careers, while older women cited past trauma and lack of support. Across all groups, key barriers included economic insecurity, housing constraints, and insufficient institutional support. The findings provide a basis for developing targeted policy recommendations aimed at encouraging fertility among younger generations through integrated interventions that are culturally responsive and structurally supportive.

Keywords: *low fertility, socio-economic factors, focus group discussions, policy recommendations*

Efficacy and Safety of Anaesthetic Technique in Children Undergoing Ritual Circumcision in A Camp in A Tertiary Hospital- An Observational Study

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Abstract

In the Maldives, male ritual circumcision is commonly conducted later than in most communities. A large number of cases are performed during school holidays, often organized as camps. Existing literature, mostly from the Middle East, reports on neonatal circumcision, where the anaesthetic technique and outcomes differ. A prospective, open-label, observational study was designed to report on the efficacy and safety of anaesthesia during circumcision at a camp in 2022 at IGMH. A total of 193 boys with a median age of six years. were recruited Children were selected according to the American Society of Anaesthesiologists Physical Status classification (ASA PS) I and II. Their demographic characteristics, medical conditions, and maternal antenatal history were recorded. A wide range of conditions was noted, with bronchial asthma being the most common. All cases were conducted under monitored anaesthetic care (MAC) with sedation and penile block without airway instrumentation. The most common induction agent was ketamine, and the children were most commonly maintained with propofol boluses. All patients received PR paracetamol and IV fentanyl. Four children needed ventilatory support, while the rest received only supplemental oxygen. Anaesthesia time ranged from 6 to 43 minutes. Twelve children (6.2%) experienced perioperative events, with desaturation (in 9 children) being the most common. One case was deferred due to vomiting and laryngospasm. One child had a significant allergic reaction in Post Anaesthesia Care Unit (PACU), while four children required oxygen support. PACU discharge and home discharge were guided by pre-established scores. There was no significant statistical difference in intraoperative and postoperative complications linked to different patient characteristics. The anaesthetic technique was found to be safe and efficacious. This study adds to the literature supporting the safety and efficacy of MAC sedation with penile block for circumcision in school-aged children. These data could be used to develop national guidelines and safety standards for the conduct of anaesthesia during circumcision in the Maldives.

Keywords: *anaesthesia, circumcision, monitored anaesthetic care, penile block*

Investigating the Role of Acetylated Five-Leaf Yam Starch in Optimizing Disintegration Efficiency of Paracetamol Tablets

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Abstract

The search for locally sourced, functional excipients has intensified in recent years due to the rising cost of imported pharmaceutical-grade starches. This study investigates the disintegration efficiency of starch extracted from five-leaf yam (Dioscorea pentaphylla), a traditionally underutilized tuber crop, in the formulation of 500 mg paracetamol tablets. Starch isolated from five-leaf yam tubers was acetylated and subjected to structural and physicochemical characterization, including swelling power, solubility index, hydration capacity, and flow properties. Drug–excipient compatibility was analyzed by Fourier Transform Infrared Spectroscopy. Tablets were formulated by wet granulation using different concentrations of five-leaf yam starch (2.5%, 5%, 7.5% w/w) as a disintegrant compared to model excipient, maize starch. Weight variation, hardness, friability, drug content uniformity, and in vitro dissolution behaviour of formulated tablets were evaluated. Disintegration time, wetting time, and water absorption ratios were closely observed. Acetylated five-leaf yam starch exhibited fair flowability than maize starch with the 39.81° of angle of repose. The high swelling power and hydration capacity of yam starch over maize starch showed a marked effect on the tablet disintegration. Drug-excipient compatibility study showed the absence of interactions. The formulated tablets were uniform in weight. Disintegration times and hardness of tablets decreased when increasing five-leaf yam starch concentration. Tablets formulated with 7.5%w/w five-leaf yam starch exhibited the most rapid disintegration, but compromising mechanical strength. Over 80% of the average drug release was noted within 30 minutes of dissolution testing at all the concentrations. Tablets containing acetylated five-leaf yam starch exhibited notably shorter wetting times, indicating rapid water uptake. These findings highlight the potential of five-leaf yam starch as a disintegrant, particularly at concentrations between 2.5–5%w/w, where optimal disintegration efficiency is observed without compromising mechanical strength. Acetylated five-leaf yam starch would be an effective solution for pharmaceutical industry to reduce dependency on imported excipients.

Keywords: *acetylated starch, disintegration efficiency, dioscorea pentaphylla, paracetamol tablets, wetting time*

Reference Values For 5-Times Sit-To-Stand Test and 30-Second Chair Stand Test Among Community-Dwelling Older Adults Living in Faafu Atoll

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Abstract

This study established reference values for the 5-times sit-to-stand (5XCST) and 30-second chair (30s CST) stand tests among 170 older adults (aged 55+) in Faafu Atoll, Maldives. The mean time (seconds) for 5XCST Females was 11.33 ± 3.80; in Males, it was 11.23 ± 3.30. The median number of chair stands performed for 30-CST for females and Males was 13. Performance declined with age, as the mean 5XCST time rose from 9.52 sec to 15.16 sec, while the average number of 30-CST repetitions dropped from 14.91 to 9.68 ($p < .001$). No significant gender differences were found, though age, height, and leg length were significantly associated with the performance of tests. These findings provide essential clinical benchmarks for assessing mobility and fall risk. The results offer valuable insight for similar aging populations, aiding early detection of functional decline and supporting targeted rehabilitation strategies.

Keywords: *normative values, fall risk, chair stand tests*

Economics of Green Human Resources: A Tool for Sustainable Recruitment Exercise in Nigeria

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Abstract

This article examined the economics of Green Human Resources as a tool for sustainable recruitment in Nigeria. The adoption of Green Human Resource is essential in fostering a culture of environmental awareness within organizations. However, lack of clear regulations and standards for adoption of Green Human Resource practices, initial cost implication could obstruct implementation initiatives if not effectively managed. Qualitative data was gathered through interviews with Human Resource experts and organizational leaders within the public and private sectors to acquire insights regarding their experiences and challenges in adopting Green Human Resource in Nigeria. The findings revealed that Green Human Resource can significantly reduce cost of recruitment and selection into hiring process by both public and private sectors in Nigeria. The study revealed the economics significant of adopting Green Human Resource practices into Human Resource functions by enhanced productivity, cost minimization and talent attraction. The study recommends for a comprehensive adoption of Green Human Resource practices and ethics into Human Resource functions to foster a sustainable recruitment exercise in both public and private sectors in Nigerian economy.

Keywords: *economics, GHR, HR, selection, recruitment, sustainable*

Knowledge and Perception of Physiotherapy Among Healthcare Science Students at The Maldives National University

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Abstract

Physiotherapy is a crucial profession within an interdisciplinary medical team, in which healthcare professionals need to comprehend the duties of other team members to offer holistic management to patients. Healthcare professionals who hold negative beliefs and perceptions about other healthcare professions can be a barrier to a 'patient-centred' approach. Nevertheless, there is a paucity of research on the knowledge and awareness of physiotherapy among healthcare professionals and students. There have been no studies conducted in the Maldives to investigate the knowledge and perception of physiotherapy among healthcare students. Therefore, the study aimed to explore the knowledge and perceptions among healthcare science students at the Maldives National University (MNU). A cross-sectional study was conducted at the Faculty of Health Sciences (FHS), School of Nursing (SN), and School of Medicine (SM). A stratified random sampling method was adopted to recruit the participants. A self-administered questionnaire was used to obtain the data from the participants. The data were analysed using SPSS version 25. A total of 318 students from three different schools and faculties of MNU participated in the study. The mean age of the respondents was 23 ± 4, with 89.9% being female. The overall knowledge score of 12 indicated poor knowledge, whereas the perception score of 10 reflected a positive perception among the participants, with no significant difference observed between genders. The Kruska-Wallis test showed a significant difference in knowledge score across courses and years of study enrolled. The study's findings revealed a disparity between healthcare students' positive perception of physiotherapy and their limited knowledge regarding the profession, indicating barriers to knowledge acquisition. Significant differences were found between different healthcare courses and years of study.

Keywords: *physiotherapy, knowledge, perception, healthcare students, interprofessional learning*

Perceptions of Ageing Well: A Comprehensive Study on Senior Citizens in the Maldives

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Abstract
As the demographic landscape of the Maldives shifts toward an ageing population, understanding and promoting the well-being of older adults has become a significant focus of academic inquiry and policy planning. It is evident from literature that aging well is influenced by a combination of biological, social, and environmental factors, yet there is limited research in the Maldivian context to understand these dynamics. This study aimed to assess perceptions of ageing well among senior citizens, identify factors associated with their physical and mental well-being, explore challenges they face, and recommend strategies to support positive ageing. Using a mixed methods approach, qualitative data were gathered through stakeholder consultations, focus group discussions, and individual interviews with 41 purposively selected participants representing NGOs, local councils, ministries, health centres, WDCs, and the public. Findings from this phase informed the design of a national survey administered to 1,178 individuals selected through multi-stage cluster sampling, with 59% female and 41% male respondents. Results indicated that physical activity, diet, and management of chronic health conditions were critical to physical well-being, while mental well-being was influenced by loneliness, lack of social connection, cognitive decline, and a diminished sense of purpose. Barriers identified included insufficient geriatric care, lack of age-friendly infrastructure, limited health insurance coverage for home-based services, and geographic and financial constraints on accessing specialist care in remote islands. Moreover, participants emphasized the underutilization of capable senior citizens post-retirement and the lack of intergenerational knowledge exchange. The study recommends targeted investments in accessible public infrastructure, expansion of community health services, revisions to healthcare financing policies, and strengthened multisectoral collaboration. These findings emphasize the need for holistic, culturally relevant, and inclusive policies to foster healthy and dignified ageing in the Maldives.

Keywords: *ageing well, senior well-being, mixed methods*

Effectiveness of Group CBT in Reducing Anxiety Among Young Adults in the Maldives: A Pilot Intervention Study

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Abstract

This pilot study investigated the effectiveness of group therapy using a Cognitive Behavioural Therapy (CBT) model in reducing anxiety and enhancing coping strategies among young adults in the Maldives. A pre-test/post-test experimental design was employed with five participants who met inclusion criteria for anxiety. Over the course of 12 weeks, participants engaged in structured CBT-based group sessions facilitated by licensed therapists using a standardized treatment manual. Anxiety and coping levels were assessed using the Beck Anxiety Inventory (BAI) and the COPE Inventory, respectively. Results from a paired samples t-test showed a statistically significant reduction in anxiety scores from pre- to post-intervention ($t(4) = -13.217$, $p < .001$), with a large effect size (Cohen's $d = -4.179$). Participants also demonstrated increased use of active coping strategies following the intervention. Although limited by its small sample size, the findings suggest that group-based CBT is a promising and practical intervention for managing anxiety in young adults, especially in settings with limited mental health resources. These results highlight the potential for expanding group therapy as an accessible and cost-effective treatment modality within the Maldivian context.

Keywords: *group therapy, CBT, anxiety, young adults, coping strategies, Maldives, pilot study*

Socio-Economic Drivers of Low Fertility in the Maldives: Insights from the 2025 Maldivian Women's Survey

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Abstract

The Maldives is experiencing a significant demographic transition, with fertility levels declining below reproduction rate. A substantial shift was observed with the Total Fertility Rate plummeting to 1.7 in 2022 despite relatively high levels of education and health care indicators. This trend is being driven by a combination of structural, cultural, economic and reproductive health-related challenges. A survey was conducted among 479 Maldivian women aged 18-49 years via an online questionnaire to identify the primary socio-economic drivers of the current fertility decline. Data were analysed using descriptive statistics and Poisson regression to examine patterns and factors influencing fertility outcomes. The findings reveal notable generational differences in fertility patterns. While only 36% of women expressed a desire for more children, 50.5% from these women intend to have a child within the next three years. However, the actual fertility rates remain modest, with an average of 1.6 pregnancies and 1.2 childbirths per woman, and a childbirth-to-pregnancy ratio of 0.8. Caesarean births comprising 50% of all deliveries were particularly common among younger women aged 18–25 years. Despite these differences, the ideal family size remains consistent across groups, averaging 2.6 to 2.8 children, in line with community norms and highlighting a gap between fertility intentions and realized outcomes. Younger women (18-25) are more likely to prefer no children, while older women (36-49) favour larger families. Key barriers to having more children include lack of living space (55.5%), health issues (19.6%) and financial difficulties (10.2%). Second-choice barriers identified were financial concerns (40.9%), followed by health problems (27.0%) and lack of childcare (15.9%). Family formation was found to be influenced by age, employment, income, and access to services, with economic and infrastructural constraints limiting fertility decisions. Addressing these constraints through coordinated governance and culturally appropriate strategies is essential to counter the declining fertility trends.

Keywords: *fertility decline, economic factors, Social-cultural drive*

Factors Affecting Glycaemic Control in Patients with Type 2 Diabetes Mellitus Presenting to A Large Tertiary Hospital in Male'.

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Abstract

Diabetes has now become increasingly prevalent worldwide, with South Asians at a higher risk of developing type 2 diabetes mellitus. Maldives itself has a recorded prevalence of diabetes at 6.7% in 2021. Given the increasing morbidity and mortality associated with diabetes-related complications, there is a critical need for improved glycaemic control strategies. This study aimed to determine the status of glycaemic control and identify key factors influencing the glycaemic control of patients with type 2 diabetes mellitus presenting to Indira Gandhi Memorial Hospital (IGMH). This hospital-based retrospective cohort study included 440 participants with type 2 diabetes mellitus who presented to IGMH, between 01st January to 31st December 2024. Data on all the variables considered in the study were obtained through direct patient interviews using a structured questionnaire and hospital medical records by employing a census sampling method. Ethical approval for this study was granted by the National Health Research Council (NHRC), registration number NHRC/2024/37. Informed consent was obtained from all participants prior to enrolment in the study. Statistical analyses were conducted using IBM® SPSS® version 30.0. The Chi-square test of independence was used to assess associations between variables and glycaemic control, followed by logistic regression models for further analysis. Poor glycemic control, defined as HbA1c >7% or FBS >130 mg/dL, was observed in 51% of patients based on FBS and in 22% based on HbA1c. The findings of the study showed that, there was a strong association between poor glycemic control and non-adherence to diet [OR=3.16, p<0.001, CI:1.66-6.01], exercise [OR=1.85, p=0.006, CI:1.20-2.85], long duration of illness [OR=1.99, p=0.003, CI:1.26-3.15], combination therapy with oral hypoglycaemic agents and insulin [OR=23.22, p<0.001, CI:8.34-64.63] and compliance to treatment [OR=3.03, p<0.001, CI:1.62-5.65]. These results highlighted the importance of compliance to treatment, lifestyle modifications, and early intervention in managing glycaemic control among type 2 diabetes mellitus patients presenting to IGMH. Addressing these factors, therefore, could lead to improved disease management and better long-term health outcomes.

Keywords: *Type 2 Diabetes Mellitus, Glycaemic Control, HbA1c, fasting blood sugar, Maldives*

Effectiveness of Diabetes Camps on Glycaemic Control Among Youth with Type I Diabetes in The Maldives: A Quasi-Experimental Study.

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1. The Maldives National University, 2. Diabetes Society of the Maldives

Abstract

Diabetes camps aimed at educating youth with type I diabetes in the self-management of diabetes have been conducted systematically since 2012.The camps also provided a platform for experience sharing and creating networks for psychosocial support within the diabetes youth community in the Maldives. Nevertheless, little is known about the effectiveness of these camps in achieving glycaemic targets. The aim of this study was to examine the changes in HbA1c, weight, total daily dosage of insulin and cholesterol levels, 1 year after completion of the diabetes camp, among youth with type I diabetes in the Maldives. A quasi-experimental study was conducted involving a total of 44 youth, between the ages 13 and 25 years, as participants of 3 consecutive diabetes youth camps (from 2016, 2018 and 2022). Data was collected pre-camp and 12 months post-camp and analyzed. The results demonstrated a significant reduction in HbA1c (pre-camp median HbA1c: 9.95 [IQR:8.15-11.90] and post-camp median HbA1c: 8.80 [IQR:7.60-10.20], $p<0.05$) and a significant increment in weight gain at 12 months post-camp (pre-camp median weight: 50.20 [IQR: 43.45-61.68] and post-camp median weight: 53.20 [IQR:44.30-63.28], $p<0.001$). However, HbA1C reduction and weight gain were not associated with any of the studied variables; gender, age, duration of diabetes, residing in rural or urban areas, type of DM, occupation or camp year. The results demonstrated empirical evidence on the benefit of camps for youth for the management of diabetes, and the need to expand the focus of research to include wider aspects of glycaemic control among youth.

Keywords: *diabetes, youth, camp, HbA1c, weight gain, insulin*.

The Effect of Articulatory Suppression on Working Memory in Young Adults in The Maldives

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Abstract
Previous research has shown that articulatory suppression (AS), a process involving the repetition of irrelevant sounds, such as counting aloud to block verbal rehearsal, impairs working memory performance across various task conditions. However, there is limited research on the extent to which this effect can be observed in the Maldivian context. Hence, the current study investigated whether there is an effect of articulatory suppression on working memory performance in young adults in the Maldives. The sample consisted of 40 participants with a mean age of 21.7 (SD = 2.4). The participants were between the ages of 18 to 27, including 30 females (75%) and 10 males (25%). Twenty of the participants were assigned to an AS condition, requiring counting aloud, and 20 were assigned to a control condition, involving finger-tapping. The participants had to recall eight visually presented words while repetitively performing their respective task conditions (counting or tapping). As hypothesized, results of the independent sample t-test indicated that participants in the articulatory suppression condition recalled significantly fewer words than those in the tapping condition. These findings show that AS impairs working memory by interfering with verbal rehearsal. The results suggest practical applications for educational strategies, such as incorporating visual aids in learning materials and allowing students more time to process information silently. The limitations of the study include potential time-of-day effects, lack of passive-control condition, and the gender imbalance of the sample. Further research can examine the effects of AS while controlling for individual differences in working memory capacity.

Keywords: *working memory, articulatory suppression, articulatory process, Maldives, phonological loo*

Sub-theme 4: Merging Evidence-Based Research with Clinical Expertise and Patient Centred Care

18 Abstracts



Effectiveness of SHARP Debriefing Tool to Enhance Clinical Skills in Nursing Students Practicing in the Nursing Art Lab (Action Research)

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Abstract

Debriefing is a structured reflective process essential to experiential learning in clinical education. SHARP debriefing tool and SHARP is an acronym that stands for "five prompts" that guide students and facilitators in providing structured debrief to the student immediately after a practice case. Debriefing is an important element of nursing education, especially following simulation education or else following a clinical practice session. Currently The Maldives National University (MNU), School of Nursing (SN) do not have a simulation laboratory for nursing students. However, Nursing Arts Lab (NAL) is set in place for demonstration of basic and complex procedures. Lecturer will demonstrate procedures to students once, and students practice during practice hours by referring to their practical procedure book. The main aim of this study is to explore the effectiveness of SHARP debriefing tool in enhancing student's clinical skills in Nursing Art Lab. Objectives include to identify the effectiveness of SHARP debriefing tool in enhancing Bachelor of Nursing student's clinical skills in performing clinical procedure. The intervention involved demonstration and practice of intravenous cannulation and injection procedures using SHARP tool. Findings revealed an improvement in students' performance and documentation from Cycle 1 to Cycle 3. The total scores increased from 11 to 20, nursing care plan scores rose from 10 to 18, and recording/reporting scores improved from 5.5 to 9. Thematic analysis identified three themes: recognition of strengths, skill improvement, and applicability to practice. The SHARP debriefing tool is a practical and effective method to enhance clinical skills, reflective practice, and confidence in undergraduate nursing students.

Keywords: *SHARP debriefing tool, student feedback, clinical skills*

Acquaintance, Attitude, And Perceived Barriers Regarding Scientific Research Publications Among Clinical Nurses: A Cross-Sectional Study at Tertiary Care Hospital in Western Rajasthan

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All India Institute of Medical Sciences

Abstract

In today's era, conducting research is crucial for advancing the nursing profession. Scientific publications in clinical research aim to improve patient care outcomes and foster a sense of importance for nurses within the healthcare team. However, clinical nurses often lag behind due to factors such as limited familiarity, attitudes towards research, and encountered barriers. The study conducted to know the knowledge, attitude and perceived barriers regarding scientific research publication among clinical nurses at tertiary care hospitals in western Rajasthan. A Cross-sectional descriptive study was conducted among the clinical nurses. A non-probability convenience sampling technique was used to recruit the 350 clinical nurses for the study. Participants were assessed for their knowledge, attitude, and perceived barriers regarding scientific research publications through a self-administered questionnaire. The study revealed that 92% of participants lacked sufficient knowledge about scientific research publications, and 78.3% had a moderate perception of barriers. Pearson's correlation coefficient indicated a weak positive correlation ($r= 0.143$, $p= 0.007$) between knowledge and attitude, and a significant negative correlation ($r= -0.143$, $p= 0.012$) between knowledge and perceived barriers. However, multiple linear regression analysis showed no significant relationship among clinical nurses in terms of knowledge, attitude, and perceived barriers towards scientific research publication. A study on clinical nurses found that a majority have insufficient knowledge about scientific research, while over half hold neutral attitudes toward research publications. Additionally, a significant portion of clinical nurse's report experiencing moderate levels of perceived barriers. The study highlights the need for targeted educational interventions to enhance clinical nurses' knowledge and attitudes toward research publication. Addressing perceived barriers can empower nurses to contribute more actively to evidence-based practice.

Keywords: *scientific research, acquaintance, attitude, perceived barriers, clinical nurses.*

Effect of Nurse-Led Lifestyle Modification Follow Up Program on Health Outcomes and Quality of Life Among Post Myocardial Infarction Patients: A Randomized Controlled Trial

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Abstract

Cardiovascular diseases have maintained the trend of being the primary cause of death globally, potentially contributed by myocardial infarction. Despite increasing hospital admissions with acute myocardial infarction and its related complications, there are no known ongoing post discharge program in our settings. The study aimed to evaluate the effect of a Nurse-led lifestyle modification follow-up program on health outcomes and quality of life among post myocardial infarction patients. Patients with acute myocardial infarction at the time of discharge were randomly allocated to a control group or an intervention group (n=52/group). The control group was provided routine care, while the intervention group received routine care along with a Nurse-led lifestyle modification follow up program (health education, booklet, & telephone follow up). Data were collected using demographic datasheet, health outcomes datasheet, and MacNew Quality of life questionnaire. All evaluations were conducted at baseline and after 12 weeks of completion of Nurse led lifestyle modification follow up program. Normality was assessed with the Shapiro-Wilk test, confirming a normal distribution. Parametric tests (unpaired t-test/ANCOVA) were used to compare quantitative data between patient groups at baseline and after 12 weeks. The intervention group showed a considerable improvement in comparison to control group in Low density lipoprotein ($p=0.045$), Systolic blood pressure ($p=0.009$), Diastolic blood pressure ($p=0.044$), Body Mass Index ($p=0.043$), and NTProBNP ($p=0.007$), after 12 weeks of hospital discharge. The program effectively improved the lifestyle behaviours after 12 weeks thereby significantly improving the quality of life in all the subscales- physical, emotional and social ($p<0.001$). The program offers a novel and cost-effective care method. It authenticates potential to improve patient's outcomes and quality of life after 12 weeks of program implementation.

Keywords: *health outcomes, quality of life, myocardial infarction, randomized controlled trial, follow up*

Sub-theme 4: Merging Evidence-Based Research with Clinical Expertise and Patient Centred Care

Birth Defect Surveillance in the Main Government Tertiary Hospital of Maldives from 2016 To 2024

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Abstract

We studied birth defects in the main tertiary government hospital (Indira Gandhi Memorial Hospital (IGMH) of Maldives from 2016 to 2024. All inborn live births in the 9-year period were included. Still births and missed carriages were excluded. ICD 10 was used for coding. There were 17188 live births, and 729 babies (4.24%) had birth defects described under Q code of ICD-10. A total of 1215 defects were noted. Number of females were 313 (43%) and there were19 sets of twins. Total312 defects (26% of all defects) were identified in preterm babies. Out of 710 mothers who delivered babies with birth defects, 107 (15%) had gestational diabetes. Median birth weight was 2862 gm (range from 630gm to 5000gm), and median gestational age was 37.5 weeks (range from 25 to 41 weeks). Looking at neonatal outcome, 24 had hypoglycaemia (3.3%), 21 had hypothermia (2.9%), 27 babies died before discharge (3.7%). The most common cause for neonatal deaths with birth defect was lung hypoplasia (total 6 patients, 22% of deaths). Two deaths were due to diaphragmatic hernia and another 2 had Potters syndrome. Furthermore, 82 (11.2%) babies required bag and mask ventilation. The overall prevalence of total birth defects in our study was 424 per 10,000 live births. This includes significant and non-significant birth defects under the ICD code Q. The most common were congenital malformations of the circulatory system, that consists of 28% of defects with a prevalence of 200 per 10000 live births. Birth defects were common, and most common defects were in cardiovascular system. Respiratory system defects were the reason for highest mortality.

Keywords: *birth defects, Maldives, surveillance*

Spiritual Care Competency Among Nurses at Tertiary Care Teaching Hospital: A Cross-Sectional Study

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Abstract

A vital aspect of human life, spirituality significantly influences care and well-being. Spiritual care improves well-being by promoting integrity and relationships while balancing the physical, psychological, and spiritual areas. Hence, we assess the spiritual care competency among nurses at a tertiary care teaching hospital. This cross-sectional study was conducted on 354 nurses working at tertiary care teaching hospital, who were selected by non-probability consecutive sampling. Data collection tool was socio demographic variables sheet, spiritual care competency scale-India questionnaire. The data were analysed using SPSS 20 using descriptive and inferential statistics. Among the 354 nurses assessed, 52.8% demonstrated a moderate level of spiritual care competency (scores 57–106), while 43.8% exhibited a high level of competency (scores 107–135). Only 3.4% of nurses were found to have a low competency level (scores 27–56). The overall mean spiritual care competency score was 102.00 ± 16.93, reflecting relatively strong spiritual care competence among nurses. The findings indicate that the majority of nurses demonstrated moderate levels of spiritual care competency, with an overall mean score of 102.00 ± 16.93, reflecting a relatively strong competence. Although no significant associations were found between socio-demographic variables and spiritual care competency ($p > 0.05$), the results highlight the need for structured training programs to further enhance nurses' spiritual care skills.

Keywords: *spiritual care competence, nurses, tertiary care hospital, spiritual care, Spiritual Care Competency Scale*

Effect of Modified vs Standard Cardiac Rehabilitation Program on Bio-Psycho-Physiological Parameters among Acute Coronary Syndrome Patients at a Tertiary Care Institute: A Pilot Randomized Controlled Trial

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Abstract

Cardiovascular diseases (CVDs), particularly Acute Coronary Syndrome (ACS), are leading contributors to morbidity and mortality in India. Cardiac rehabilitation (CR) is a vital component of recovery; however, standard CR programs often face limitations in patient engagement and outcomes. The objective of the study was to evaluate and compare the effectiveness of a Modified Cardiac Rehabilitation (MCR) program versus a Standard Cardiac Rehabilitation (SCR) program on 6-minute walk test (6 MWT), biological, physiological, and psychological outcomes in ACS patients. This pilot randomized controlled trial included 20 ACS patients who underwent either coronary artery bypass grafting (CABG) or percutaneous coronary intervention (PCI). Participants were randomly assigned to MCR or SCR groups using simple randomization. The MCR program, designed by a multidisciplinary team, included education, counselling, lifestyle modification, and physical activity guidance over 8–10 weeks. Data were collected at baseline, 4–6 weeks, and 8–10 weeks post-intervention using validated tools: 6-minute walk test (functional capacity), lipid profile, HbA1c (biological markers), BP, HR (physiological markers), and HADS and MacNew HRQOL (psychological outcomes). The study results highlighted that MCR group showed statistically significant improvements in 6-minute walk test performance($p=0.006$). However, no significant improvement was observed in psychological and biological parameters compared to the SCR group except for systolic ($p=0.04$) & diastolic ($p=0.02$) pressures. No adverse events or follow-up losses were reported. Present study findings concluded that the modified cardiac rehabilitation program is both feasible and potentially more effective than the standard approach in improving key recovery outcomes among ACS patients. Larger trials are recommended to confirm these findings and support broader implementation.

Keywords: *cardiovascular diseases, acute coronary syndrome, 6-minute walk test, cardiac rehabilitation*

Middle Cerebral Artery Supply from Posterior Circulation in the Absence of Ipsilateral Internal Carotid Artery: A Rare Vascular Variant

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Abstract

Congenital agenesis of the internal carotid artery (ICA) is an exceptionally rare vascular anomaly, occurring in less than 0.01% of the population. It results from embryological failure of ICA development and is often asymptomatic due to the presence of collateral circulation. However, when symptomatic, it can manifest as cerebrovascular events, cranial nerve deficits, or rarely, movement disorders. We present the case of a 43-year-old male who presented with focal dystonia. A non-contrast CT brain scan was performed to evaluate for a possible infarct. While assessing for a dense middle cerebral artery (MCA) sign, it was appreciated that a prominent posterior circulation vessel was supplying left MCA territory. This unexpected finding raised suspicion of an underlying vascular anomaly. A CT angiogram of the cerebral vessels was subsequently performed, which confirmed complete congenital agenesis of the left ICA. Collateral blood flow was noted through the posterior circulation via hypertrophied posterior communicating artery (PCOM) consistent with Lie's Type D classification. No acute infarcts or aneurysms were identified, and no intervention was deemed necessary. Thus, patient was managed conservatively. This case is notable due to the uncommon presentation of focal dystonia in association with ICA agenesis, a combination not frequently described in literature. It emphasizes the importance of considering vascular anomalies in patients with unusual neurological symptoms and illustrates the diagnostic value of cross-sectional and angiographic imaging. This rare pattern has implications for cerebrovascular interventions and stroke risk assessment, especially given the altered hemodynamics and potential for aneurysm formation. Early recognition of such variants is crucial, especially in the context of surgical or interventional planning, to avoid complications and ensure accurate diagnosis and heightened awareness of congenital vascular variants among clinicians and radiologists

Keywords: *ICA – Internal Carotid Artery, MCA – Middle Cerebral Artery, PCOM- Posterior Communicating Artery*

Exploring Nursing Students' Experience and Perception of High-Fidelity Simulation in Clinical Decision-Making: A Qualitative Study

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Abstract

Simulation-based learning (SBL) is recognized as a pedagogical approach that enhances experiential learning and improves the development of clinical competencies in nursing education. Due to limited opportunities for direct patient care, SBL is essential in bridging the knowledge-practice gap. High-fidelity simulation (HFS) is increasingly utilized in nursing education to support the development of decision-making skills within a controlled and safe learning environment. The study aimed to explore student nurses' experiences and perceptions on Clinical Decision-Making after participating in an HFS-based intervention. This qualitative study, embedded within a randomized controlled trial, focused on final-year Bachelor of Nursing students after participation in the HFS-based intervention. A purposive sample of fourteen participants was selected from an experimental group divided into two focus groups, each including seven participants. Data collection method was focus group discussion. Focus groups were chosen to encourage peer reflection, stimulate discussion, generate richer, and more dynamic insights through shared group discussions. Thematic analysis was used to analyse the data for the study. Four themes emerged from analysis which are Stepping up from low to high; opportunities to learn from mistakes without compromising patient safety; applying what they learned to real-life situations; enhancing critical thinking and decision-making skills. Findings highlight that HFS facilitates reflective, experiential learning that promotes students' readiness for real-life clinical decision-making. The qualitative insights highlight the emotional and cognitive development that students experience during simulations, providing valuable guidance for improving simulation-based education within the Maldivian context. Integrating structured HFS in nursing curricula can significantly improve undergraduate nursing students' decision-making skills by providing realistic and safe learning environments that effectively prepare them for real-world clinical practice.

Keywords: *high-fidelity simulation, nursing students, clinical decision-making, qualitative research, phenomenology*

Psychiatric Morbidity and Quality of Life in Patients Undergoing Haemodialysis: A Cross-Sectional Analytical Study

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Abstract

The kidneys play a crucial role in maintaining bodily homeostasis. Chronic Kidney Disease (CKD) affects 13% of the global population and often goes undetected until advanced stages. In India, end-stage renal disease has an incidence rate of 181 per million, with CKD prevalence between 0.79% and 1.4%. Haemodialysis, a common treatment, imposes significant physical and psychological burdens that reduce quality of life (QOL). This study assessed psychiatric morbidity and QOL in haemodialysis patients, explored their correlation, and analysed associations with demographic variables. A cross-sectional analytical study was conducted at the Haemodialysis Unit, AIIMS Jodhpur, using a sample of 50 patients selected via non-probability consecutive sampling. Data were collected using self-structured sociodemographic tools, DASS-21 for psychiatric morbidity, and WHOQOL-BREF for QOL assessment. Analysis using SPSS version 26 included Karl Pearson's coefficient for correlation and Fisher exact test for associations (significance level $p<0.05$). Findings revealed high psychiatric morbidity: the mean depression score was 14.52 ± 4.96 (mild to moderate), anxiety 15.76 ± 4.13 (moderate to severe), and stress 23.04 ± 4.70 (moderate to severe). Psychiatric symptoms were significantly and negatively correlated with QOL across all domains. Notably, age was significantly associated with depression ($p=0.004$). Additionally, employment status, family income, residential area, age, and education were strongly associated with QOL in physical, psychological, social, and environmental domains. The study highlights that over 70% of patients experienced moderate to severe psychological symptoms, which directly impacted their quality of life. These results emphasize the urgent need for integrated mental health screening and support in dialysis care protocols. Addressing both psychiatric morbidity and sociodemographic vulnerabilities is essential to improving health outcomes and overall quality of life in patients undergoing haemodialysis.

Keywords: *psychiatric morbidity, quality of life, haemodialys*

Midwifery Competencies of Budding Nurses: A Cross-Sectional Study

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Abstract

Ensuring quality midwifery education is vital to preparing competent nurses capable of delivering safe and effective maternal and newborn care. Midwives are instrumental in providing over 83% of essential maternal and neonatal health services, significantly improving outcomes and reducing mortality. Despite global guidelines such as the International Confederation of Midwives (ICM) core competencies, variations in training and clinical exposure can lead to discrepancies in competency levels among nursing students. This study was conducted to assess both perceived and actual midwifery competencies among budding nurses using the Objective Structured Clinical Examination (OSCE). A cross-sectional study was carried out among 69 B.Sc. (Hons.) Nursing students from the College of Nursing, AIIMS, Jodhpur, India who had completed their midwifery course. Participants were selected through non-probability total enumerative sampling. Data collection tools included a socio-demographic sheet, a regional midwifery competency assessment tool, and an OSCE checklist covering antenatal examination, breastfeeding, postnatal assessment, and immediate newborn care. The results revealed that 36.29% of students perceived their competence as high, 36.29% as suboptimal, and 27.5% as developing. OSCE assessments showed variations in skill proficiency: 27.5% met the standard in antenatal examination, 30.4% in breastfeeding, 36.2% in postnatal assessment, and 40.6% in immediate newborn care, while a substantial proportion required improvement. No significant association was found between personal variables and competency levels. These findings emphasise the importance of strengthening midwifery education through competency-based assessments to ensure budding nurses are well-equipped to provide quality maternal and neonatal care, thereby addressing critical gaps in healthcare delivery and contributing to global efforts in reducing maternal and neonatal mortality.

Keywords: *midwifery competency, perceived competence, OSCE, antenatal examination, breastfeeding, postnatal assessment, budding nurses*

Magnetic-Based Isolation of Primary Microglia from Neonatal Mice for High Quality RNA Extraction

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Abstract

Microglia are the innate immune cells in central nervous system, involved in maintaining neural homeostasis and regulating neuroinflammatory responses. Microglial gene expression study is essential for understanding their underlying mechanism in neurodevelopmental and neurodegenerative disorders. Primary microglial isolation is efficient for such studies as they mimic human cell types. However, isolating high-purity microglia from neonatal brain is a tedious, time-consuming process. This present study optimized a protocol for isolating primary microglia from neonatal mice (postnatal day 4) using the EasySep magnetic separation system, followed by high-quality RNA extraction for further downstream molecular applications. Full brains were harvested from neonatal mice on its 4th day, mechanically dissociated and enzymatically digested to obtain single-cell suspension. Immunomagnetic separation was then performed with kit-based anti-CD11b magnetic beads to selectively isolate microglia. This magnetic isolation enabled rapid and gentle separation, resulting in pure and viable microglial populations with minimal astrocytic contamination, which was later exposed for purity checking through Immunocytochemistry. RNA was extracted from the isolated cells using a silica membrane-based spin column method. RNA quality and quantity were assessed using spectrophotometry and agarose gel electrophoresis, which showed consistent cell numbers with high RNA integrity (RIN >8.0). In conclusion, our study demonstrates a fast, efficient, and reproducible method for isolating primary microglia from neonatal mouse brains. The high-quality RNA obtained can be used for gene expression profiling and supporting studies on microglial function and neuroinflammation mechanism. This method offers a valuable tool for neuroscience researchers to explore microglial cells at the molecular level.

Key words: *microglia, magnetic separation, neuroinflammation, neonatal mouse and RNA extraction*

The Effect of Peritoneal Dialysis on the Quality of Life of Patients with End-Stage Renal Disease

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Abstract

End-stage renal disease (ESRD) severely impairs patients' quality of life (QOL), necessitating renal replacement therapies (RRT). Peritoneal dialysis (PD) has emerged as a method for improving Health-related Quality of life (HRQOL). The literature review aimed to explore the effect of PD and nursing care management required to improve the QOL of ESRD patients undergoing PD and offer recommendations to improve nursing care and patient experience of QOL. The methodology was based on a comprehensive literature review using peer-reviewed sources published in databases such as EBSCO, PubMed, CINAHL, Web of Science, Research4Life, and Google Scholar, between 2014 and 2024. Key words used include: "end-stage renal disease", "dialysis modalities", "peritoneal dialysis", "quality of life"," nursing management"," nursing intervention", "patient education". Articles on PD, QOL, nursing management, and patient education techniques were included in the study. Out of 70 studies, 50 studies were included. Articles were appraised using the JBI and PRISMA tools. All the articles were tabulated, and findings were thematically analysed using Braun and Clark's six-step method. Three themes emerged: 1. PD improves the QOL of ESRD patients, 2. Nursing interventions and education improve PD patient outcomes, 3. Family involvement and social support improve patient outcomes. Inclusion criteria were articles related to PD, QOL, and nursing education. Only articles in English, original qualitative and quantitative research studies, clinical trials, systematic reviews, meta-analyses, and cohort studies were selected for the review. The review excludes articles from unreliable sources, other languages, and publications from more than 10 years ago. The findings suggest that PD significantly improves patients' overall QOL, for it is home-based, low complication nature. The review recommends implementing a holistic care approach, telecommunication, patient health education, and establishing community-health nursing to support sustainable outcomes. The study concludes by emphasizing the need for continued research to enhance the QOL of ESRD patients across the country.

Keywords: *end-stage renal disease, dialysis modalities, peritoneal dialysis, quality of life, nursing management, nursing intervention, patient education.*

Efficacy and Safety of Anaesthetic Technique in Children Undergoing Ritual Circumcision in A Camp in A Tertiary Hospital- An Observational Study

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Abstract

In the Maldives, male ritual circumcision is commonly conducted later than in most communities. Many cases are performed during school holidays, often organized as camps. Existing literature, mostly from the Middle East, reports on neonatal circumcision, where the anaesthetic technique and outcomes differ. A prospective, open-label, observational study was designed to report on the efficacy and safety of anaesthesia during circumcision at a camp in 2022 at IGMH. A total of 193 boys were recruited. All children (median age 6 years), all American Society of Anesthaesiologists Physical Status classification (ASA PS) I and II, had their demographic characteristics, medical conditions, and maternal antenatal history recorded. A wide range of conditions was noted, with bronchial asthma being the most common. All cases were conducted under monitored anaesthetic care (MAC) with sedation and penile block without airway instrumentation. The most common induction agent was ketamine, and the children were most maintained with propofol boluses. All patients received PR paracetamol and IV fentanyl. Four children needed ventilatory support, while the rest received only supplemental oxygen. Anaesthesia time ranged from 6 to 43 minutes. Twelve children (6.2%) experienced perioperative events, with desaturation (in 9 children) being the most common. One case was deferred due to vomiting and laryngospasm. One child had a significant allergic reaction in (Post Anaesthesia Care Unit) PACU, while four children required oxygen support. PACU discharge and home discharge were guided by pre-established scores. There was no significant statistical difference in intraoperative and postoperative complications linked to different patient characteristics. We found the anaesthetic technique to be safe and efficacious. This study adds to the literature supporting the safety and efficacy of MAC sedation with penile block for circumcision in school-aged children. These data could be used to develop national guidelines and safety standards for the conduct of anaesthesia during circumcision in the Maldives.

Keywords: *anaesthesia, circumcision, monitored anaesthetic care, penile block*

A Rare Case of Small Cell Neuroendocrine Carcinoma of the Uterine Cervix in the Maldives: A Case Report

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Abstract

We present a rare case of small cell neuroendocrine carcinoma (SCNC) of the uterine cervix, highlighting the importance of clinicians to consider this rare malignancy in the differential diagnosis of cervical cancer. Cervical neuroendocrine carcinoma (NEC) is a rare and aggressive malignancy. This 35-year-old lady presented with vaginal bleeding. Ultrasound images (USG) showed cervical hypoechoic mass protruding into the vagina. Magnetic resonance imaging (MRI) revealed a bulky, expansile, solid mass with a homogenous texture, low apparent diffusion coefficient (ADC) value, with nodal metastases. Mimicking lymphoma, the tumour did not exhibit cervical epithelial distortion. The diagnosis of SCNC was confirmed by biopsy, MRI features that suggest SCNC are lesion homogeneity, low ADC values, and frequent nodal metastases, which are commonly observed in lymphomas. Histopathology and immunohistochemistry confirmed that the tumour was characterized by positive expression of neuroendocrine markers such as synaptophysin, CD56, CK7, p16, Ki67 chromogranin and negative expression of p40 and estrogen receptors, suggesting an NEC. Despite its rarity, this case emphasizes the importance of considering NEC in the differential diagnosis of cervical cancer when a cervical mass presents with these findings. Ethical standards such as patient confidentiality and approval from patient after an informed and voluntary consent was obtained prior to the submission of this abstract.

Keywords: *small cell neuroendocrine carcinoma (SCNC), magnetic resonance imaging (MRI), ultrasound imaging (USG), apparent diffusion co-efficient (ADC), neuroendocrine carcinoma (NEC)*

Vitamin D insufficiency and pregnancy outcomes: A hospital-based study conducted at IGMH

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Abstract

Vitamin D is a fat-soluble vitamin with various implications on foetal growth and development. While studies corroborate the association between positive birth outcomes and Vitamin D supplementation, lower serum levels have been identified as a risk for adverse pregnancy outcomes, such as abortions and preterm delivery. Despite the relevance, empirical research addressing Vitamin D and pregnancy outcomes are notably lacking in the Maldives. This study investigated the association between vitamin D and pregnancy outcomes at a tertiary care hospital (Indira Gandhi Memorial Hospital) in the Maldives. The study enrolled a census of 158 women between 18 and 40 years of age, who delivered at IGMH between January 2023 to December 2024. Participants with incomplete birth records, without vitamin D level test records, and who were referred to IGMH were excluded from the study. Data was obtained from the hospital information system without direct patient contact. Information collected was anonymized, and hospital numbers were used for data verification. Results showed that the mean Vitamin D level among the study participants was 21.39 ng/ml (±13.10). Mothers with a history of diabetes had a higher mean Vitamin D level (25.25 ng/ml ± 9.12) compared to non-diabetic mothers (20.70 ng/ml ± 13.60), [$\chi^2(1, N = 158) = 7.33$, $p < 0.01$]. However, maternal age, history of hypertension, and haemoglobin levels were not associated with any difference in vitamin D levels. There was no association between Vitamin D levels and the studied pregnancy outcomes; gestational age at birth, birth weight, abortions, intrauterine foetal death (IUFD), intrauterine growth restriction or neonatal intensive care admissions. Findings from the study contribute to the empirical evidence on Vitamin D levels among mothers and emphasizes the need to strengthen clinical assessment of Vitamin D levels during pregnancy. Further studies are recommended to explore the long-term effects of Vitamin D in determining neonatal health outcomes.

Keywords: *vitamin d insufficiency, maternal outcomes, foetal outcomes*

A Clinical Study on Risk Factors of Multidrug-Resistant Tuberculosis- A Hospital-Based Study

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Abstract

Multi-drug resistance TB (MDR-TB) is the resistance to first-line TB drugs for instance Rifampicin and Isoniazid. MDR-TB is prevalent in 9.3% of the Pakistani population and ranked 5th with respect to MDR-TB burden. Lack of national awareness programs on antibiotic resistance as well as TB control, illiteracy, and poverty are the major causes of the increasing burden of MDR-TB. The present study was designed to assess the etiology and risk factors associated with MDR-TB from a tertiary care hospital. The study involved sporadic cases of both MDR-TB and non MDR-TB patients. A well-designed questionnaire was used to collect all the essential information like general information, history of a patient, family medical history, symptoms/ causes, diagnosis, therapeutic prognosis etc. For inquiring about gene mutation that causes drug resistance, sputum samples were taken from patients and screened using Gene-Xpert technology. Statistical analysis was done using SPSS software version 22.0 (IBM). Frequency of MDR-TB and non MDR-TB patients was evaluated. For finding significant association of socio-demographic and clinical factors with drug resistance chi square test was performed. Finally, binary logistic regression was used for predicting the predictors of factors associated with drug-resistant tuberculosis. The research findings exhibited that MDR-TB is most frequent in the lungs (PTB). Female gender, lack of education, PTB, and primary condition are associated risk factors of MDR-TB. Mutation in the rpoB gene for rifampicin resistance was assessed using Gene Xpert technology. It accounted for 60% of mutation in probe E of the rpoB gene. This study highlighted the factors inclined to have drug resistance like female gender, lack of awareness, pulmonary infection, and primary case. Using a systematic approach MDR-TB can be dealt with by prioritizing factors figured out in this study.

Keywords: *tuberculosis, MDR, TB, risk factors*

Exploring Upper Gastrointestinal Pathologies and Their Clinical Predictors in Maldivians: An Endoscopic Study Based at Indira Gandhi Memorial Hospital

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Abstract

With Esophagoduodenoscopy (EGD) serving as the yardstick and gold standard for assessing Upper Gastrointestinal (UGI) health today, billions are being accounted for globally. In recent statistics, digestive diseases ranked at top 5 cause of hospital admissions in Maldives. This study seeks to describe UGI pathologies and correlate them to their risk factors. This was an observational cross-sectional study involving Maldivians who underwent EGD at Indira Gandhi Memorial Hospital between December 2024 to February 2025. Our calculated sample size target was 190 with our sample reaching 211. The sample had an age range of 18-90 years with mean age being 51 years. The male-to-female ratio was 1:1.4. Body Mass Index of most patients fell under pre-obesity class (37%). Lifestyle habits included 28% positive smoking history. Hot drinks and caffeine consumption were 50.7% and 39.8% respectively. Most prevalent comorbidity was dyslipidemia (48.3%). Most consumed drug was Proton Pump Inhibitors (47.4%). Biopsy was taken in 114 patients with 4 patients positive for Helicobacter pylori. The common diagnoses were Gastritis (81.5%) and Hiatal Hernia (45.0%). The commonest indication for EGD was Esophageal Reflux symptoms (31.8%). Chi-squared test correlations of common diseases to their study variables revealed Gastritis to be correlated with Liver disease ($p=<0.001$) and Upper abdominal symptoms ($p=0.01$). Hiatal Hernia with Caffeine ($p=<0.001$) and Liver Disease ($p=0.02$). Esophagitis with Esophageal Reflux Symptoms ($p=0.01$), Clopidogrel use ($p=0.03$). Duodenitis with sex ($p=<0.001$), Caffeine ($p=0.02$), Smoking ($p=0.05$), Renal disease ($p=0.05$), Aspirin ($p=<0.001$), Esophageal Reflux Symptoms ($p=<0.001$) and Dyspepsia ($p=0.05$). Findings suggest links between diagnoses, symptoms, and risk factors, supporting the need for deeper analysis and potentially impacting future policy and practice.

Keywords: *upper gastrointestinal, pathologies, esophagogastroduodenoscopy, Maldivians*

Investigating the Role of Acetylated Five-Leaf Yam Starch in Optimizing Disintegration Efficiency of Paracetamol Tablets

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Abstract

The search for locally sourced, functional excipients has intensified in recent years due to the rising cost of imported pharmaceutical-grade starches. This study investigates the disintegration efficiency of starch extracted from five-leaf yam (Dioscorea pentaphylla), a traditionally underutilized tuber crop, in the formulation of 500 mg paracetamol tablets. Starch isolated from five-leaf yam tubers was acetylated and subjected to structural and physicochemical characterization, including swelling power, solubility index, hydration capacity, and flow properties. Drug–excipient compatibility was analysed by Fourier Transform Infrared Spectroscopy. Tablets were formulated by wet granulation using different concentrations of five-leaf yam starch (2.5%, 5%, 7.5% w/w) as a disintegrant compared to model excipient, maize starch. Weight variation, hardness, friability, drug content uniformity, and in vitro dissolution behaviour of formulated tablets were evaluated. Disintegration time, wetting time, and water absorption ratios were closely observed. Acetylated five-leaf yam starch exhibited fair flowability than maize starch with the 39.81° of angle of repose. The high swelling power and hydration capacity of yam starch over maize starch showed a marked effect on the tablet disintegration. Drug-excipient compatibility study showed the absence of interactions. The formulated tablets were uniform in weight. Disintegration times and hardness of tablets decreased when increasing five-leaf yam starch concentration. Tablets formulated with 7.5%w/w five-leaf yam starch exhibited the most rapid disintegration but compromising mechanical strength. Over 80% of the average drug release was noted within 30 minutes of dissolution testing at all the concentrations. Tablets containing acetylated five-leaf yam starch exhibited notably shorter wetting times, indicating rapid water uptake. These findings highlight the potential of five-leaf yam starch as a disintegrant, particularly at concentrations between 2.5–5%w/w, where optimal disintegration efficiency is observed without compromising mechanical strength. Acetylated five-leaf yam starch would be an effective solution for pharmaceutical industry to reduce dependency on imported excipients.

Keywords: *Acetylated starch, Disintegration efficiency, Dioscorea pentaphylla, Paracetamol tablets, Wetting time*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

13 Abstracts



Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

LOVE, as a Pathway to Prosocial Behaviour: A Theoretical and Pilot Study Using the LUVORA Framework for Social Cohesion

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Abstract

In today's increasingly divided world, nurturing emotional connections that promote empathy, and cooperation is essential for social cohesion. This theoretical and pilot study explores love as a core positive emotion capable of nurturing prosocial behaviour and reducing social fragmentation in diverse communities. Guided by Fredrickson's Broaden-and-Build Theory of Positive Emotions and supported by interdisciplinary insights from positive psychology, moral philosophy, and community development, this study introduces LUVORA—a value-driven conceptual framework comprising six interwoven virtues: Love, Uniformity, Virtue, Openness, Resilience, and Acceptance. Together, these elements represent a developmental pathway for building emotional awareness, trust, and inclusive social engagement. The central research question asks: How can structured love-based interventions enhance empathy, prosocial motivation, and interpersonal trust in community settings? A pilot qualitative study will be conducted with twelve (12) community facilitators in Sri Lanka. Participants will be introduced to the LUVORA framework through a two-day workshop involving storytelling, reflective exercises, and group dialogue. Follow-up data will be gathered through reflective journaling, narrative conversations, and focus group discussions over two weeks. Data will be analysed using thematic analysis, exploring shifts in emotional insight, perceived connection, and behavioural intention. Anticipated themes, based on pre-engagement mapping, include increased empathy, emotional openness, and strengthened community bonds. This study, currently in its preparatory phase, aims to lay the conceptual and methodological foundation for future empirical research on love as a transformational tool for social cohesion and human development.

Keywords: *love, prosocial behaviour, social cohesion, positive psychology, luvora framework*

Exploring Youth Perception of Political Issues of Job Recruitment and its Indirect Effect on Unemployment in the Maldives

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Abstract

This study explores the political issues affecting the job recruitment in Maldives and its indirect effect on unemployment in Maldives and gives an overview of the youth's perception regarding the problem. This study examines the political factors existing in Maldives that have a vital role in the selection and recruiting stages, in both private and public sector and how it contributes to the growing number of unemployed young adults. It pays a special focus on clientelism, patronage, nepotism, elitism, favoritism, government policies and corruption and how this leads to marginalization of qualified candidates from the labor market, making way for underqualified employees, that eventually leads to poor performance and decline of institutions and the general prosperity of a nation. A minor theme of this research is Demotivation of youth which leads to the increasing number of NEET (Not in Employment, Education or Training) Youth, as a consequent of unfair proceedings that undertake during recruitment and selection process. The findings of this study have a key role in visualizing an ideal strategic plan for the nation, by addressing the existing policy gaps. Furthermore, by addressing the highlighted issues in this study, it can be a great aid to manifest the United Nations Sustainable Development Goals, specifically Goal 8 "Decent Work and Economic Growth" and Goal 16 "Peace Justice and Strong Institutions".

Keywords: *clientelism, unemployment, youth, corruption, political issues*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

Breaking the Glass Ceiling: A qualitative exploration of Progress and Challenges in Achieving Gender Sensitive Parliaments in the Maldives

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Abstract

The importance of balanced political participation and power-sharing between men and women in all arenas – be it political and public life has been recognized as a prerequisite for the achievement of Sustainable Development Goals by 2030. By drawing on 30 years of evidence-based research, the Commonwealth Parliamentary Association [CPA] confirms that gender equality cannot be guaranteed by just equality of representation, but through the concept of a 'Gender Sensitive Parliament' (GSP). A GSP can be defined as a Parliament that responds to the needs and interests of both men and women in its structures, culture, and working procedures. Given this, an interpretivist, phenomenological approach effectively captures the nuances of the lived experiences of parliamentarians in the Maldives. Through a structured interview with two women and one-man parliamentarian currently serving in the 20th tenure of the Parliament, and 2 staff working in the parliament, this research explores the progress and challenges in realizing a gender-sensitive parliament in the Maldives. The findings reveal that women parliamentarians do not face major challenges after winning a seat but navigating the path towards breaking the glass ceiling becomes a challenge. The findings shed light on the importance of bringing transformative changes through political parties in promoting gender equality and substantive representation and contribute to existing literature on women's political participation in Small Island Developing States and Asian Countries.

Keywords: *gender sensitive parliaments, women's political participation, gender equality and empowerment, gsp in small island states*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

Democracy & Development: Impact of Gender Quotas and Appointments - Is It Working?

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Abstract

This study critically examines the impact of the 33% gender quota on local governance in the Maldives, focusing specifically on Women's Development Committees (WDCs) and women councillors. It addresses the question: To what extent has the mandated inclusion of women through the gender quota translated into genuine participation and influence in local decision-making, planning, and service delivery? This research adopts a qualitative case study approach, incorporating document analysis and focus group discussions with women councillors, Women's Development Committee (WDC) members, and gender experts. The sources utilized in this study include development plans and stakeholder reflections on institutional structures, role clarity, and access to resources. Despite the formal increase in women's representation through quotas, this inclusion has not resulted in meaningful influence or empowerment within local governance. In many councils, women hold positions without genuine authority, often lacking clear mandates or access to decision-making processes. Their presence is often symbolic—serving as a representative figurehead rather than facilitating substantive engagement in policy or budgetary decisions. The challenges faced by women in local governance stem from structural barriers like entrenched patriarchal norms and insufficient institutional support. Many female council members lack adequate training and resources to advocate effectively, while the absence of supportive networks and mentorship leaves them isolated. This persistence of traditional gender roles undermines their contributions and perpetuates marginalization. The paper posits that although the 33% quota has enhanced visibility, it has not yet achieved its primary goal of empowering women in local governance structures. Genuine transformation necessitates not only formal inclusion but also the establishment of functional authority, capacity-building initiatives, and institutional reforms to facilitate active and equal participation.

Keywords: *democracy, development, women, representation, empowerment*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

Democracy and Development Series: Education at the Polls - Democratic Pressures and Policy Choices in the Maldives

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Abstract

This paper analyses the implications of democracy in the Maldives through the framework of educational policymaking, particularly emphasising two key policies implemented over the past 15 years: the School Digitisation Programme (2018) and the Free First-Degree Programme (2019–present). The study uses document analysis to systematically review government policy documents, political campaign materials, and budgetary data. This study investigates how democratic competition, especially in relation to election cycles, has influenced the development and execution of educational policies. The School Digitisation Programme, launched ahead of the 2018 presidential election, aimed to modernise classrooms through nationwide tablet distribution and digital infrastructure upgrades. This initiative proved vital during the COVID-19 pandemic, facilitating continuity of learning amid school closures. However, the swift implementation encountered notable challenges, primarily related to teacher burnout, from the expedited training schedules imposed to meet politically motivated deadlines. Furthermore, the lack of a comprehensive usage policy led to the improper use of tablets, particularly among younger students. This raised significant concerns regarding their exposure to inappropriate content and the potential for excessive screen time. The Free First-Degree Programme, introduced in a populist context, provided broad access to undergraduate education to garner political support. While this initiative increased public expenditure, it raised concerns about long-term sustainability, equity, and quality assurance. The paper contends that although democratic governance has facilitated progressive policy changes in education, it has also introduced political incentives that favour short-term electoral gains over coherent, long-term strategic planning. As a result, the "cost of democracy" within the Maldivian education sector extends beyond financial implications to encompass institutional challenges, evident in policy discontinuities, the politicisation of educational initiatives, and strained fiscal capacity. These findings underscore the necessity for depoliticised, evidence-based education reforms that can endure political transitions and truly support national development objectives.

Keywords: *democracy, development, educational policymaking, democratic pressures, Maldives*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

Navigating Great Power Competition: The Maldives as A Democratizing Small State

Aishath Leesha

Abstract

The Indian Ocean has emerged as the centre of 21st century geopolitics. India's Neighbourhood First policy, China's Belt and Road Initiative, the Quadrilateral Security Dialogue, and the expanding US Indo-Pacific Strategy reinforces its strategic significance. As great power competition intensifies, states in the region gain new opportunities and face challenges in navigating the geopolitical dynamics. Shifts in international power structures have redirected attention from traditional threats to non-traditional concerns, allowing small states to exercise greater autonomy and agency. This transformation has reshaped small state studies, moving beyond the conventional notion of small states as weak actors to recognizing their strategic strengths. One such strength is the size-democracy correlation. However, a deeper analysis reveals vast variations in democratic outcomes, indicating that oversimplified generalizations fail to account for distinct differences in small states. It further indicates that despite the strategic advantages, great power competition remains a persistent challenge for small states, often impeding domestic democratization efforts. A comparative study of the Maldives illustrates the complexities faced by the small state in navigating great power competition. Through a realist approach, an examination of its domestic political developments during its pre and post-democratization phase portrays these challenges. The analysis demonstrates that while the Maldives increasingly exercise autonomy, navigating great power relations remains a complex issue when domestic priorities intersect with external strategic interests. Through an evaluation of Maldives' historical interactions with Britain as a colonial power, and recent developments following its democratization, the thesis highlights three case studies: the GMR Case, Unprecedented foreign policymaking by severing ties with Qatar and withdrawing from The Commonwealth, and the 'India Out' movement to underscore these challenges. The findings indicate that, in the absence of institutional support mechanisms to address unique vulnerabilities of small states, navigating great power competition remains a significant challenge for democratising small states like the Maldives.

Keywords: *great power competition, small state, Maldives*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

Democracy & Development: Excess Infrastructure as a Cost of Democracy

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Abstract

This paper critically assesses the political trend toward excessive and costly infrastructure development across Maldivian islands from 2009 to 2025, specifically focusing on the proliferation of domestic airport projects. Central to the study is the guiding question: To what extent does the political structure—marked by micro-constituencies, a large parliament, and decentralized clientelist politics—contribute to unsustainable infrastructure decisions, and what trade-offs result for national development and service delivery? The study utilizes a qualitative methodology that includes three focus group discussions and an analysis of relevant documents. The focus groups consist of participants grouped by their expertise: (1) former national and sectoral development planners, (2) financial experts, and (3) development consultants. Concurrently, a review of key policy documents, election pledges, and development budgets from 2009 to 2025 has been conducted to track infrastructure commitments and their justifications. Infrastructure commitments, especially for domestic airport construction, often stem from strong political support rather than feasibility. The absence of a national spatial development plan and coordinated planning processes has been noted. Constituency-based lobbying, driven by individual MPs or specific islands, frequently eclipses considerations of cost-effectiveness and national priority. Consequently, this has led to disproportionate budget allocations toward visible capital projects, sidelining essential investments in health, education, and water services. The paper contends that while democratic decentralization has empowered local voices and enhanced participation in development, it has also created political incentives that prioritize electoral visibility over strategic coherence. Consequently, the "cost of democracy" in infrastructure development transcends mere financial inefficiencies, leading to institutional fragmentation, weakened national planning mechanisms, and increased fiscal exposure. These findings highlight the pressing need to re-establish a nationally guided, depoliticized infrastructure planning framework that aligns political accountability with long-term development outcomes.

Keywords: *democracy, development, cost of democracy, infrastructure, planning*

The Impact of Overlapping Audit Committee Chairmanship on Quality Forward-Looking Information Disclosure (QFLID): Evidence from the Dow Jones MENA Index

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Abstract

This study investigates the impact of internal and external overlapping audit committee chairmanships on the Quality of Forward-Looking Information Disclosure (QFLID) in companies listed on the Dow Jones MENA Index. Grounded in resource dependence theory, the study emphasizes the strategic role of directors beyond their traditional monitoring functions and hypothesizes that overlapping audit committee chairmanships positively influence the quality of QFLID. A cross-sectional Bayesian regression analysis is applied to a sample of 167 companies across nine MENA countries such as Jordan, the United Arab Emirates (UAE), Saudi Arabia, Qatar, Egypt, Oman, Bahrain, Kuwait, and Morocco, for the fiscal year 2023. The study employs a rigorous content analysis of 7,450 sentences extracted from corporate annual reports using disclosure assessment criteria aligned with established frameworks. A notable modification was made to the external environment component, aligning it with the Global Reporting Initiative (GRI 2021) classification framework. The findings reveal a statistically significant positive association between both internal and external overlapping audit committee chairmanship and the QFLID. Furthermore, the study identifies a regulatory gap, highlighting the absence of explicit governance code provisions regarding overlapping chair roles in the sampled jurisdictions. These findings carry important implications for regulators and corporate governance practitioners in the MENA region, suggesting that embracing overlapping audit committee structures may enhance transparency and facilitate foreign direct investment (FDI).

Keywords: *audit committee, quality forward-looking disclosure, corporate governance, overlapping chairmanship, resource dependence theory*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

Dynamics of Citizen Participation in Urban Governance in India: Rhetoric and Reality

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Abstract

Citizen participation is a buzzword in the current development and governance discourse. The post-colonial India tried to involve community participation in the implementation of the programmes in the urban slums. The constitutional amendment for regenerating urban local government in 1992 provided for institutionalization of participation through Ward Committees. In this presentation an attempt will be made to capture and analyse how the citizens are participating through this institutional arrangement. The findings of the study bring out that there is lack of citizens' interest in participation because many of them think that the ward committees themselves are not citizens' bodies but political bodies as the members are selected by them. They are reluctant to hear the voices of the citizens in the meetings as a result the committees do not meet at regular intervals. Second, the decisions of the ward committees are not implemented leading to lack of trust and credibility. Third, effective participation calls for participative ethos and culture which is yet to grow properly. The study was conducted in two municipalities in one district selected on the basis of the functioning of the ward committees Respondents included municipal functionaries, word councillors and citizens. The data and perceptions were captured through structured questionnaire and focus group discussions. The research brings out that simple legislative changes will not produce desired results. Second, there is need for sensitizing the citizens about the need for participation through vigorous campaigns. Third, modern technology like whatsapp groups may be used to keep the citizens duly informed about the date, time and venue of the meeting

Keywords: *governance discourse, constitutional amendment, ward committee, citizens*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

Gendered Workplace Expectations: A Comparative Study of Male and Island Offices in the Maldives

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Abstract

This quantitative study investigates gendered task expectations within the Maldivian Civil Service, comparing urban offices in Malé with island offices across the atolls of Haa Dhaalu, Raa, Gaafu Dhaalu, and Seenu. Surveying 263 civil servants (160 in island offices and 103 in Malé) the study reveals that while formal gender equality policies ensure equal pay and promotion opportunities, indirect biases persist in everyday workplace practices shaped by local cultural norms. Female employees in island offices, even those in professional and managerial roles, report significantly higher involvement in tasks traditionally viewed as women's work, such as caregiving, support services, and hospitality duties. Statistical analysis shows that Malé employees express stronger endorsement of gender-neutral leadership selection and greater confidence in the enforcement of equality policies, whereas island employees report more ambiguity and acceptance of traditional gender roles. Many female respondents selected survey options indicating they had "grown accustomed" to these norms, suggesting internalized acceptance rather than openly voicing objection. The findings highlight an implementation gap because, despite progressive policies in the Maldives, traditional gender roles and limited awareness of anti-discrimination measures, especially in rural areas, continue to reinforce informal task segregation and uphold male dominance in technical and leadership roles. To address these challenges, the study recommends multi-level interventions such as rotating task assignments, leadership development programs for women, and locally tailored awareness initiatives to bridge the gap between policy and everyday practice across urban and island offices in the Maldives.

Keywords: *gendered expectations, workplace dynamics, cultural norms, gender equity, Maldives*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

Exploring Youth Perceptions of Political Issues of Job Recruitment and its Indirect Effect on Unemployment in the Maldives

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Abstract

This study explores the political issues affecting the job recruitment in Maldives and its indirect effect on unemployment in Maldives and gives an overview of the youth's perception regarding the problem. This study examines the political factors existing in Maldives that have a vital role in the selection and recruiting stages, in both private and public sector and how it contributes to the growing number of unemployed young adults. It pays a special focus on clientelism, patronage, nepotism, elitism, favouritism, government policies and corruption and how this leads to marginalization of qualified candidates from the labour market, making way for underqualified employees, that eventually leads to poor performance and decline of institutions and the general prosperity of a nation. A minor theme of this research is Demotivation of youth which leads to the increasing number of NEET (Not in Employment, Education or Training) Youth, as a consequent of unfair proceedings that undertake during recruitment and selection process. The findings of this study have a key role in visualizing an ideal strategic plan for the nation, by addressing the existing policy gaps. Furthermore, by addressing the highlighted issues in this study, it can be a great aid to manifest the United Nations Sustainable Development Goals, specifically Goal 8 "Decent Work and Economic Growth" and Goal 16 "Peace Justice and Strong Institutions".

Keywords: *clientelism, unemployment, youth, corruption, political issues*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

History of Mental Health in the Maldives

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Abstract

Mental health is an emerging public health concern in the Maldives, yet there is limited documentation on its historical development. While some studies address current mental health challenges, few have systematically reviewed the evolution of services and policy. This study reviews the development of mental health services in the Maldives focusing on clinical services, mental health promotion, and systemic policy efforts. Using a qualitative framework, documentary analysis and in-depth interviews with eight purposively selected key informants were conducted. Thematic analysis of interviews and documents showed that early explanations for mental illness were shaped by cultural and religious beliefs, often accompanied by stigma. The 1970s marked the introduction of medical models when trained professionals began practicing locally. Key milestones include establishing the Home for People with Special Needs in 1976 and the first psychiatric outpatient clinic at Indira Gandhi Memorial Hospital in 1995. Mental health promotion, particularly life skills training and psychosocial support, intensified from 2004 onward. Systemic improvements culminated in the 2017 National Mental Health Policy endorsement and the 2019 opening of the Centre for Mental Health. These developments reflect steady progress in clinical care and policy frameworks. The findings offer valuable insights for future mental health service planning and prevention strategies in the Maldives.

Keywords: *mental health, history, service development, Maldives, health policy*

Sub-theme 5: Interdisciplinary Insights on Social Dynamics, Human Development and Community Engagement

LOVE, as a Pathway to Prosocial Behaviour: A Theoretical and Pilot Study Using the LUVORA Framework for Social Cohesion

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Abstract

In today's increasingly divided world, nurturing emotional connections that promote empathy, and cooperation is essential for social cohesion. This theoretical and pilot study explores love as a core positive emotion capable of nurturing prosocial behaviour and reducing social fragmentation in diverse communities. Guided by Fredrickson's Broaden-and-Build Theory of Positive Emotions and supported by interdisciplinary insights from positive psychology, moral philosophy, and community development, this study introduces LUVORA – a value-driven conceptual framework comprising six interwoven virtues: Love, Uniformity, Virtue, Openness, Resilience, and Acceptance. The study, which involves a small-scale qualitative pilot with community facilitators in Sri Lanka, aims to explore the emotional and social impact of structured love-based interventions. It proposes love as a transformational force crucial for addressing disconnection in an increasingly technology-driven world.

Keywords: *love, prosocial behaviour, social cohesion, positive psychology, LUVORA framework*

Sub-theme 6: Innovative Expressions Merging Artistic Creativity, Cultural Contexts, and Linguistics

9 Abstracts



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Love Language Alignment and Relationship Satisfaction Among Married Couples in The Maldives

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Abstract

Romantic relationships play a vital role in psychological well-being, and how partners express and receive love significantly influences relationship quality. Drawing on Chapman's (1992) Five Love Languages framework, this study examined the relationship between love language alignment and perceived relationship satisfaction among married couples in the Maldives. A growing body of literature suggests that congruence in emotional expression and communication contributes to stronger relational bonds, yet little is known about how this dynamic unfolds in non-Western contexts. The study employed a correlational survey design and collected data using standardized questionnaires assessing individuals' primary love languages and perceived satisfaction. The online survey was disseminated through social media platforms, and out of 128 respondents, data from 98 participants (49 couples) were analyzed as both partners had completed the questionnaire. The most frequently reported love language was Quality Time (n = 46), followed by Physical Touch (n = 27) and Acts of Service (n = 21). Analysis showed that 52.6% of couples were mismatched in their primary love languages. Despite high overall satisfaction rates (86.7%), a paired-samples t-test revealed a statistically significant difference in relationship satisfaction scores based on love language alignment, $t(96) = -6.93$, $p < .001$, indicating that matched couples reported significantly higher relationship satisfaction. These findings highlight the importance of emotional compatibility and shared modes of expressing affection in marital relationships. Contextualized within the Maldivian cultural setting, the study provides relevant insights for relationship counselling, emphasizing the need for culturally sensitive interventions that consider how couples communicate love. The results underscore the potential of incorporating love language education into marital support programs to foster healthier and more satisfying partnerships.

Keywords: *love languages, relationship satisfaction, married couples, emotional communication, Maldives*

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Fostering Pre-university Students' Confidence in Public Speaking: An Action Research

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Abstract

English as a Second Language (ESL) is imperative in the modern-day world due to its significance and application in higher education. In addition to writing, students are often assessed by their ability to present in front of their peers, as public speaking is an important graduate attribute that most higher education institutions aim to instil in their graduates. However, students at higher education institutions tend to perform poorly in this regard, and result in poor scores in subjects that require public speaking as an assessment component. This is often due to their anxiety about public speaking, regardless of being competent in the subject area. This anxiety of public speaking in English can be due to their anxiety in recalling the already learned content at the language production stage, or due to a skill deficit where students fail to learn the content in the first place and thereby fail to produce. This study is action research used by a lecturer teaching pre-university ESL learners to identify the reasons for pre-university students' anxiety in ESL public speaking and explore ways to improve the students' public speaking skills by using techniques to improve the input and output of language. The study is a qualitative one that involves a double loop process where, after each course of teaching, a focused group discussion was held with a purposive sample of five student who depicted high levels of anxiety during their presentation. This information was used to plan the modifications in teaching for the following term. The findings indicated that allowing more time for students to become familiar with each other, and fostering a safer learning environment as well as giving clear directions and feedback on their performance had improved their confidence in ESL public speaking.

Keywords: *public speaking, anxiety, action research*

From Search to Synthesis: Preliminary Reflections on AI in Academic Information Seeking and Writing among First-Year Undergraduates

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Abstract

The increasing accessibility of generative AI tools is reshaping how university students approach academic tasks. This study explores student engagement with AI not only as a writing aid, but also as a tool that influences how they find, evaluate, and synthesise academic information. The paper is part of a three-phase qualitative inquiry into how undergraduate learners interact with AI tools throughout a first-year academic writing module at the Maldives National University. This paper presents findings from Phase 1: a reflective, impromptu, and anonymised, in-class writing exercise completed by 24 first-year students. Prompted to reflect on their use of AI in researching and writing their first assignment, students shared insights on how AI shaped their approach to information seeking, task understanding, and writing strategies. Thematic analysis of their responses reveals: use of AI in generating ideas and simplifying complex texts, confusion over evaluating AI-generated content, concerns about fake references, and ethical dilemmas regarding reliance. A recurring theme was the lack of clear institutional direction, leaving students to navigate AI use largely without guidance. The subsequent research phases (P1/ P2) will include reflective writings after the completion of a critical review task, followed by in-depth interviews with a selected group. These will offer insights into information-seeking behaviour, evolving attitudes towards the role of libraries and information services, and ethical considerations surrounding AI in academia. The findings highlight an urgent need for structured institutional support and direction around AI use in academic contexts. This presents an opportunity for university library to initiate embedding AI awareness and skills into their information literacy framework to focus on access, evaluation, critical awareness, and competencies needed to use these tools ethically and effectively in information seeking and academic expression.

Keywords: *generative ai, information seeking behaviour, web information seeking, ai information literacy framework.*

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Translanguaging Practice in Higher Education: Students' Perspectives

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Abstract

Translanguaging has been observed as one of the emerging pedagogical approaches and a dynamic practice where bilingual and multilingual students can use their full linguistic repertoires in an integrated manner to support their academic success. The main aim of this study is to explore the translanguaging practice in higher education from the students' perspective, to understand how students perceive and utilize translanguaging in different academic settings in higher education. Employing a mixed-methods approach, the research integrates both quantitative and qualitative data to provide a comprehensive understanding of students' utilization of translanguaging and how they perceive it. A survey of 400 students was conducted to identify general trends in translanguaging practices and perception. Besides, to gain insights, 15 semi-structured interviews were held with selected participants, focusing on their perceived benefits and challenges of the practice of translanguaging in their learning settings. Furthermore, 5 classroom observations were carried out across various disciplines to examine the students' practice of translanguaging in real time learning contexts. Quantitative data qualitative data was analysed. The findings revealed that students generally have a positive attitude towards translanguaging and they practice translanguaging at different stages of their teaching and learning in higher education settings for different purposes, such as to facilitate their comprehension of the content, for active and collaborative engagement and for building confidence. Hence, the findings of this study indicates that translanguaging can be used in higher education settings, for enhancing students' learning and academic experiences. As translanguaging has several benefits, it can be used as a pedagogical approach to support integrating students' full linguistic repertoires in academic contexts, especially for a more inclusive educational practice. Based on these findings, it is recommended that higher education institutions could adopt more linguistically responsive teaching and learning strategies which would help mitigate language related barriers which might hinder the overall comprehension of the content.

Keywords: *translanguaging, higher education, students' perspectives*

Sub-theme 7: Bridging Science, Policy, and Sustainable Practices in Fisheries and Agriculture

4 Abstracts



From Fingerlings to Plate: An Integrated Approach to Grouper Aquaculture

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Reefscapers

Abstract

Grouper aquaculture presents a promising opportunity for sustainable seafood production in the Maldives, as market demand increases among the local buyers. This study evaluated the growth performance of brown-marbled groupers (Epinephelus fuscoguttatus) reared in a controlled tank system, focusing on practical husbandry techniques suitable for small-scale operations. Juvenile groupers (initial size 10cm) were stocked in 1000-liter hard plastic tanks equipped with sand filtration systems to maintain optimal water quality. Individuals were fed a variety of fresh food such as tuna flesh, finely cut baitfish (i.e., fusiliers), once or twice daily at 5-7% of their body weight, with feeding rates adjusted monthly based on growth sampling. Over an 8–12-month culture period, individuals exhibited consistent growth, reaching final weights of 900-1000 g, with a feed conversion ratio (FCR) ranging from 3:1 to 9:1. The sand filtration system effectively maintained optimal dissolved oxygen, ammonia, and nitrate levels, creating stable conditions that supported healthy growth. Survival rate averaged 50%, with losses attributed to stress, disease outbreaks and technical issues. The harvested fish were primarily marketed to an on-site resort restaurant, demonstrating a successful vertically integrated production model that maximizes profitability by eliminating middlemen. This farm-to-table approach not only ensured premium product freshness but also allowed for better price control. Economic analysis revealed a favourable return on investment, with production costs primarily driven by feed expenses (60%) and labour (20%), whereas the rest is attributed to fingerlings purchase and incidents. This study confirms the technical and economic feasibility of small-scale tank-based grouper aquaculture using basic filtration technology and locally available feed. The model proves particularly suitable for coastal resorts and communities seeking to implement sustainable seafood production. Future research should investigate alternative protein sources to reduce feed costs and optimise stocking densities for improved productivity.

Keywords: *small-scale aquaculture, grouper, tank-based*

Coconuts in Crisis: Integrated Biological Control and Cultivation Strategies to Safeguard Cocos nucifera in the Maldives

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Abstract

The coconut palm (Cocos nucifera) is a symbol of resilience, sustenance and cultural identity in the Maldives. The coconut palm is recognized for its diverse uses, particularly in nutrition and medicine. It plays a huge role in the sustenance of local communities in terms of providing food, building materials and as part of the economic livelihood of the many islands' communities This paper is a situational analysis on the coconut crisis in the Maldives and recommended strategies to overcome the crisis. Coconut cultivation in the Maldives plays a vital role in supporting local livelihoods and ensuring food and nutritional security. However, the coconut industry faces a significant challenge due to the aging of coconut palms, with an estimated 50% of existing trees exceeding their optimal economic bearing age. In the Maldives, despite the socio-economic and environmental importance of coconut, there has been increasing neglect in the maintenance and management of coconut plantations. This has contributed to a rise in pest and disease infestations, leading to a marked decline in coconut production. Consequently, the country has witnessed a growing dependency on imported coconuts a concerning trend for a nation that relies on imports for over 90% of its nutritional needs. This situation underscores the urgent need for national attention and strategic interventions to revitalize the coconut sector. This article will explore how a dual strategy, "Integrated Biological Control and Cultivation Centre" could address the current coconut crisis observed in the Maldives.

Keywords: *coconuts in crisis, integrated biological control, cultivation strategies, Maldives*

Indigenous Materials as a Pathway to Climate-Resilient Farm Structures in AA.Thoddoo

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Abstract

Rising temperatures, unpredictable rainfalls, and saltwater intrusion are just some of the climate concerns that interrupts agricultural production especially for a tropical climate. To increase climate resilience and resource efficiency, there are several research done and various methods being applied particularly in these regions. However, even though Maldives being a sensitive country to climate change, very few or no climate resilience approaches are being adapted in an architectural level by Maldivian farmers and policy makers of agricultural industry. This leads to increased vulnerability among farmers, reduced food security, and overall negative impacts on agriculture in the Maldives. Therefore, in consideration of this issue in the Maldives, this research will explore how the use of indigenous materials in Thoddoo - known as the agricultural island of the Maldives - can contribute to a climate resilient agricultural approach, ultimately to improve cultural continuity and community resilience. This paper will examine the viability of utilizing readily available resources such as coral stone, palm thatch, and timber for farm structures over conventional sources. With a mixed-method approach involving focus groups, systematic questionnaires, and perception analysis, the study concludes that indigenous materials are generally perceived to be more low-maintenance, affordable, and environmentally friendly in Thoddoo. Additionally, that these materials promote local knowledge systems and economic autonomy while minimizing embodied carbon and environmental degradation. This research develops a sample model for the application of indigenous materials into farm structures, which could also be adapted for use in other island communities in the Maldives facing similar challenges. The main limitation of this research is that it focused solely on Thoddoo, a central island, where conditions may differ significantly from those on islands located at either end of the Maldives. Moreover, the limited time available for data collection proved to be a challenge when drawing conclusions.

Keywords: *climate change, climate resilience, indigenous materials, farm structure, Thoddoo*

Mangroves Under Developmental Pressure: Insights on Temporal Trends in Biodiversity from Short-Term Data Composites

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Abstract

Conserving mangrove ecosystems is critical to the existence of the low-lying islands of the Maldives. Yet, the lack of quantified long-term data on temporal changes in biodiversity parameters such as species richness and abundance hinders efforts to establish sustainable conservation strategies. Hence, this study examines temporal trends in the relative abundance of mangrove plant species from 2005 to 2025 generated from student-led field studies of K. Huraa mangrove. The mangrove was sampled 12 times, with samples taken at least once per sampling year. Each time, the mangrove species were identified and counted within quadrats in four random locations. A permutational ANOVA using Euclidean dissimilarity indices of the relative abundance of mangrove species was run to test the independent and interaction effect of species and time. Five true mangrove species were identified. Throughout, the relative abundance sequenced from highest to lowest was Bruguiera cylindrica, Bruguiera gymnorrhiza, Rhizophora mucronata and Rhizophora apiculata. Lumnitzera racemosa was excluded from analysis because it was first observed in 2022, outside the sampling sites. The relative abundance fluctuated over the years, with B. cylindrica and B. gymnorrhiza showing apparent declines following El Niño and La Niña, respectively. The ANOVA revealed a strong species effect on the relative abundance, with significant differences between B. cylindrica and B. gymnorrhiza compared to the other three species. Despite the observed temporal fluctuations, no statistically significant independent effect of time nor interaction effects of time and species on relative abundance were found. While sampling errors are likely to exist in this data, the repeated fieldwork yielded extensive, validated data on biodiversity changes with crucial temporal insights. These findings have important implications for utilizing existing short-term records to quantify long-term temporal shifts in biodiversity. Engaging students in the data-gathering process may be a key to successful conservation efforts, particularly where resources are limited.

Key words: *conservation, mangroves, biodiversity, temporal change, long-term data*

Sub-theme 8: Innovative Strategies for Business and Organizational Management

10 Abstracts



The Managerial and Operative Challenges of Human Resources Management in the Guest House Sector in the Maldives

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Abstract

The study focuses on examining the managerial and operative challenges of human resources management (HRM) in the guesthouse sector of the Maldives. Adopting and adhering to the best practices of human resources management facilitates businesses to succeed and survive. The research aims to explore the primary managerial and operative challenges guesthouses face while implementing effective HR practices and its effect on overall guesthouse operations. Uncompetitive salaries coupled with a lack of proactive HR planning and training for optimum performance contribute to various HRM issues. In addition to this, the differences in work ethics and culture create a problematic workplace environment for both local and expatriate staff. For instance, the lack of proper HR planning often results in poor onboarding processes which contribute to tensions thus reducing employee morale. The study employs an inductive approach, facilitating qualitative research. The study utilizes a multiple case study research strategy as new information is likely to be learned from incremental cases. Data was collected with the help of semi-structured interviews and guesthouse owner and managers were selected via purposive sampling. The research shows how guesthouse HRM issues are interconnected. Lack of HR expertise made it difficult to create clear organizational structures and manage everyday operations. Guesthouses must balance operational costs with attractive salaries and perks while focusing on cost control and service quality which reflects the interconnectedness and the ripple effect of poor HR planning. There is a need for proactive management to improve employee engagement and business performance. It is noted that guesthouses lack systematic administrative skills and needs from structured training programs with a competitive compensation package to cater to employee retention and performance. The study notes the importance of professional and policy level support and adequate HR interventions to improve the guesthouse operations performance in the Maldives.

Keywords: *human resources management, guesthouses, Maldives, hospitality industry, managerial challenges, operative challenges*

Redefining Organisational Agility through Hybrid Work Systems: A Post-Pandemic Study of Employee Performance in Tertiary Institutions

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Abstract

This study redefines organisational agility in post-pandemic era by examining the mediating role of organisational agility in the relationship between hybrid work systems and employee performance in tertiary institutions. The hybrid work system is assessed through four dimensions of work engagement, digital adaptation, work-life balance, and job autonomy. A survey research design was employed, targeting a population of tertiary institutions in Nigeria. A sample size of 384 respondents was determined using Cochran's (1977) formula, with proportional allocation to ensure representative sampling. Data were collected using a structured five-point Likert scale questionnaire and analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings reveal that work engagement and job autonomy have a significant and positive effect on employee performance, while digital adaptation and work-life balance have positive but statistically insignificant effect. Notably, organisational agility mediates the relationship between hybrid work dimensions and employee performance, reinforcing the need for adaptive institutional structures. The study concludes that cultivating organisational agility enables institutions to translate hybrid work practices into sustained staff performance. It recommends that tertiary institutions prioritise policies that promote employee engagement and autonomy, strengthen digital capabilities, support work-life balance, and institutionalise agile frameworks tailored to the realities of the Nigerian education sector.

Keywords: *organisational agility, hybrid work systems, employee performance, work engagement, digital adaptation, job autonomy, work-life balance*

Work Design, Perceived Organizational Support and Work Engagement Among University Lecturers in Kenya

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Abstract

Anchored on the Job Demands- Resource model and the social exchange theory, this study focuses on University Lecturers drawn from both public and private Universities in Kenya. The study seeks to advance knowledge in the field of the Job Demands-Resource model by providing empirical evidence from results of interactions between work design, perceived organizational support and employee engagement among lecturers in the Universities in Kenya. The aim is to determine how the variables of job demands-resources model interact with employee perceptions of organizational support to affect engagement in their work. Although the Job Demands- Resource model has been studied in relations to other variables such as work engagement, burn out and other employee and organizational outcomes, few have studied the role of organizational support in this relationship. This study attempts to address this gap.

Keywords: *work design, perceived organizational support, employee engagement, universities in Kenya, perceived organizational support, employee engagement, universities in Kenya*

IFRS Adoption in Hungary: Evidence from Individual Financial Statements

Éva Karai, ***Ahmed Izhaam Eötvös Loránd University***

Abstract

Since the early 1990s, IFRS has been increasingly implemented in the financial reporting of countries. This has been with the primary goal of facilitating global comparison of financial reporting for investors. Following European Commission Regulation No. 1606/2002, Hungary first implemented mandatory financial reporting under IFRS for the consolidated financial statements of listed entities. In 2017, this mandate was also extended to individual financial reporting. The objective of this paper is to assess the impacts of IFRS adoption on the individual financial statements of Hungarian entities. We study this using a statistical methodology composed of descriptive and inferential statistics between the Hungarian Accounting Act (HAA) and IFRS. This is tested for two groups of variables: accounting measures and financial ratios. Our sample consists of 24 companies listed on the Budapest Stock Exchange. For the descriptive element, Gray's comparability index is used to assess the degree of conservatism after IFRS adoption. The inferential element is composed of statistical significance testing, tested sample-wide and also within the largest subsector of the sample for additional clarity. Results of Gray's comparability index show neutrality in most of the variables. However, statistical testing shows significance for numerous variables which indicate a fall in conservatism with IFRS adoption except for current assets and the solvency ratio. The subsector results show some similarity to this as well. However, the magnitude of this could be small based on the neutrality results from Gray's comparability index. To conclude, a fall in the degree of conservatism highlights greater shareholder-orientedness, which is a key characteristic of IFRS. Thus, IFRS adoption has led to greater shareholder-orientedness in the financial reporting of Hungary. Studies from other European countries show similar results in the same variables, though most of these studies consider different variables as well.

Keywords: *IFRS, Hungary, continental accounting model, individual, financial statements, grays comparability index*

A Case Study of Leadership Styles and Management Practices of a Higher Education Institute Leader in the Maldives

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Abstract

The study aims to present a case of a leader in a higher educational institution in the Maldives, integrated with theory and literature. For a better understanding of the phenomenon, it was prudent to conduct a single case study, supported by theory, and literature, offering an understanding of the dominant leadership style(s) and management practice(s) adopted by a dean at one of the Universities in the Maldives. Data collected through an in-depth interview was analyzed qualitatively. The study highlights that leaders with high self-efficacy and charisma positively impact leadership effectiveness, particularly through motivating staff, integrating technology, and facilitating workplace learning. Additionally, university leaders, such as deans, can model responsible leadership, including authentic and ethical leadership by fostering communication, aligning goals, and promoting a collaborative and inclusive academic environment. The findings identify that the role of educational leaders and managers is crucial for organizational success in the Maldivian higher education context.

Keywords: *educational leader, higher education, leadership and management, leadership styles, leadership theories*

Sub-theme 8: Innovative Strategies for Business and Organizational Management

Organizational Culture, Organizational Constraints and Interpersonal Conflicts among Employees Working in Coworking Spaces

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University of The Punjab

Abstract

The present research was conducted to investigate the relationship between organizational culture, organizational constraints and interpersonal conflicts among employees working in coworking spaces. Correlational research design was used. It was hypothesized that there would likely be a significant relationship between organizational culture, organizational constraints and interpersonal conflicts in individuals working in coworking spaces. Organizational culture and organizational constraints both would likely to predict interpersonal conflicts. There would be gender differences in organizational culture, organizational constraints and interpersonal conflicts. Total sample of 150 individuals working in coworking spaces was included. Organizational culture assessment questionnaire (Sashkin & Rosenbach, 2013), Organizational Constraints Scale, OCS (Spector & Jex, 1997) and Interpersonal Conflict at Work Scale, ICAWS (Spector. Jex, 1997) were used to assess the understudy variables. The results indicated that there was a significant relationship between organizational culture, organizational constraints and interpersonal conflicts and both were the predictors of interpersonal conflicts. Organizational constraints had moderating effects on interpersonal conflicts. No gender differences were found in terms of interpersonal conflicts. The present research can be implied to the field of organizational psychology. It focuses on the phenomenon of the cultures and constraints of the organization and their contribution to interpersonal conflicts in individuals. The benefits of coworking spaces include promoting better environment, organizational culture, reducing constraints and interpersonal conflicts.

Keywords: *organizational culture, organizational constraints, interpersonal conflicts, coworking spaces.*

Sub-theme 8: Innovative Strategies for Business and Organizational Management

The Role of Gender in Leadership Behaviour: A Maldivian Youth Perspective

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Abstract

The role of gender in leadership behaviour is a diverse and intricate topic that has gained increased focus in recent years. The behaviours of leadership that are used can have a significant impact on productivity, general effectiveness, and organisational dynamics. While there are different types of leadership behaviours studied in Maldives, particularly in higher education contexts, these studies are limited in examining the role of gender on leadership behaviours. This study aimed to find out whether male and female leaders in the Maldives exhibited different leadership behaviours using the Leader Behaviour Inventory (LBI), from the perspective of Maldivian youth aged between 18 and 35 years. The study used a cross-sectional quantitative research design and convenience sampling was used to collect data from Maldivian youth who evaluated the frequency of leadership behaviours of 50 male and 50 female leaders across five distinct categories: VizG (visualizing greatness), EmpW (empowering the "we"), ComM (communicating for meaning), ManageO (managing oneself), and CareR (care and recognition). Results revealed that youth viewed their leaders to demonstrate higher engagement levels, with female leaders showing more traits such as being cooperative and sympathetic, while male leaders showed higher engagement levels across traits such as being commanding and decisive behaviours of leadership. The findings of this study have important implications in terms of how junior subordinates perceive male and female leadership traits and how they can benefit and learn from different types of leadership in organisations. Some of the limitations of the study are restricted time for data collection, small sample size, and participant bias that could have been influenced by own beliefs regarding gender and leadership.

Keywords: *gender and leadership, youth perception and leadership*

Sub-theme 8: Innovative Strategies for Business and Organizational Management

Shifting Patterns in Payment Method Usage Before, During, and After COVID-19: Insights from Maldives Transaction Data

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Abstract

Studies across various countries, including France, Denmark, Spain, China, the United States, and the United Kingdom, utilised transaction data to explore consumer dynamics during the pandemic. The findings from these studies indicate a marked shift from cash to digital payments during COVID-19, with many changes persisting post-pandemic. While this trend is well-documented in larger economies, there is limited research on how payment behaviours have changed in small island nations like the Maldives. This study addresses that gap and investigates shifts in payment method usage in the Maldives before, during, and after the COVID-19 pandemic using aggregated quarterly transaction data from 2017 to 2024. Drawing on data from the Maldives Monetary Authority (MMA), which includes ATM withdrawals (used as a proxy for cash), debit cards, cheques, and account transfers, expenditure shares for each payment method are computed and analysed within a Seemingly Unrelated Regression (SUR) framework. The model includes real income, inflation, pandemic, and post-COVID dummy variables, and a time trend as explanatory factors. The results reveal a substantial and statistically significant decline in the use of cash and cheques during the pandemic, followed by further reductions in the post-COVID period. In contrast, account transfers exhibited a sustained and sharp increase. Debit card usage, however, showed no statistically significant change, indicating limited behavioural substitution in that category. These findings point to a strong and lasting shift away from traditional payment methods toward digital alternatives in the Maldives. The pandemic catalysed a lasting transformation in payment behaviour, highlighting the need to strengthen digital financial infrastructure and ensure inclusive access during the ongoing transition.

Keywords: *payment methods, seemingly unrelated regression, digital payments, covid-19, payment substitution*

Sub-theme 8: Innovative Strategies for Business and Organizational Management

Role of Job Security on Employee Job Satisfaction Among Maldivians

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Abstract
The purpose of this study was to investigate the role of job security on employee job satisfaction among Maldivians, along with a comparison between employees in the public sector and private sector. A quantitative, cross-sectional study was conducted among 103 Maldivian employees from the public sector and the private sector. Participants were given self-administered questionnaires, a job insecurity scale, along with a job satisfaction survey. The findings showed a significant negative relationship between job insecurity and employee job satisfaction among Maldivians. However, contrary to most existing literature, the study did not find a significant difference between the public and private sectors for both job insecurity and job satisfaction. The findings of this study can help provide useful and valuable understandings for organizations in both sectors, so that they can develop strategies and focus on enhancing factors that can improve employee retention and well-being by examining how job security influences employee satisfaction. The results of this study also suggest examining how different areas contribute to satisfaction level among employees and the effect of mediating variables, such as stress, organizational support, and other factors, between job security and satisfaction.

Keywords: *job security, job satisfaction, Maldivian employees*

Sub-theme 8: Innovative Strategies for Business and Organizational Management

The Strategic Role of Emotional Intelligence in Enhancing Academic Service Quality in Maldives Higher Education

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Abstract

This research aims to examine the strategic significance of emotional intelligence (EI) in the quality of academic services within higher education. The study will concentrate on the Maldives National University (MNU), the largest public university in the Maldives. Despite empirical evidence from numerous global studies associating emotional intelligence (EI) with enhanced employee performance, a notable gap persists regarding its direct impact on academic quality within the higher education sector in the Maldives and associated quality management frameworks. The research seeks to improve service delivery at MNU, the largest public university in the Maldives, by investigating the potential incorporation of emotional intelligence into learning and development programs. The primary objectives are to examine existing knowledge regarding emotional intelligence in higher education, assess the current emotional intelligence levels of MNU academic staff, analyse the correlation between emotional intelligence and the quality of teaching and learning services, develop targeted training programs for emotional intelligence, and propose policies for sustainable quality enhancement. The research will utilize a Mixed Methods Sequential Explanatory Design, initially quantitatively evaluating emotional intelligence and service quality through stratified random sampling, with data gathered via validated online surveys, such as the Schutte Self Report Emotional Intelligence Test. This phase will examine correlations and predictive relationships. A qualitative phase will follow, utilizing purposive sampling to perform semi-structured interviews with academic personnel and leaders. This qualitative data will elucidate the quantitative findings and delineate context-specific frameworks and policy integration strategies. The results will offer practical insights for MNU to cultivate a constructive learning atmosphere and enhance student outcomes via strategic EI integration.

Keywords: *emotional intelligence, academic quality, higher education, Maldives, service delivery*

Sub-theme 9: Merging Emerging Future Ready Technologies with Practical Applications

13 Abstracts



Artificial Intelligence in E-Learning: A Systematic Review on Personalized Learning and Adaptive Assessment

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Abstract

This systematic review examines the role of artificial intelligence (AI) in e-learning, particularly in Personalized Learning (PL) and Adaptive Assessment (AA). Using the PRISMA methodology, 25 studies were selected from an initial pool of 218 records across multiple databases. The findings highlight AI's potential to enhance student performance, engagement, and motivation while also identifying challenges such as bias and ethical concerns. The review explores the historical development, theoretical foundations, and practical applications of AI in education, emphasizing its impact on adaptive learning environments. Key future directions include empirical validation of AI's effectiveness, reducing algorithmic bias, and addressing data privacy concerns. This study highlights AI's transformative potential in education and calls for continued research to ensure equitable and effective implementation.

Keywords: *adaptive assessment, artificial intelligence, AI ethics, educational technology, personalized learning*

Bridging the Educational Gap: How AI is Transforming Education in Rural Regions in Sri Lanka

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Abstract

Education in rural Sri Lanka faces numerous challenges, including limited access to resources, a lack of qualified teachers and digital educational infrastructure compared to urban regions. These inequalities contribute to the widening educational gap between rural and urban regions, affecting students' learning outcomes and overall educational opportunities. This paper explores how Artificial Intelligence (AI) can transform education in these rural regions, focusing on its applications in personalized learning platforms, digital tutoring, teacher training, and remote learning solutions. By examining the effects of AI in global educational contexts and analysing the difficulties faced by rural communities, the paper discusses the potential of AI to bridge the educational gap. The research uses qualitative methodology, including interviews, direct observations, case studies from several districts and examines the pilot programs and AI-driven initiatives that demonstrate promising results and highlights both the opportunities and challenges associated with AI integration. The results indicate that while AI has great impacts on rural education, the successful implementation will require addressing issues related to digital infrastructure, content localization, teacher readiness, and financial constraints. This paper concludes that AI could play a vital role in reshaping rural education; its long-term success will depend on supportive policies and investments in technological infrastructure.

Keywords: *bridging, artificial intelligence, rural education, educational gap, Sri Lanka*

Our Earth Our Futures: Teacher reflection on curriculum innovation to incorporate sustainable development and global citizenship education in the primary school classroom

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Abstract

This paper reports on the broader Our Earth Our Futures (OEOF) project that aimed to explore how Education for Sustainable Development and Global Citizenship (ESDGC) can be incorporated into the primary school curriculum. This paper presents teacher reflections on the curriculum innovation process in how ESDGC principles were integrated into their lessons and associated professional development in doing so. The overall OEOF project had 3 schools in the Maldives and 4 schools in Oxfordshire, UK implementing classroom projects/lessons with a focus on empathy, global citizenship, sustainability and social and environmental justice. This paper reports on the voices of teachers, how teachers' pedagogical practices developed through the engagement in this project. A total of 15 teachers from the Maldives took part in this project and their reflective narrations were thematically analysed by teachers themselves to identify learning moments and innovations, also highlighting how they overcame the challenges they faced in the process. The analysis revealed the significance of real-world relevance, which made learning more meaningful and urgent for both students and the teacher. The integration of environmental issues fostered student engagement, which in turn motivated the teachers to make these meaningful connections in their lessons. Ultimately, the experience underscored the importance of connecting curriculum to real-life values and challenges, resulting in a more intentional, impactful, and holistic approach to education.

Keywords: *our earth our futures, education for sustainable development and global citizenship, UK, Maldives, teacher reflections*

Our Earth Our Futures: Researcher reflection in implementing sustainable development and global citizenship education in the primary school classroom

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Abstract

This paper reports on the "Our Earth Our Futures (OEOF)" project that aimed to explore the impact of innovative, intercultural approaches to curriculum innovation on teachers' professional development and students' learning of self as global citizens. In doing so, this project also explored the support needed for teachers to employ transformative pedagogies within existing curricular and institutional frameworks through expertise facilitator support. This paper reports on the latter through research reflections on identifying ways and approaches for teacher professional development and learning from a facilitator lens. The OEOF project had 3 schools in the Maldives and 4 schools in Oxfordshire, UK, implementing classroom projects/lessons with a focus on empathy, global citizenship, sustainability and social and environmental justice. In this presentation, we use the data of researcher/facilitator reflections that were either made as individual reflections or group's reflective conversations. These discussions were written down and thematically analysed to identify 'what works' and under 'what conditions' to identify teacher professional development and learning provisions. As facilitators, we noted that bringing all teachers together to build a common understanding played a foundational role. We observed that when given time and space to explore teachers' existing misconceptions and current practices, they became more open to change. Experiencing new pedagogies firsthand, especially the arts-based approaches for ESDGC emerged as a significant enabler, as it allowed teachers to engage with these methods more confidently. We also observed that opportunities for interaction and reflection, both individually and collectively, deepened teachers' learning and supported the integration of new strategies into their practice. Importantly, our facilitative stance of withholding judgment created a trusting environment where teachers felt safe to experiment, reflect honestly, and grow. These findings highlight the critical role of collaborative, experiential, and non-judgmental facilitation in fostering meaningful and sustained pedagogical growth among teachers.

Keywords: *our earth our futures, education for sustainable development and global citizenship, UK, Maldives, researcher reflections*

Robogogy: A Pedagogical Framework for Empowering Non-IT Teachers with Robotics Education for Resource-Limited Classrooms

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Abstract
Robogogy is a novel pedagogical framework that empowers non-IT educators to integrate robotics into teaching and learning in the Maldives effectively. The concept arises from the urgent need to close the digital divide in education, especially in island contexts with limited access to specialised technical expertise and infrastructure. Robogogy advocates for an accessible, inclusive, hands-on methodology in robotics education rooted in constructivist and experiential learning theories. The objective is to cultivate student competencies in creativity, critical thinking, and problem-solving while enhancing educator autonomy in teaching 21st-century skills. A national seminar was held for educators and key stakeholders who expressed interest in the topic. This seminar served as a foundational activity to introduce the concept, gauge interest levels, explore contextual needs, and assess the baseline capacity of non-IT teachers to engage with robotics. The seminar revealed a strong enthusiasm for the subject, an acknowledged skills gap, and a desire for structured professional development to facilitate the integration of robotics into teaching. The insights gained are currently guiding the development of the Robogogy framework, which aims to provide streamlined instructional strategies, context-specific toolkits, and flexible lesson plans. The project employs a mixed-methods approach that includes a needs analysis, the development of the Robogogy framework, and a pilot implementation phase aimed at Key Stage 2 and 3 classrooms. Evaluation will be done through surveys, classroom observations, and interviews to measure teacher confidence, instructional effectiveness, and student engagement. The overarching objective is to develop a sustainable and scalable model for integrating robotics into education that can be adapted to diverse geographic and resource contexts. Robogogy aims to transform classrooms into dynamic learning environments that equip teachers and students for a technology-driven future while ensuring that robotics education is equitable and attainable for all.

Keywords: *robogogy, robotics, education*

Reflect - Act - Transform: Digital Entrepreneurship as a Learning Tool For The 21st Century Graduate

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Abstract
In today's rapidly evolving digital economy, higher education institutions face the growing challenge of bridging the gap between theoretical knowledge and practical applications to prepare graduates for the demands of the modern workforce. Literature emphasizes the importance of developing an entrepreneurial mindset in the digital age, while noting that traditional teaching methods often fall short in cultivating real-world readiness. Experiential learning is viewed as vital for students' development, and studies highlight both strengths and gaps in Malaysian entrepreneurship education. In response, this study explores how digital entrepreneurship serves as a dynamic experiential learning platform that fosters critical reflection, perspective transformation, and identifies digital entrepreneurship activities that lead to the development of an entrepreneurial mindset among university students. Grounded in Jack Mezirow's Transformative Learning Theory, the study adopted a qualitative design involving 20 purposively selected student entrepreneurs from various academic disciplines. Data collected through in-depth interviews and participant observation were transcribed and thematically analyzed. Findings show that sustained engagement in digital entrepreneurship promotes deep self-reflection, challenges existing assumptions, and cultivates adaptive thinking and behaviour. Participants reported growth in areas such as crisis management, autonomous decision-making, creativity, intercultural communication, and self-confidence; skills often underdeveloped in conventional classroom environments. Moreover, participants identified and engaged in digital entrepreneurship activities that were effective in applying theoretical knowledge within real-world contexts, thereby enriching their experiential learning process. The results suggest that digital entrepreneurship is not merely a skill building exercise but a transformative educational journey. Through authentic challenges and interactions, students integrate theory with practice, experience mindset shifts, and gain motivation for lifelong learning. The process also strengthens resilience and adaptability, key traits for thriving in today's uncertain economy. This paper advocates embedding experiential digital entrepreneurship in higher education curricula to better equip graduates as reflective, proactive, and resilient contributors in the 21st-century digital economy.

Keywords: digital entrepreneurship, experiential learning, transformative learning

Designing Adaptive e-Learning in Moodle: A Personalized Environment Integrating Learner Profiling, Content Adaptation, and Progressive Assessment

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Abstract
This design paper presents the development of a prototype Moodle-based personalized adaptive e-learning environment that addresses key instructional design and personalization challenges in technology-enhanced learning. The system is grounded in the Felder-Silverman Learning Style Model (FSLSM) and integrates principles of constructive alignment and backward design to ensure pedagogical soundness. The adaptive environment focuses on two core dimensions of personalization: (1) content adaptation based on individual learner preferences and styles, and (2) progressive assessment tailored to the learner's current knowledge level. Central to this design is a dynamic learner profiling mechanism, which utilizes initial diagnostics, learning analytics, and machine learning to construct and continuously update individual learner profiles. Based on these profiles, the system adapts both the instructional content and assessment strategies to create a meaningful, engaging, and personalized learning experience. The development followed a design-based research (DBR) methodology, incorporating iterative cycles of design, development, expert validation, and refinement. This paper outlines the system architecture, profiling process, and adaptivity mechanisms, and discusses how the design addresses common concerns in the literature regarding scalability, pedagogical coherence, and effective personalization in adaptive learning systems.

Keywords: *personalized learning, adaptive learning, e-learning, lms*

Generational Differences in Digital Ethics Perceptions on Employee Well-Being in AI-Enabled Health and IT Workplaces: A Systematic Review

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Abstract

Ethical concerns are amplified in 21st-century workplaces amid rapid digital transformation as over 70% of employees report AI-related unease. Millennials and Gen Z show 30% higher ethical AI concern, influencing trust, adaptability, and well-being. Despite the growing adoption of AI in evolving sectors, digital ethics perceptions remain an overlooked factor affecting employee well-being—a gap this review aims to address. By employing a systematic literature review approach, it will explore how generational differences in digital ethics perceptions influence employee well-being in AI-enabled health and IT workplaces. Relevant articles and institutional statistical reports published between 2015-2025 is being sourced from Web of Science, PubMed, Google Scholar, and regional health and social science databases. using keywords such as "digital ethics," "generational differences," "employee well-being," and "AI workplaces". Studies are screened based on predefined inclusion and exclusion criteria, following PRISMA guidelines. The objectives of this review are: i) synthesize existing research on generational attitudes toward digital ethics in AI-driven health and IT workplaces. ii) examine the relationship between generational attitudes toward digital ethics and employee well-being—including stress, trust, and job satisfaction—among employees aged 24 to 55 in AI-driven health and IT workplaces, and iii) identify research gaps and provide practical recommendations for organizations to foster ethical AI adoption through training, clear policies, and inclusive practices in multigenerational workplaces. Expected results indicate notable generational differences in digital ethics perceptions, with younger employees showing greater acceptance and older cohorts expressing heightened concern over AI-related privacy and transparency. These perceptions are expected to influence employee well-being, affecting trust, stress levels, and job satisfaction. Differences may be more pronounced in health sectors due to ethical sensitivity around patient data. These findings underscore the necessity for organizations to develop inclusive digital ethics policies that address generational differences in AI perceptions bridging generational gaps and enhance employee well-being in increasingly AI-integrated health and IT workplaces.

Keywords: *digital ethics, generational differences, employee well-being, ai workplaces.*

Sub-theme 9: Merging Emerging Future Ready Technologies with Practical Applications

Impact of E-Training Quality on the Sustainability of the Corporate E-Training Programmes: A Conceptual Review

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Abstract

Technology has profoundly transformed corporate training practices within organizations. A significant impact was seen in training practices managed by Human Resources (HR), leading to altered organizational training cultures and emphasizing the need for new approaches. The transition from traditional to e-training methods has yielded considerable financial and non-financial benefits for organizations. However, it is of utmost importance to ensure the sustainability of corporate training programs alongside these benefits. This conceptual review examines the impact of e-training quality dimensions and the sustainability of corporate e-training programs, highlighting key factors influencing their continued adoption and effectiveness. The study synthesizes existing literature through a thematic analysis approach, drawing on frameworks such as Kirkpatrick's Training Evaluation Model and the Technology Acceptance Model (TAM), alongside concepts from sustainability science, to evaluate relevant quality indicators within sustainable e-training programmes. The review identifies core e-training quality factors (Alam et al., 2021), including Learner Quality, Instructor Quality, Information Quality, System Quality, and Institutional Quality as crucial to employee engagement and knowledge retention. It also reveals a significant gap in the integration of e-training quality models with corporate sustainability in the current literature. The sustainability of corporate e-training programmes including equal training opportunities, long-term oriented training, an integrated approach to training, a focus on well-being, environmentally oriented training, and team building (Piwowar-Sulej and Iqbal, 2025). The paper proposes a conceptual framework linking e-training quality dimensions to the sustainability of e-training programme outcomes. In this framework, e-training quality is identified as the independent variable, while the sustainability of e-training programmes serves as the dependent variable. Perceived value and technology self-efficacy function as moderating variables, and learning organisations act as the mediating variable. The study calls for empirical validation and further research to explore how these factors interact across diverse corporate contexts.

Keywords: *e-training quality, sustainability of the corporate e-training, corporate e-training.*

The future of learning and teaching law in the age of Generative Artificial intelligence

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Abstract

Generative artificial intelligence has rapidly transformed the otherwise unaffected practice of law worldwide. This has prompted law schools to change the pedagogical approach adopted in teaching law. The existing study aims to explore the changes in legal education following the use of Generative AI tools, such as ChatGPT, Harvey, and others. The study is qualitative, drawing on peer-reviewed scholarly articles on the use of Generative AI tools in legal education. The literature explored the changes in the study of law when using Generative AI tools to gain an understanding of how the use of these tools impacts the way law is taught. The findings indicate that modern law schools are increasingly utilizing Generative AI tools as aids in both learning and teaching law. While many are skeptical of the use of Generative AI tools due to ethical concerns, most studies suggest that using Generative AI tools can foster critical thinking among future lawyers. Correspondingly, the studies posit that knowledge and proficiency in the use of Generative AI tools could become a core legal skill in the future. The study concludes that law schools must develop guidelines for the effective use of Generative AI tools in legal education.

Keywords: *chatgpt, gen AI, harvey, learning, and teaching law*.

AI-Driven Detection of Watermelon Leaf Diseases Using YOLOv8: Enhancing Pest Management in Maldivian Agriculture

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Abstract

The agricultural sector, especially in climate-sensitive and geographically constrained regions like the Maldives, is increasingly vulnerable to the adverse impacts of pests and plant diseases (Abdulla, et al., 2022). With traditional detection methods proving insufficient, artificial intelligence (AI) offers promising solutions to enhance early disease identification and promote sustainable agricultural practices. This study presents a deep learning-based system for detecting watermelon leaf conditions—specifically mosaic virus, downy mildew, and healthy—through image classification, using a YOLOv8 architecture enhanced with synthetic data generation and hyperparameter tuning. The final model achieved a mean Average Precision (mAP) of 95.1% at IoU 0.5, outperforming previous benchmarks, including YOLOv7 and Faster-RCNN models Wang et al. (2024). Notably, the application of SMOTE combined with fine-tuned hyperparameters led to a performance improvement of 16%, 14%, and 16% for mosaic virus, healthy, and downy mildew classes, respectively—findings that align with recent literature supporting the role of synthetic oversampling in improving class balance and detection accuracy Cuenca-Romero et al. (2024). In addition to technical performance, the accompanying web application artifact was evaluated for real-world usability. The app received a 90% user satisfaction rating, highlighting its practical value in the field. Overall, the study successfully demonstrates the effectiveness of AI- enabled systems for pest and disease detection, addressing challenges in the technological and user experience is necessary for impactful adoption in resource-constrained agricultural contexts of Maldives.

Keywords: *computer vision, deep learning, watermelon disease detection*

Students Using Artificial Intelligence for Assignments: Students' Perspectives vs. Lecturers' Dilemma

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Abstract

The advance of Artificial Intelligence (AI) has brought major changes to the various aspects of daily life, including education. The purpose of this research is to explore the differing perspectives of students and lecturers on the use of AI when doing academic assessments. This research will investigate the advantages and challenges perceived by both groups. In addition, it will also explore the implications of AI on the academic integrity, assessment quality and overall learning experience of the students. A convergent mixed method approach will be used to find answers to the research questions by using 100 higher education students and 15 lecturers from the Maldives National University. Quantitative data will be gathered through a structured questionnaire, which will be piloted. Qualitative data will be collected via semi-structured interviews with a purposive subsample of students and lecturers to elicit deeper insights into their experiences and concerns related to AI use in academic work. For data analysis, descriptive and inferential statistical techniques (e.g., t-tests, ANOVA, and correlation analysis) will be applied to the quantitative data using software such as SPSS. Qualitative data from the interviews will be transcribed and subjected to thematic analysis. The findings from both data strands will be triangulated to provide a balanced and evidence–based understanding of how AI technologies are influencing academic practices with implications for policy development, instructional design, and assessment strategies in higher education.

Keywords: *artificial intelligence in education, ai-assisted learning, ethics in ai use, technology in higher education, academic integrity*

Influence of AI tools on learning, engagement, and academic performance: Perspective of FHTS students

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Abstract

The reliance on AI tools for academic purposes has been debatable among educators. While some educators argue for the importance of leveraging AI tools for teaching and learning, others are concerned about the excessive reliance on these tools. This is a valid concern considering the dearth of studies focusing on Artificial Intelligence (AI) tools. While the literature on AI equally discusses the positives and drawbacks of adopting AI tools, there is a significant gap in the literature from the perspective of students, especially in the Maldivian Hospitality Education context. Therefore, the purpose of this study is to investigate the influence of AI tools on students' learning, engagement, and academic performance. The study employs a qualitative methodology, collecting data from 10 to 15 participants selected purposively, for semi-structured face-to-face interviews. Data will be analysed thematically by using NVivo software. The research results will contribute to the growing body of literature on AI tools by revealing the students' perception and role of AI tools on their learning, the specific AI tools that enhance students' learning, engagement and academic performance, and the drawbacks of relying on AI tools. The findings of the research can assist students in their academic journey, educators in designing curriculum, training requirements for the evolving Hospitality and Tourism (H&T) industry and for policy makers to strengthen policies on plagiarism and academic integrity.

Keywords: *artificial intelligence, AI, AI TOOLS, generative ai, hospitality and tourism*

Sub-theme 10: Bridging Smart and Sustainable Innovations in the Built Environment with Practical Engineering Challenges

4 Abstracts



Sub-theme 10: Bridging Smart and Sustainable Innovations in the Built Environment with Practical Engineering Challenges

Impact of Wind on Various geometrical shapes of High-rise Buildings

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Abstract
This study explores the impact of lateral wind pressure on high-rise structures with diverse geometrical configurations. Five 15-storeyed models, varying in plan and elevation geometry, were analyzed using the latest version of STAAD Pro software under amplified wind pressure. Results reveal that structures with symmetry and regularity in plan and elevation exhibit superior resistance to wind forces, with a maximum nodal displacement of 38mm, deemed acceptable. Conversely, models with irregularity and asymmetry demonstrated higher nodal displacements of up to 58mm, raising concerns about the long-term performance of the structure against lateral wind pressure. The findings underscore that regularity and symmetry in plan and elevation enhance structural stability against wind actions. For irregular geometries, rigorous analysis and design, including shear walls and bracings, are essential to ensure structural integrity.

Keywords: *high-rise structures, lateral pressure, nodal displacement*

Structural Design & Cost Estimation of a Proposed Multi Storey Residential Building at Hulhumale

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Abstract

The main purpose of structural analysis and design is to produce a structure capable of resisting all the loads applied during its intended life span without failure. Reinforced concrete structures are very common in Maldives. Structural design issues and improper analysis method leads to overdesign, which is one of the reasons for increase in the construction cost of a project. The cost of a building can be minimized if proper design and detailing is followed. Therefore, this paper aims to analyse and design a residential building structure which is already designed to BS code and to compare the actual cost of the building with the cost estimation after the design using AS code. The reason behind the comparison is to find out how much the cost is affected by the structural design using different codes. Therefore, the first part of this thesis aimed at structural analysis and design of a 6-storey residential apartment at Hulhumale using AS code. The analysis involves calculating forces in structural elements such as beams, slabs, columns, roof slabs, and foundations using Staad. Pro software, followed by structural detailing. Cost estimation is carried out using Excel to quantify how design decisions impact overall costs. The second part is to do a cost estimation for the designed structure and compare the actual cost with the estimated cost to find out the difference.

Keywords: *structural design, cost analysis, staad.pro*

Enhancing Sustainability in Maldivian Tourism MSMEs: Waste Minimization, Energy Efficiency, and Water Conservation

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Abstract

Tourism MSMEs play a pivotal role in the Maldivian economy, yet their environmental impact, particularly concerning waste, energy, and water management, poses critical challenges. This study examines the implementation of sustainable practices among tourism MSMEs across selected Maldivian islands, highlighting strategies for waste minimization, energy efficiency, and water conservation. Through the PROMISE methodology, which integrates STENUM Asia (India) and National Cleaner Production Centre (Sri Lanka)'s Resource Efficient Cleaner Production (RECP) principles with Parley for the Oceans' Avoid, Intercept, and Redesign (AIR) framework, the project engaged 128 MSMEs via rapid assessments, audits, direct consultancy, and structured training sessions. A total of 833 sustainable options, 58.8% of which recommend switching from single-use plastics to more sustainable alternatives. were provided, with 53.3% focused on reducing single-use plastics, 1.32% on water conservation, 12.4% on energy efficiency, and 32.9% on other sustainable activities. Among these recommendations, 531 measures accounting for 63.7% were successfully implemented, demonstrating a tangible shift toward sustainability. Additionally, MSMEs explored energy-efficient solutions and water conservation measures, though financial constraints and limited local availability of sustainable alternatives posed significant barriers to adoption. The findings underscore both the successes and challenges of transitioning tourism MSMEs toward sustainable operational models. While businesses exhibit a strong commitment to eco-friendly practices, external support—particularly financial incentives and accessible sustainable products—remains crucial for long-term integration. This research contributes to discussions on sustainable tourism development by offering insights into practical interventions that support waste reduction, energy efficiency, and water conservation in small-scale tourism enterprises.

Keywords: *waste minimization, plastic pollution, single-use plastics, marine litter, sustainable consumption and production*

Reviving Maldivian Celestial Navigation Through Spatial Design and Cultural Architecture

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Abstract

For centuries, Maldivian Navigators have relied on an intricate understanding of the stars to transverse the vast Indian Ocean. Celestial bodies and astronomical patterns like Asurumaa, Dhen'bulhi, and Furudheli formed the backbone of indigenous wayfinding systems, linking cultural identity to the natural environment. In contemporary architectural development across the Maldives, this profound relationship with the sky has largely faded, replaced by imported spatial logics and standardized wayfinding. This study investigates how traditional Maldivian star-based navigation systems can inform architectural design, enhance cultural storytelling, and support intuitive spatial orientation in modern built environments. This research explores the question: How can cultural astronomy and indigenous wayfinding principles be integrated into contemporary architecture to preserve intangible heritage and enrich spatial experience? Grounded in literature on the Maldivian astronomical patterns, indigenous navigation, and spatial semiotics, this study also draws comparative insights from Polynesian and Micronesian architectural traditions that incorporate celestial systems. A qualitative methodology was adopted, combining semi-structured interviews with Maldivian elders, navigators, and architects, alongside documentation of oral history and folklore associated with the stars. The study also includes a conceptual design proposal for a cultural pavilion and wayfinding system inspired by celestial paths and seasonal star alignments, with the integration of Dhivehi star names in signage, floor patterns aligned with celestial axes, and light installations mimicking constellations emerged as promising design strategies. This research proposes a culturally rooted architectural framework where the night sky becomes both map and memory. Implications are to extend to heritage preservation, education, and tourism to encourage a reimagined relationship between Maldivians, their architecture, and the cosmos.

Keywords: *reviving, Maldivian celestial navigation, cultural*

Sub-theme 11: Integrating Emerging Trends with Tourism and Hospitality Practices

4 Abstracts



Assessing the need for Strategic Environmental Assessment: A case study of the resort-based tourism sector of Maldives.

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Abstract
Maldives is best known for its white sandy beaches and crystal-clear lagoons, which attract more than a million tourists annually. The tourism sector of the country has received praise for how well the tourism planning and control system has been executed in the past. However, recent development trends in the sector have indicated a concerning shift towards an unchecked increase in the number of tourist resorts. This shift in policy has raised significant concerns about the long-term sustainability of the tourism sector, socio-economically and environmentally. This research has therefore assessed the need for a more robust strategic planning process for the resort-based tourism sector of Maldives and specifically evaluated the extent to how much Strategic Environmental Assessment (SEA); a systematic decision-support tool designed to integrate environmental, social, and economic considerations, could help to address this. This study employed the identification of perception of key stakeholders of the resort sector through interviews and that of the general public through questionnaires. The findings showed widespread dissatisfaction with the current strategic planning system. For instance, 96% of respondents reported no consultation during the formulation of tourism masterplans, highlighting a severe lack of public involvement. Further, 89% of stakeholders expressed concern over the absence of limits on island leasing for resorts. When SEA was presented as a potential solution 94% of the interviewees and 63% of the survey respondents supported its introduction, seeing it as part of the solution. Based on these findings, this research concludes that introducing SEA to Maldives' strategic tourism planning is essential. SEA can help protect the country's precious natural resources and sustain the natural attractions that make Maldives a global tourism destination. Without SEA, Maldives risks losing its unique qualities, endangering both its ecosystems and economy.

Keywords: *strategic environmental assessment, carrying capacity, environmental economics, sustainability, Maldives*

The Maldivian Public Diplomacy: Rethinking the Maldivian Tourism Promotion

Ibrahim Nahushal

Abstract

The Maldives' transformation into a world-leading luxury tourism destination represents a remarkable case of leveraging natural advantages through strategic promotion. While analysts have extensively analysed the country's diplomatic positioning between China and India, the public diplomacy dimensions of its tourism success remain critically understudied. This study seeks to achieve two key objectives: First, to examine how tourism promotion, and nation branding associated with it, facilitates achieving the goals of archetypal public diplomacy and based on this, secondly, to reconceptualize Maldivian tourism promotion as a form of public diplomacy strategy. Our investigation tests two central hypotheses: that Maldivian tourism promotion functions as an effective but institutionally unrecognized form of public diplomacy (H1), and that its corporate framing has obscured its strategic value and possible alternative ways in shaping international perceptions (H2). This study employs qualitative analysis to examine tourism promotion in the Maldives through three key sources: government-led tourism campaigns, national tourism master plans, and stakeholder perspectives. Findings reveal that while the Maldivian tourism promotion achieves core public diplomacy outcomes - building international affinity- it remains siloed as a commercial activity rather than recognized as a diplomatic manoeuvre. This finding suggests, through a reconceptualized public diplomacy strategy of tourism promotion, small states like the Maldives can increase the strategic utility of tourism promotion in shaping international perceptions and advancing national interests. The study makes both practical and theoretical contributions. For policymakers, it demonstrates the need to formally integrate tourism into diplomatic architectures and vice versa. For scholars, it expands the scope of public diplomacy theory beyond deliberate public diplomacy strategies. Ultimately, this research offers a framework for resource-limited nations to maximize their international impact for economic gains through limited or narrow windows.

Keywords: *public diplomacy, Maldives tourism promotion, tourism, diplomacy, nation branding.*

Through the Glass Ceiling: Challenges Faced by Women Working in the Resorts of the Maldives

Hashma Adnan
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Abstract

Tourism is a pivotal economic sector globally, contributing significantly to the socio-economic development of many countries. However, gender disparities in tourism employment remain a critical issue, and women are often concentrated in lower-paid, lower-status jobs, facing significant barriers to career advancement. While tourism is the leading economic sector in the Maldives, only two percent of local women work in resorts, highlighting stark gender disparity, despite an almost equal gender split in the population. This study aims to explore the challenges faced by local women when working in the resorts of the Maldives, examining it through the Gendered Institutions theory and Glass Ceiling Effect. The study employs a phenomenological narrative approach, using semi-structured interviews with five female employees at Maldivian resorts selected through purposive sampling. While the small sample size limits the generalisability of the findings, the in-depth narratives provide valuable insights into the lived experiences of these women. Content analysis of the interviews revealed dominant challenges including gender stereotyping, discrimination, workplace harassment, biased recruitment and promotion practices, cultural constraints, and conflicts between family responsibilities and work. These findings align with global literature on gender issues in tourism and suggest that such challenges significantly hinder women's career development and progression. Although evolving gender ideologies and increased access to education are beginning to challenge inequality in the sector, the low representation of women in resort employment underscores the need for more effective empowerment strategies in the Maldives.

Keywords: *gender disparity, resort employment, Maldivian resorts, glass ceiling effect, women in tourism*

From Insight to Impact: A Qualitative Research Approach to Addressing Low Season Challenges Through Wellness Staycation Strategy in Urban Hotels in Bangkok, Thailand

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Abstract

The hospitality industry continues to grapple with fluctuating demand during off-peak periods, especially for urban hotels located outside of main tourist zones. This study explores a strategic marketing intervention grounded in wellness tourism to address low occupancy challenges. A review of literature highlights the growing relevance of health-focused travel experiences as a response to post-pandemic lifestyle shifts and increased consumer awareness around well-being. The research investigates how wellness-themed offerings can attract niche market segments such as wellness travellers and staytioners. The study addresses the following research questions: How can wellness tourism be leveraged as a core positioning strategy? What role does qualitative insight play in designing effective campaigns for urban hotels? The study employed a qualitative design using participatory observation, thematic analysis of online customer reviews (via TrustYou CXP), and in-depth interviews with hotel staff and stakeholders. Data were analyzed using thematic coding, Customer Journey Mapping, and Enneagram-based persona profiling. The sample included 4 hotel departments, 12 staff members, and over 150 customer feedback entries. The insights informed the development of the 'Stay Healthy Staycation' campaign, featuring customized packages combining healthy meals, spa sessions, fitness coaching, and direct booking incentives. The study's findings underscore the utility of qualitative methods in generating actionable insights for hospitality marketing and offer a replicable framework for similar urban properties. Implications suggest that integrating wellness as a core value proposition can improve brand positioning, customer engagement, and revenue stability during seasonal downturns.

Keywords: *wellness tourism, hotel marketing, qualitative research, staycation, urban hospitality*

Sub-theme 12: Faith and Knowledge: Integrating Islamic Principles with Contemporary Practice

9 Abstracts



مقَامُ النُّبوَّة في القُرآن: بين التَّأصيل العقديّ وتحدِّيات الجينوم البشَريّ والذكاء الاصطناعيّ

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ملخص

يتناول هذا البحث مفهوم النُّبوَّة في القرآن الكريم من خلال التأصيل العقدي، والتفاعل مع التحدِّيات المعاصرة التي يطرحها العلم الحديث، مثل مشروع الجينوم البشريّ والذكاء الاصطناعيّ. تهدف الدراسة إلى تحليل النُّبوَّة كرسالة إلهيَّة شاملة تُسْهم في فَهْم الإنسان للعلاقة مع الله عز وجل، وتقديم إرشادات تُوازن بين التَّقدم العلمي، والقِيَم الإيمانيَّة، والرُّوحيَّة. تتمثل إشكالية البحث في التَّحدِّيات الفكريَّة، والعلمية التي يواجهها فَهْم مقام النُّبوَّة في العصر الحديث والتي تفرضها الاكتشافات العلميَّة الحديثة، مثل مشروع الجِينوم البشريّ، وتطورات الذَّكاء الاصطناعيّ، والتي تثير تساؤلات حول الإنسان، والوحْي، والرِّسالة، بل والوجود الإلهيّ نفسه في ظل الطابع المادي للعلم الحديث. يتمثل سؤال المشكلة الرئيس كيف يمكن لمفاهيم النُّبوَّة في القرآن أن تقدم إجابات عقديَّة، وفكريَّة مُقْنِعة في مواجهة التحدِّيات المعاصرة المرتبطة بالجينوم البشري، والذَّكاء الاصطناعيّ؟ يتضمن أهداف البحث توضيح المفاهيم العقديَّة المتعلقة بالنُّبوَّة في القرآن، ودراسة التحدِّيات المعاصرة التي تواجه مقام النُّبوَّة مثل العلم والفكر الغربيّ، واستكشاف التطبيقات المعاصرة للنُّبوة في حلّ الأزمات المعاصرة مثل التطور العلْميّ والتَّقني، والتحدِّيات المرتبطة بالجينوم البشري، والذَّكاء الاصطناعيّ. يعتمد البحث على المنهج الاستقرائي لاستقراء الآيات القرآنية، والنصوص المتعلقة بالنُّبوَّة ، ومقاصدها وعلى المنهج التحليلي: لتحليل النصوص القرآنية، والأدبيات الدينيَّة المتعلقة بالنُّبوَّة؛ لفهم أبعادها العقديَّة، والمقاصديَّة؛ وربطها بالقيم الأخلاقية، والإنسانية المعاصرة، وتحليل مفاهيم الجينوم البشريّ، والذَّكاء الاصطناعيّ من منظور علمي، وفلسفي. وعلى المنهج المقارن: لمقارنة مفاهيم النُّبوَّة، والرِّسالة مع النظريات الفكرية، والعلميَّة الحديثة؛ لتسليط الضوء على موقفها من هذه التحديات. تظهر نتائج البحث أن النُّبوَّة لا تزال مصدرًا هامًا للهدى في مواجهة التَّحديات الحديثة، حيث توفر إطارًا أخلاقيًا يوجه الإنسانية نحو استخدام العِلم بما يحفظ كرامة الإنسان، وأصوله العقديّة، وقِيمِه الرُّوحيَّة. كما أكدت أهمية تجديد الخطاب الدِّيني بما يتناسب مع متطلبات العصر.

كلمات مفتاحية: مقَام النُّبوَّة، القُرآن، التأصيل العقدي، الجينوم البشري، الذكاء الاصطناعي

معاهدة سايكس بيكو وأثرها على القضية الفلسطينية: دراسة نقدية تحليلية

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ﻣﺤﻤﺪ ﻣﺮﺳﻠﻴﻦ، ﻣﺤﻤﺪ ﺇﺳﻤﺎﻋﻴﻞ

ملخص

تُعد معاهدة سايكس بيكو واحدة من أبرز المعاهدات السرية التي أعادت رسم خارطة الشرق الأوسط بعد انهيار الدولة العثمانية. وقد مهّدت الطريق أمام القوى الاستعمارية –بريطانيا وفرنسا– لتقسيم الأراضي العربية بما يخدم مصالحهما، متجاهلتين تطلعات الشعوب العربية في الاستقلال وتقرير المصير. وكان من بين أكثر المناطق تضررًا من هذه الاتفاقية، فلسطين التي وُضعت لاحقًا تحت الانتداب البريطاني، مما مهد الطريق لإقامة الكيان الصهيوني الإسرائيلي. يهدف هذا البحث إلى توضيح خلفية تاريخية عن معاهدة سايكس بيكو، كما يتناول أثر هذه المعاهدة على القضية الفلسطينية. يتطرق البحث إلى العلاقة بين معاهدة سايكس بيكو والمعاناة الحالية التي يتعرض لها أهل غزة. يقوم البحث بتسليط الضوء على نقد الواقع العربي والدولي تجاه ما يحدث لأهل فلسطين عموما وما يحدث لأهل غزة خصوصا. يعتمد هذا البحث على المنهج التاريخي النقدي والتحليلي. لقد خلص البحث إلى أن معاهدة سايكس بيكو لم تكن مجرد اتفاق لتقاسم النفوذ، بل كانت لحظة تأسيس لمأساة مستمرة في فلسطين، تتجلى اليوم بأبشع صورها في الحصار المفروض على غزة، والعدوان المستمر، والتخاذل الدولي. إن فهم هذه المعاهدة وتبعاتها لا يُعد فقط قراءة للتاريخ، بل هو خطوة ضرورية لفهم جذور الصراع وضرورة تغييره. وأن صمت الدول العربية والمجتمع الدولي على هذه المجازر والمذابح والتشريد والقتل والتجويع التي تحصل لأهل فلسطين تُعد امتدادًا مباشرًا لسياسات السيطرة والهيمنة التي أرستها القوى الكبرى في معاهدة سايكس بيكو

كلمات مفتاحية: معاهدة، سايكس بيكو، أثر، القضية، فلسطينين

جرائم الاعتداء على المال العام من قبل المواطنين

شهام محمد

ﷺ ﷺ ﷺ ﷺ ﷺ ﷺ ﷺ

ملخص

فإن المال بصفة عامة ضرورة من ضرورات الحياة، ويعتبر من الأمور الخمسة التي حث الإسلام على المحافظة عليها، وهي الدين، النفس، العقل، العرض والمال، ولا يخفى مال الأموال العامة من أهمية كبرى؛ لأنه لا بد منها في قيام مصالح الدين والدنيا، وفقدها يؤدي إلى عدم قيام مصالح الدين والدنيا على انتظام واستقامة، والإسلام أمر بالمحافظة على هذه الأموال واعتبرها ضرورة من ضرورات الحياة، من أجل ذلك شرعت الأحكام لإقامتها والمحافظة عليها، بحفظ كيانها وبقائها وفرضت العقوبات لمنع العدوان عليها بما يفسدها أو يضعف ثمرتها؛ لأن عليها أمر الإسلام يقوم عليه، وحمايتها وبالمحافظة عليها ينتظم أمر الأفراد وتستقيم الجماعات. ونجد أن المال له أهمية كبيرة وخاصة في هذا العصر سواء كان المال عاماً أو خاصة، إلا أن أهمية المال العام أكبر، ولذلك كان هذا البحث: "جرائم الاعتداء على المال العام من قبل المواطنين"، وقد قسم هذا البحث إلى ثلاثة مطالب، وهي: المطلب الأول: تخريب الأموال العامة – المطلب الثاني: حرق الأموال العامة عمداً – المطلب الثالث: سرقة الأموال العامة.

الكلمات المفتاحية: الأموال العامة، سرقة، حرق، الاعتداء، جريمة

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ދާދި ގޮތް

ކަމުގެފާ ހަމައެކަ ދާދި ގޮތް ވަޒީފާ ލިބުމާ ގުޅިގެން، ވަޒީފާ ދިނުމުގެ ކުރިން ކަންކަން ބަލައިލަންވާ ގޮތް

الحرية وحرية التعبير من منظور الإسلام وفي المجتمعات الغربية: دراسة مقارنة تحليلية

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ﻣﺤﻤﺪ ﻣﺮﺳﻠﻴﻦ، ﻣﺤﻤﺪ ﺇﺳﻤﺎﻋﻴﻞ

ملخص

إن الحرية نعمة أنعم الله بها على جميع المخلوقات عموما وعلى الإنسان خصوصا، وأن حرية التعبير في الإسلام حق مكفول لكل إنسان مؤمنا كان أو غير مؤمن ولكن بضوابط شرعية محددة كما تناولها القرآن الكريم والسنة النبوية الشريفة. وأن الحرية وحرية التعبير في المجتمعات الغربية مفتوح للجميع دون رقابة ولا حدود، وأن لكل إنسان أن يعبر برأيه كما يشاء حتى ولو كان الأمر يؤذي الآخرين. يهدف هذا البحث إلى تناول مفهوم الحرية وحرية التعبير في الإسلام وفي المجتمعات الغربية كما يتعرض البحث إلى التأسيس العلمي للحرية وحرية التعبير مع تقرير القرآن الكريم لهما. يتطرق البحث إلى مجالات الحرية وحرية التعبير وضوابطهما المحددة في الإسلام كما يقوم البحث بتسليط الضوء على تطبيقات الحرية وحرية التعبير في الإسلام والمجتمعات الغربية، وذلك من خلال دراسة مقارنة تحليلية في ضوء القرآن الكريم والسنة النبوية الشريفة. يعتمد هذا البحث على المنهج الاستقرائي والمقارن والتحليلي. وقد خلص البحث إلى أن الحرية منحة منحها الله للإنسان دون تجاوز الحدود التي رسمه الله تعالى له وأن حرية التعبير في الإسلام مكفولة ضمن حدود لا تتعدى على الدين أو القيم العامة، وهو ما يتوافق مع مبدأ "لا ضرر ولا ضرار". وإن الحرية وحرية التعبير في المجتمعات الغربية تُعتبر من حقوق الإنسان الأساسية، لكن غالبًا ما تُمارس بالازدواجية ودون مراعاة القيم الدينية والثقافية للشعوب الأخرى مما يؤدي أحيانًا إلى صراعات حضارية كالإساءة للرموز الدينية، أو التعبير الفني المهين. يقترح البحث على أن تكون هناك دراسات مقارنة ومتقاربة في الحرية وحرية التعبير من منظور الإسلام والمجتمعات الغربية حتى يكون الإنسان على بينة من مثل هذه الأمور.

كلمات مفتاحية: الحرية، حرية التعبير، منظور الإسلام، المجتمعات الغربية

أثر التصرفات المالية الناشئة عن استثمار الأموال الخيرية

حسن محمد الكردي

ﻣﺤﻤﺪ ﺣﺴﻦ ﻣﺤﻤﺪ ﺍﻟﻜﺮﺩﻱ

ملخص

إن من القضايا الأساسية التي تسعى البشرية إلى حلها هي قضية الفقر والعوز، ولذا فقد أوجدت الشريعة روافد وموارد مالية تصب في سبيل إنهاء هذه المشكلة، ولما كانت الأموال الخيرية قاصرة عن تغطية الاحتياجات المجتمعية الكبيرة، فقد توجهت جهود المخلصين نحو إيجاد سبل لاستثمار هذه الأموال الخيرية بما يحقق المصلحة العامة، ويسهم في تحقيق النهضة الاقتصادية والتقدم والتنمية للأمة، وما يترتب على ذلك من آثار تتعلق بالمشروعات الاقتصادية، وتخفيف العبء المالي الذي تتحمله الدولة. ومن خلال رجوعنا إلى الكتب الفقهية القديمة يظهر لنا أنه لم يشتهر عند الفقهاء القدامى مصطلح الاستثمار، لكن كان معناه معروفاً لديهم ومستخدما بألفاظ أخرى تؤدي نفس المعنى، أمثال الاتجار بالمال، والتثمير، والإستنماء، والتصرف في المال بقصد الربح والتنمية. أما العلماء المعاصرون فقد تحدثوا عن مصطلح الاستثمار في مقالاتهم وكتبهم، وأفصحوا عن تعريفهم للاستثمار، وهذا دور الباحث في بيان هذا الأثر للتصرفات المالية من استثمار الأموال الخيرية. تهدف هذه الدراسة إلى بيان حكم استثمار الأموال الخيرية، وبيان مقاصد استثمار الأموال الخيرية، ومحاولة إيجاد الموارد المالية الدائمة للمعوزين. يعتمد هذا البحث على المنهج الوصفي التحليلي، من خلال تصوير المسألة المراد بالبحث قبل بيان الحكم فيها حتى يتضح بذلك المقصود منها. وقد خلص البحث إلى نتائج منها: يجوز استثمار الأموال الخيرية بنوعيها الواجبة والمندوبة من قبل الجهات الخيرية القائمة عليها بشروط وضوابط تقيد الاستثمار وتوجه المستثمر للطرق والمجالات التي بالإمكان تنمية المال الخيري بها. وللتصرفات المالية الناشئة عن استثمار المال الخير أثر على جهة الاستثمار، فهي أمينة لا تضمن إلا بالتعدي والمجاوزة، وتلحقها عقوبات حال المخالفة، ولها أجر دنيوي وأخروي مقابل قيامها برعاية شؤون الفئة المستحقة. ولاستثمار المال الخيري أهمية وآثار بالغة على صعيد المجتمع تتجسد بتحقيق الرعاية والتكافل الاجتماعي، والارتقاء بالمستوى التعليمي للمعوزين، وتضاف إليها أثار اقتصادية ترتبط بتحقيق النهوض الاقتصادي للأمة. ويوصي الباحث بضرورة تقيد الجهات الخيرية بشروط المتبرعين في كيفية الصرف، وعدم مخالفة ذلك إلا لمصلحة أكبر للمستحقين.

الكلمات المفتاحية: استثمار، الأموال الخيرية، أثر، التصرفات

ؤسّوِدْ مْرْسْ وِنْرْسْدْ وِمْرْمَوْدْرَمِ مَرْسِرِمَّبِرْمْدْدْ سَمْرْمِ بْرْدْدْ
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مِرْمُرِسْمَّمْتْتْدْ وَمْمِحِ مْمِرِمَوْسِسِحِ

ذْحْيْحَرْ

مِرْسْسْمَّرَمِ، مُرَسِرَ دَّمْرَسِرَ مِرِمِرْمُرْدَّمْرْ وِنْرْمْ مْرْمْرْدْ. مِرْسْسْمَّرَمِ مِوْمِحِدَّمِ حَرْدَّمْرْدُ مُرْسْرْ وِنْرْسْرْدْ مُرِمُوْمِرِسْرَدَّمِ، مُرَدَّمْرْدِمِ، مُمْمَوَمِرِمَوْسْرَمَرْ ةَمْرْمْرْدِّ وِنْرْسْرْ. مَّسَّرْ مِرِمِرْمْدَّ مُرِمَرَ مِنْرْسْرْدْ وِنْرْسْرْدْسْ مِرِمِرْمْدَّسْرْمْرْدْ. مُرِمِ مُمِ مِوَّدْ دَّوْمِوَّدْ وِنْرْسْ سَرْدْرَمِرْدْ. مْرْمَوَمَ دَّوْمِوَّدْ دْرْدْمْرْسْمْ مَمَرَسْرْدْسْ دْرَّمْرْمْرْدْ. مُرِمِ مِوَّدْ مَرْسْرْ، سَرْمْمْعِ مَمَرَسْرْدْسْ دْرَّمْرْمْرْدْ. مْرْمَوَمَ سْرْمَرْسْرْ، مِوَمَرْمْعِ رِسْرْدْ مَمَرَسْرْدْسْ دْرَّمْرْمْرْدْ. مَوَسْرْمْعِ رِسْرْدْ دْدْمَوَرَمِ مِرِمِرْمْدَّ مَمَرَسْرْدْسْ دْرَّمْرْمْرْدْ. مْرْمَوَمَ، مْحِوِنْرْسْرَمِ مِسْمْرَّدْمِرِسْ سْرْسْ مُرْنْسْ مِرِسَرَسْرْ مَوَّمَّوْ مَمَرَسْرْدْسْ دْرَّمْرْمْرْدْ. سْرْسْرْدْ مَمْرْدْ مْمِوَّدْرَمِ دْرَّمْرْمْرْدْ. مْحِوِنْرْسْرَمِ مِسْمْرَّدْمِرِسْ مُرْنْسْ مُرْنْسْ مِرِسَرَسْرْ مَوَّمَّوْ مَمَرَسْرْدْسْ دْرَّمْرْمْرْدْ. مُرَّمْرْمَرَمَرْمْ رْسْرْدْ. مْرَّدْرِسَرَسْرْ دَّرْدْسْرْ. سْرِوَمْرْسَرْمْرْدْدَّ مْرْمَرْسْمَرْمْ رْسْرْدْ. دَّمْمْسْرْ. رَمَّ، مِرِسِ مِرْمْرْمَرْسْمَرْمْدْسْ رْسْرْدْ. مِرِسِدَّمْسْ دَّرَرْدْسْمَّ دَّمْرَسْمَرْمْرْدْسْمَرْمْ رْسْرْدْ. مْرَمَرْ مْرْمَرْسْمَرْمْدْ. مْمْمَمَرْدْ مَمَرَسْرْ مَرْسِرِمَّبِرْمْ رْمْرْمْرْدْ. دْدْمَرْمَرْدْ دْمْمَرْمَرْدْ، مْحِوِنْرْسْرَمِ مِسْمْرَّدْمِرِسْ سْرْسْ مُرْنْسْ مِرِسَرَسْرْ مَوَّمَّوْ مَمَرَسْرْدْسْ دْرَّمْرْمْرْدْ. سْرْسْرْدْ مَمْرْدْ مْمِوَّدْرَمِ دْرَّمْرْمْرْدْ.

ڤ٘ـ٘ـ٘ـ

ތަރުތީބީ ދަށުގައި ދިވެހި ދަރުސް ދިނުން
ދިވެހިންނާ ދެރަވާ
ތަރުތީބީ ދަށުގައި ދިވެހި ދަރުސް ދިނުން

ދާދިފަހު

ވަދިވ! ތަރުތީބީ ދަށުގައި ދިވެހި ދަރުސް ދިނުމުގެ ކަންކަމުގައި ދިވެހި ބަސް ބޭނުންކުރުމުގެ ކަންކަމާ ގުޅުންހުރި ބައެއް ކަންކަން ދެނެގަނެ، ދިވެހި ބަސް ބޭނުންކުރުމުގެ ކަންކަމުގައި ދިވެހި ބަހުގެ ތަރައްޤީ ގެނައުމަށް ކުރެވޭ ކަންކަމާ ގުޅުންހުރި ބައެއް ކަންކަން ދެނެގަނެ، ތަރުތީބީ ދަށުގައި ދިވެހި ދަރުސް ދިނުމުގެ ކަންކަމުގައި ދިވެހި ބަސް ބޭނުންކުރުމުގެ

Sub-theme 13: Blending Traditional Jurisprudence with Contemporary Legal Practices and Access to Justice

11 Abstracts



Development and Democracy Series: Examining the Constitutional Credence of the Maldives State

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Maldives Centre for Policy Studies

Abstract

A State is a form of human association distinguished from other social groups and has the features of territory, defined population, government, sovereignty and laws. Unlike the Government, the State has permanence. The Constitution embodies the principles and values on which the State is founded; principles and values which give credence and authority to the Nation's Identity and Machinery of the State, which if compromised or undermined, would detract the State from its Absolute Authority. While there are universally common features which States are required to have, Constitutions, along with these features, embrace equally important characteristics which are Nation-specific. Together, these are in general terms referred to as the Identity of the Constitution. Using legal theories and principles used in 4 different Governance and Legal Systems, this Study attempts to identify the Absolute Features of the Maldivian State and to determine the Constitutional Identity of the Maldives. The Study further examines whether the Maldives' Constitution and Laws sufficiently protect the Absolute Features of the Maldivian State and her Constitutional Identity, from actions or decisions of any arm of the State, or through changes to Laws or the Constitution, that can detract or compromise the State and its absolute authority. Governance and Legal Systems have been selected to include written and unwritten constitutions; parliamentary and presidential systems, unitary and federal systems, and a multi-level governance system which features regional policies binding on the State. The Study, for the first time in the Maldives attempts to identify the Absolute Features of the Maldives' State, determine her Constitutional Identity, and document the relative strengths and/or weaknesses of such features, through academic and comparative study. This study aims to encourage and boost further research and academic debate into constitutionalism and constitutional practices of the Maldives and related studies.

Keywords: *state, national identity, constitution, constitutionalism*

Democracy and Development Series: Maldives' Foreign Policy ….. ANCHORED OR ADRIFT?

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Maldives Centre for Policy Studies

Abstract

The Maldives' Constitution and laws obligate State Officials to ensure that Maldives upholds a foreign policy, which protects her sovereignty and sustain national and internal security; to enjoy full freedom in decision making at international and domestic arena, in the best interest of the Maldives. This Study addresses the question, "whether and to what extent is this obligation fulfilled by the State and the Officials who are entrusted with the obligation", and "whether there are any material risks and challenges in protecting the sovereignty and national security of the Maldives?" Recent events in the Maldives show that writing these obligations in the Constitution and Law has not guaranteed that sovereignty and national security remain intact. In contrast, examination of these events illustrate that Maldives' foreign policy was firmer pre-2008. Analysis further reveals a decline in Maldives' bargaining power post ratification of the 2008 Constitution and the ensuing years, in ensuring sovereignty and national security. The study examines 10 cases that have been seen to impact sovereignty and national security. Cases were selected based on national significance, to span different constitutional and legal systems, different administrations, and different foreign counterparts. The analysis was based on relevant constitutional and legal provisions, national security and geo-political concerns and ensuing results, including economic and financial impact. The Study also determines the factors that contribute to formulation of foreign policy, and the reasons which lead to the weakening of the country's resolve to preserve sovereignty and national security. This Study highlight the realities and challenges then and today, in keeping sovereignty and national security intact, from the time of the Fight for Independence till today.

Keywords: *foreign policy, sovereignty, national security*

Legal Reform and The Fight Against Corruption in The Maldives: A Qualitative Analysis

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Abstract
Corruption continues to undermine democratic governance, economic development, and public confidence in the Maldives. The first act of legislation formulated to combat corruption in the Maldives is the Prevention and Prohibition of Corruption Act (PPCA) 2/2000. It prescribes legal provisions and guidelines for state institutions to prevent and prohibit acts of corruption in public offices. Later, the democratic process led to the ratification of the 2008 Constitution, under which an 'Anti-Corruption Commission Act (ACCA) 13/2008. The ACCA mandated the establishment of the Commission as an independent statutory institution and governed the duties and responsibilities of the Commission. This qualitative study examines the development of anti-corruption laws in the Maldives and their impact on improving corruption investigations. The research seeks to answer the question: How have anti-corruption laws in the Maldives evolved over time and to what extent have these reforms strengthened institutional accountability and enforcement capacity? The hypothesis is that legislative amendments introduced since 2000, particularly the 2011 consolidation of the Anti-Corruption Act and the 2021 amendments to both the Corruption Act and Penal Code have positively contributed to the effectiveness and procedural clarity of corruption investigations. This study uses a qualitative analysis of legislative texts, including the Anti-Corruption Act (as amended in 2011), the third amendment to the Corruption Act (2021), the fifth amendment to the Penal Code (2021) and Criminal Procedure Code. The sample includes a targeted review of legal provisions relating to investigative powers, institutional authority, and criminal liability. Findings reveal that these legislative reforms have directly improved the legal environment for corruption investigations. This study concludes that legal reform has played a central role in enhancing anti-corruption efforts in the Maldives. The research contributes to legal scholarship on governance in small island developing states and offers practical insights for future reforms. The findings are especially relevant for policymakers, legal practitioners, and international development partners focused on institutional integrity and rule of law advancement.

Keywords: *Prevention and Prohibition of Corruption Act, Anti-Corruption Commission Act, Anti-Corruption Act, corruption, criminal liability.*

ތިމާވެށީގެ ހަނދާނާ ދިމާއަށް ދަތުރުކުރާ ގަޑިތަކުގައި ކުށްވެރިކަމާ ގުޅޭ ދައުވާ ހުށަހެޅުމުގެ ކުރިން ހިނގަންޖެހޭ ކަންކަން

ފާތިމަތު ޝަރުފާ

ކ.ސަގަރ ދ.ފ.ސ

ތަފާތުކަމެއް

ތިމާވެށީގެ ހަނދާނާ ދިމާއަށް ދަތުރުކުރާ ގަޑިތަކުގައި ކުށްވެރިކަމާ ގުޅޭ ދައުވާ ހުށަހެޅުމުގެ ކުރިން ހިނގަންޖެހޭ ކަންކަމާ ގުޅޭ "ތަފާތު ކަންކަމެއް"ގެ ތެރެއިން، ފާހަގަ ކުރެވޭ ކަންކަމަކީ ތިމާވެށީގެ ހަނދާނާ ދިމާއަށް ދަތުރުކުރާ ގަޑިތަކުގައި ކުށްވެރިކަމާ ގުޅޭ ދައުވާ ހުށަހެޅުމުގެ ކުރިން ހިނގަންޖެހޭ ކަންކަމުގެ ތެރެއިން

ދިވެހިންގެ، ތަކުރާރުތަކާއެކު ތަންކަ ދިނުމުގެ ގޮތުގައި ބައެއް ކަންކަމުގެ ކުރިމަތީ ކުރެވުނު ކަންކަމާ ގުޅުންހުރި ދަށ ދިނުމުގެ ގޮތުގައި ދިވެހި ދަށ ދިނުމުގެ ތަރުތީބު ހިންގު

ކައުންސިލިންގ ކަނޑައެޅުމުގައި ތަރުތީބުކުރާ ތަކެތީގެ ތަފާތުތައް (ތިން ދައުލަތުގެ ތަޖުރިބާ ބެލުން)

ފާތިމަތު ރަޝީދާ ކަރީމް
ދިވެހިރާއްޖޭގެ ފޮރިން ސާރވިސް

ލިޔުން

ތަންދޫރުން ފެށިގެން ދިވެހިރާއްޖެ ހުރިހާ ދިވެހިންނަށް ހ ގެ ގާނޫނުގެ ދަށުން ކަނޑައެޅިފައި ހުރި ގޮތަށް ކައުންސިލިންގ ކުރެވެ ދިވެހިންގެ ދަށުން ދިވެހި ދައުލަތުގެ ތެރެއިން ކައުންސިލިންގ ކުރާ ފަރާތްތަކަށް ދެ ގޮތަކަށް ބަލާ ގޮތް ބަދަލުވެ ގެންދާ ގޮތް ފާހަގަ ކުރެވެ ދިވެހިންގެ ދަށުން ދިވެހި ދައުލަތުގެ ތެރެއިން ކައުންސިލިންގ ކުރާ ފަރާތްތަކަށް ދެ ގޮތަކަށް ބަލާ ގޮތް ބަދަލުވެ ގެންދާ ގޮތް ފާހަގަ ކުރެވެ 2010 ވަނަ އަހަރުގެ 22 ވަނަ ދުވަހު ފާސްވެގެން ހުންނަ ކައުންސިލިންގ ގާނޫނުގެ ދަށުން ކައުންސިލިންގ ކުރާ ފަރާތްތަކަށް ބަލާ ގޮތް ބަދަލުވެ ގެންދާ ގޮތް ފާހަގަ ކުރެވެ ދިވެހިންގެ ދަށުން ދިވެހި ދައުލަތުގެ ތެރެއިން ކައުންސިލިންގ ކުރާ ފަރާތްތަކަށް ދެ ގޮ

ތަރައްޤީ ވިދާޅުވާ ދިވެހި ޤާނޫނުތަކާ ގުޅިގެން ދިވެހި ޤާނޫނު ތަރައްޤީ ކުރުން
ދިވެހި ޤާނޫނު ތަރައްޤީ ކުރުމުގެ ދަށުން ދިވެހި ޤާނޫނު ތަރައްޤީ ކުރުން
Development of Maldivian Law through Maldivian Law

ފުވައްތަ

ދިވެހި ޤާނޫނު ދިވެހި ރައްޔިތުންގެ ދަރިވަރުން ދެކެ، 2011) ވަނަ ސަނަ ދަށުގައި ތިބެ ދިވެހި ރައްޔިތުންގެ ދިރިއުޅުން ބަދަލުވެ ގެންދާ ގޮތަށް

Understanding Voluntary Pro Bono Participation Among Legal Professionals: Motivations, Barriers, and the Perspectives of Non-Participating Lawyers

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Abstract

Pro bono legal services play a vital role in improving access to justice, yet participation among legal professionals varies significantly. This study explores the factors influencing pro bono engagement while identifying institutional and structural barriers that hinder participation. Additionally, it examines the perceptions of lawyers who choose not to engage in pro bono work, shedding light on their motivations and concerns. Using a qualitative research approach, semi-structured interviews and focus group discussions were conducted with practicing lawyers, legal educators, and policymakers. A purposive sampling strategy ensured diverse perspectives, including those who actively participate in pro bono work and those who do not. Thematic analysis was employed to identify patterns related to motivations, obstacles, and professional attitudes toward voluntary service. Preliminary findings suggest that lawyers engaging in pro bono work are primarily driven by ethical responsibility, social commitment, and skill development. However, non-participating lawyers cite challenges such as workload pressure, financial constraints, lack of institutional support, and doubts regarding the effectiveness of pro bono initiatives. Structural barriers, including firm policies and inadequate incentives, further limit engagement. While pro bono work strengthens the legal profession's commitment to justice, addressing these barriers is essential for broader participation. Enhancing institutional support, providing incentives, and reshaping perceptions of pro bono work can foster a more inclusive and sustainable pro bono culture. These insights contribute to ongoing discourse on improving accessibility to legal services for marginalized communities while acknowledging the concerns of legal professionals who opt out of participation.

Keywords: *pro bono legal services, legal professional ethics, access to justice, institutional barriers, lawyers' perception*

Revisiting Gender Equity in Maldivian Employment Law: A Critical Analysis of Parental Leave Policies

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Abstract

This research aims to critically examine the gender-based disparities embedded within the Employment Act of the Maldives, particularly in relation to parental leave entitlements. It highlights the legislative imbalance where only three days of paternity leave are granted to fathers, compared to three months of maternity leave for mothers. This distinction reinforces traditional gender roles and contributes to systemic inequality by legally limiting the father's involvement in early childcare. The study further questions why the more progressive provisions under the Civil Service Regulations—offering 30 days of paternity leave and six months of maternity leave—are not extended to the broader employment sector. This raises a key issue of whether civil servants are afforded superior rights compared to private sector employees, and if so, on what basis such disparity is justified. The research adopts a qualitative document analysis methodology, focusing on the Employment Act of Maldives and the Civil Service Act. It also draws on comparative insights from international jurisdictions with advanced parental leave frameworks, assessing the feasibility of adapting similar policies within the Maldivian legal context. The key findings are that the Employment Law of the Maldives clearly paves the way for gender inequality without reasonable justification, and it has continued to be upheld over the years despite the existence of feasible mechanisms to allocate a reasonable number of paternity leave days through the system. The ultimate objective is to propose legal reforms that promote greater gender equity and shared responsibility in childcare through a balanced and inclusive employment policy framework.

Keywords: *gender equity, employment law, parental leave*

Between Survival and Criminality: Self-defense and Battered Women Syndrome, where to draw the distinction? A review of Maryam Nazaha v. PGO (2021/SC A/84)

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Abstract

The recent judgment of the Supreme Court of Maldives in Maryam Nazaha v PGO (2021/SC-A/84) is truly a landmark case in the area of criminal defense in Maldives. This case recognizes the defense of battered women syndrome for the first time in the Maldives. It is remarkable that the Supreme Court upheld her conviction for murder as she failed to meet the requirements of immediacy in self-defense, while the battered women syndrome was found inapplicable in this case. This paper adopted a qualitative methodology analyzing the legislations, case laws, and academic articles on the issue of self-defense and battered women syndrome. The academic writing was explored to examine the scope and application of the defense of battered women's syndrome in criminal law. The study finds that gender bias prevents a generous application of the defense of battered women syndrome in most jurisdictions, including Maldives. Battered Women Syndrome should not be viewed through the lens of immediacy in self-defense. A robust criminal defense and strong psychological support and procedural safety and guidelines are important for the defense of battered women to be applicable to the victims of violence and abuse in Maldives.

Keywords: *battered women, criminal law self defense, Maldives.*

The Intersection of Scams and Law: A New Era of Digital Paranoia.

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Abstract

The rapid advancement of technology has given rise to increasingly sophisticated methods of deception, with deep-fake and AI technology emerging as a significant threat. Even though there has been an increased awareness of the existence of AI created content, the present trend depicts that online scams are on the rise. The Maldives police reported that in May 2025, alone more than MVR 1.4 million was stolen. The objective of this research was to study digital frauds and explore the challenges and responses to online scams, focusing on the legal framework, enforcement efforts and institutional measures used to combat them. The methodology utilized for the research was a qualitative approach through purposive sampling of seven semi-structured interviews of criminal investigators, prosecutors, cybercrime experts and victims. The data collected was coded, analysed and the results extracted through content analysis. The results highlighted the variance of digital fraud, including the different modus operandi used to implement online scams. It accentuated the challenges to law enforcement, due to the sophisticated manipulation of audio, video and textual data that obscures the origin of the content, leaving the law enforcement with the burden of proving authenticity and intent. Furthermore, the cross-jurisdictional nature of cybercrimes exacerbates the complexity of enforcement, creates obstacles for local authorities to apprehend and prosecute criminals. In this regard, the lack of harmonized international laws and cooperative frameworks further hinders the investigation and enforcement. Finally, it also stressed the need for strong institutional measures to combat scams through centralized scam reporting, and faster responses and coordination between agencies and financial institutions for immediate effect to reduce loss to victims. Considering the surge in scams, domestically and globally, a proactive, multi-stakeholder approach coupled with international cooperation is required to reduce the financial harm to individuals and businesses.

Keywords: *scams, digital fraud, cybercrime, Maldives*

Sub-theme 14: Merging International Relations Theory with Geopolitical Practice

7 Abstracts



U.S. Grand Strategy in South Asia during the Cold War: A Realist Perspective

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Abstract

American strategic interests and its ideological stance during the Cold War shaped the politics of postcolonial South Asia, which still finds itself torn between the needs of the superpowers and its own local issues. This region's geopolitical and security problems are still shaped by the legacy of Cold War era, with the global bipolar structure maneuvered by the two South Asian Countries—India and Pakistan—for their strategic advantages. However, U.S. Cold War policy, as a "grand strategy", has little or no application in the South Asian context thus far. Also, no scholarly attention has been given to study shifts in the U.S.'s strategic posture in South Asia during the Cold War, and existing studies on U.S. strategies for India and Pakistan have focused either on a specific period of the Cold War or captured the periods that cannot fully inform the events unfolded to the critical points of the political crisis in postcolonial South Asia—the Indo-Pakistan wars in 1965 and 1971. Therefore, this article intends to solve the puzzle in U.S. Cold War grand strategy in South Asia by investigating the factors that contributed to the U.S grand strategic shift in India and Pakistan from early 1960s to early 1970s. Using the process tracing method and following a comparative case study approach, the study examines the complex development of the U.S. strategy during the Indo-Pakistan Wars in 1965 and 1971. Relying on the theories of "offensive realism" and "fractured state", the study also reveals that the U.S. Cold War strategies in South Asia shifting from neutrality to tilt (to Pakistan) was influenced by the geopolitical factors, including the Sino-Indian war and the Vietnam war, as affected by the global distribution of power, referring to US-USSR bipolar system.

Keywords: *realism, cold war, grand strategy, geopolitics, South Asi*

Successes and Challenges of Decentralization Process Introduced in the Maldives with the Democratic Constitution

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Abstract

The island developing state of the Maldives introduced a formal process of decentralization with the proclamation of the democratic constitution in 2008. Subsequently in 2010 for the first time, a statutory act was adopted titled the Decentralization Act (7/2010) to operationalize the process of democratic governance in the country. In 2011 for the first time, Maldives had elections at the local government level to elect councils that administered the local islands, atolls, and cities. The constitution fundamentally subscribes to two areas for decentralization of power from the national government: decentralized administration and the election of councils. It has been 13 years since the formal process of decentralization began in Maldives and to date, 13 amendments have been introduced to the Decentralization Act. The Maldives is a young democracy introduced in 2008, and the decentralization process has been set up gradually. Decentralization in the Maldives has been an under-researched area that requires evaluation of the state of affairs to understand the successes the process has achieved, and the challenges faced. Therefore, this paper aims to evaluate the successes and challenges the decentralization process in Maldives has experienced. Secondly, it aims to propose a reform agenda if stumbling blocks were found in the way of the process that could further improve the decentralization process to achieve more positive results toward the consolidation of democratic governance. To conduct this research, it adopts an inductive approach utilizing qualitative methodology. The data will be collected through a review of relevant documents and conducting interviews, mostly focus group interviews in the three capital islands of Maldives. Content analyses will be applied to conceive the emerging themes and to interpret the findings. The result anticipated will explain the state of affairs in the decentralization process while identifying the successes and the failures of the process. Furthermore, the research will assist in constituting a reform agenda for strengthening the decentralization process in the Maldives.

Keywords: *decentralization, local government, public services, local development, women empowerment.*

Migrant Labour in the Maldives: Historical Patterns, Sectoral Demand, and the Regulatory Challenges of a Dependency Economy

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Abstract
This study examines the evolution of migrant labour in the Maldives, tracing its transformation from occasional foreign expertise to a structural economic dependency. The literature reveals significant gaps in understanding the interplay between historical labour patterns, current regulatory frameworks, and economic necessity, with existing scholarship primarily focused on either economic impacts or human rights concerns rather than their legal-economic intersection. This research investigates how historical patterns have influenced contemporary regulatory frameworks, which economic sectors demonstrate the highest dependency on migrant workers, and what legal reforms could better balance economic needs with migrant worker protections in a small island developing state. The study hypothesizes that the Maldives' regulatory approach has evolved reactively rather than proactively, creating inconsistencies between economic demands and legal frameworks. Methodologically, this study employs legal doctrinal analysis of historical and current labor regulations and policy documents, complemented by quantitative analysis of secondary data from government statistical reports, international organizations, and industry bodies. The research examines sectoral distribution patterns across tourism, construction, and domestic service industries while analyzing the evolution of regulatory frameworks over three distinct periods of Maldivian economic development. Preliminary findings indicate a significant divergence between economic dependencies and regulatory frameworks, with construction, tourism, and domestic service sectors showing the highest reliance on migrant labour while facing the most substantial regulatory challenges. Historical patterns of ad hoc labour recruitment have created entrenched systems that resist comprehensive regulation, while economic pressures frequently lead to enforcement gaps despite formal protections. This research has significant implications for legal reform in the Maldives, potentially informing a more coherent regulatory approach that acknowledges economic dependency while strengthening worker protections. The findings contribute to theoretical understandings of how small island economies can develop more sustainable approaches to managing labour migration within their unique economic constraints.

Keywords: *migrant labor, Maldives, regulatory frameworks, economic dependency, labor rights, small island developing states, tourism, construction industry, labour policy, legal reform*

Voices in Governance: Community Engagement, Indigenous Governance, and Local Public Goods

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Abstract
Community engagement (CE) is not merely participating in voting and other democratic-based processes but is a process of involving local citizens in decision-making processes in governance. CE is now widely recognized as being integral to good practice in policymaking and governance. Therefore, it is crucial to comprehend the micro-level ethnic and political nuances of community engagement in the local indigenous government institutions. Against this backdrop that this paper seeks to study how the Dzumsa - indigenous local government - engages the ethnic communities in the decision-making processes, conflict resolution, and delivery of public goods. The object of this paper is to seek the keys to success and its implications for community engagement in decision-making by describing empirical observations of indigenous local governments in Sikkim, India. Employing quantitative and qualitative research approaches, this study collects and analyses data from Dzumsa's heads, officials, and citizens in Sikkim, India. Systematic random sampling was used to select common citizens of the research sites i.e. Lachen and Lachung Dzumsa while purposive sampling was employed to select the heads and officials of Dzumsa. The study selected 40 common citizens as the respondents in the research sites for its primary data collection through a survey schedule. In-depth interviews were conducted with 10 participants, including heads and officials of the Dzumsa to reinforce the data collected using the survey schedule. Findings show that mechanisms such as Dzumsa meetings and public hearings serve as vital channels for direct community engagement in local government. The results of the study underscore that indigenous governance provides a democratic space for community engagement in the decision-making processes. A major finding is that Dzumsa recognizes the governance needs of ethnic communities, and it ensures that ethnic communities are not merely participants in the governance of the village but are also co-creators of its political landscape.

Keywords: *community engagement, Dzumsa, indigenous governance, sikkim*

Syria: Fall of Assad, Rise of Hay'at Tahrir al-Sham

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Abstract

The civil war in Syria has been raging on and off amidst the backdrop of global events and has become a hotspot for geopolitical tensions between major powers such as the United States, competitors including Russia, rising powers such as Turkey, and regional heavy weights including Israel, Saudi Arabia and United Arab Emirates leading the Gulf Cooperation Countries. Syria has been the arena for competition through proxies and an experiment ground for conflict and cooperation. In addition to this, non-state actors are also utilizing the Syrian conflict as a space to develop, grow and mature their networks, coordinate their attacks and often use it as a violent extremist training ground, launch pad or land bridge for critical logistics and transportation of resources and troops. Given this, Small Island Developing States including the Maldives are vulnerable and are impacted by events in the region. This paper focuses on the geopolitical implications and analysis of the recent event of the Syrian Civil War to identify potential impacts on the world and the Maldives. It proposes recommendations for prioritising policy responses aligning with national security interests.

Keywords: *war, Middle East, small states*

Geopolitical Tug-of-War: The Maldives in the India-China Strategic Rivalry in the Indian Ocean Region

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Abstract

As Douglas Johnston argues, boundary-making in the ocean is functionalist: done with an eye towards the functional usage of the maritime space itself. While borders traverse both land and sea, much study has focused on issues concerning territorial borders. However, establishing the United Nations Convention on the Law of the Sea (UNCLOS) in 1982 led to defining a 'hard' maritime border, protecting the sovereign interest vis-a-vis globalizing trends of an international free market. Further, in 2017, the formal adoption of the 'Indo-Pacific' phrase by the USA in its national security plan, after a threat perception from China, has led to increased scholarly attention towards maritime borders in international relations. Understanding the threat perception and budding maritime rivalry in the Indian Ocean can be considered a critical lens to deconstruct the trajectory of great power rivalry in the global order. This paper particularly investigates the case of the Maldives, where geopolitical tensions between the larger Asia-Pacific nations continue to rise. In light of the above discourse, this paper investigates two key questions: 1) how the Indian and Chinese governments are expanding their tentacles in the Indian Ocean Region (IOR) and applying measures to balance each other's position in the region, and 2) how Maldives is leveraging its strategic geopolitical position amidst transforming global order. The study also seeks to investigate how the Sino-Indian competition has constrained the scope of manoeuvring for the Maldives' foreign policy. Elite interviews and discourse analysis have been done to identify key findings about the research questions. Elite interviews of experts on Maritime borders and geopolitics from India, China, and Maldives have been conducted to analyse scholarly projections relating to the India-China balancing act in the region, and discourse analysis has helped in exploring the general and discourse at the regional and global level about geopolitical concerns in the Indian Ocean Region.

Keywords: *India-China, Maldives, maritime politics*

China Advancing in the Face of Challenges 2025: New Quality Productive Forces

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Abstract
China is experiencing economic instability due to post-COVID slowdown, foreign geopolitical challenges, and an evolving global technology landscape. In response, President Xi Jinping has proposed the notion of New Quality Productive Forces, a transformational policy and ideological framework designed to expedite high-quality growth via advanced innovation. This paper examines how China is using new technologies, such as artificial intelligence, robotics, green energy, biotechnology, and space exploration, to reform its internal economy and establish strategic global influence. Using a comprehensive literature review, this paper aims to identify pivotal changes in China's policy framework, assess the importance of the New Quality Productive Forces, and evaluate the potential impact of these developments on China's domestic governance and foreign policy direction. The objective is to provide small states, especially the Maldives, with strategic guidance on positioning themselves in light of current global changes. The study concludes with prospective policy suggestions for small state diplomacy, economic alignment, and national resilience planning.

Keywords: *new quality productive forces, post-covid economic strategy, emerging technology*

Sub-theme 15: Exploring innovations in training, injury prevention, sports psychology, and performance enhancement

2 Abstracts



Sub-theme 15: Exploring innovations in training, injury prevention, sports psychology, and performance enhancement

Trialling a collaborative Female-Focused Swimming Instructor Training Program in the Maldives: Challenges, Learnings and Impacts

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Abstract

Globally two two-thirds of women cannot swim, and one-third of drowning deaths consist of women. In the Maldives, a country with about 99% of its area comprising the ocean, studies indicate that women on average lack five times more confidence in swimming. Interviews and consultations with about 200 people across 15 islands of the Maldives comprising 44 stakeholder groups identified several reasons for these challenges, within the broader realm of gender norms and societal stigmas, including lack of female role models, instructors, and access to a safe space. Several measures to address these issues were also identified in formulating a project encompassing these issues, including treating gender equity as a core element, as well as program community engagement, connection building, and respecting the norms and traditions of the community. Based on these inputs, a program was formulated, and five females and 2 males were trained as swim and snorkelling instructors. In addition to providing technical training, participants of the workshop were also trained in different societal aspects, including environmental awareness and responsibility. The outcome of the program resulted in 5 female participants opening their swim school. They conducted a swimming program for their community, where 111 women and children were taught how to swim, and out of this 13 went on to represent their islands at the National Swimming Festival. Overall, the project demonstrated that training female swim instructors to teach the community, especially women and girls, enables access to the dominant environment and a core recreational, educational, and economic space, and that ocean experiences are transformative: they can improve health and well-being, help to mitigate drowning, inspire marine citizenship, create job opportunities, and foster conservation leadership.

Keywords: *women, swimming, community engagement, ocean, lived experiences*

Effect of FIFA 11+ Program in Preventing ACL Injuries: A Scoping Review

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Abstract

Anterior Cruciate Ligament (ACL) injuries are among the most prevalent and debilitating injuries in football, often leading to long-term disability and career interruption. The FIFA 11+ injury prevention program, developed by the Fédération Internationale de Football Association (FIFA), has been widely promoted to reduce injury rates in football players. This scoping review aims to evaluate the effectiveness of the FIFA 11+ program, specifically in preventing ACL injuries. A comprehensive literature search was conducted using databases such as PubMed, Scopus, and Google Scholar to identify peer-reviewed studies published between 2020 and 2025. Studies included randomized controlled trials, cohort studies, and observational research focusing on the use of the FIFA 11+ program and its association with ACL injury prevention. A total of five studies were reviewed after the fulfilment of the inclusion and exclusion criteria. The findings from the selected studies indicate a consistent reduction in ACL injury incidence among athletes who adhered to the FIFA 11+ program. Improvements in neuromuscular control, balance, and strength were frequently observed, which are critical factors in ACL injury prevention. However, variations in study design, participant demographics, and program adherence pose challenges in generalizing results. The evidence suggests that when implemented consistently and correctly, the FIFA 11+ program serves as an effective tool for reducing ACL injury risk in football players. This review highlights the importance of structured warm-up programs in sports injury prevention and suggests the need for further high-quality, longitudinal studies to optimize and standardize program implementation across different populations.

Keywords: *ACL Injury, FIFA 11+, injury prevention, football, scoping review*

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