GLOBAL ACADEMIC RESEARCH INSTITUTE
COLOMBO, SRI LANKA

PROCEEDINGS

GARI WINTER MULTIDISCIPLINARY RESEARCH SYMPOSIUM 2019

On 17th – 18th December 2019
@ Galle Face Hotel, Colombo, Sri Lanka
GLOBAL ACADEMIC RESEARCH INSTITUTE
87/23A, KohilaKotuwa Road, Neelammahara,
Maharagama, Colombo, Sri Lanka
Tel: +94-112-849-268 / Fax: +94-112-849-426
For Registration: registration@gariteam.com
For Help: helpdesk@gariteam.com
Whatsapp / Viber: +94-773-940-838
Skype: gari.conference
Web: http://globalacademicresearchinstitute.com
DISCLAIMER

The responsibility for opinions expressed, in articles, studies and other contributions in this publication rests solely with their authors, and this publication does not constitute an endorsement by the Global Academic Research Institute of the opinions so expressed in them.

Official Conference website
http://globalacademicresearchinstitute.com

Proceeding of the below Conference Papers

07th International Conference on Social Science and Humanities
05th International Conference on Language and Literature Studies
02nd International Conference on Sociology & Law
09th International Conference on Business Management and Economics
07th International Conference on Health and Medicine
04th International Conference on Ayurveda Traditional Medicine and Medicinal Plants
07th International Conference on Engineering and Technology

Edited by Global Academic Research Institute Publication Department

Copyright © GLOBAL ACADEMIC RESEARCH INSTITUTE

72 Pages

All right are reserved according to the code of intellectual property act of Sri Lanka, 2003

Publish by: Global Academic Research Institute Publication Department

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from the publisher.
About GARI

Global Academic Research Institute (GARI) is an International Scientific Research Conference Organizer in collaboration with International Universities & Institutions. GARI has brought together leading academic and industry experts from the global community who process diverse experience and expertise in verity of scholarly or scientific disciplines. We established on 2010 as independent service provider then wider range of experience GARI became a powerful arm of scientific research conference organizer in the industry.

PREFACE

Global Academic Research Institute is proud to present GARI WINTER MULTIDISCIPLINARY RESEARCH SYMPOSIUM 2019 which is a series of successful research symposium. The Inaugural Session and the Technical Sessions were conducted on 17th – 18th December 2019 @ Gall Face Hotel, Colombo, Sri Lanka. The conference was organized into different disciplines which empirical, conceptual and methodological papers were received from academics, practitioners and public policy makers were accepted paying austere attention to the academic standards of the papers. To maintain consistency, authors were prescribed to follow the academic writing format of the GARI Publishers. The reviewing process was apparently transparent where papers underwent a double blinded review process by eminent subject specialists in respective areas. Thus refereed full papers selected to be presented at the conference were published here. We do not assume any responsibility for any errors or omissions in the research papers which rests solely with the authors.

Special thank goes to Guest Speech made by Dr. Pathirage Kamal Perera (Institute of Indigenous Medicine, Sri Lanka), Key note addresses & Co-chairs made by, Dr. S. Damayanthi Edirisinghe (University of Kelaniya), Dr. Dhishna Pannikot (National Institute of Technology, India), Dr. Anoja Attanayake (University of Ruhuna), Dr. U.I.K. Galappaththi (University of Ruhuna), Prof. Krishna Govender (Da Vinci Institute for Technology Management, South Africa), Dr. Sivaji. K (University of Jaffna), V. Paranthaman (University of Jaffna). The organizing committee special Appreciation Journal Partner as GARI Publishers and GARI International Journal of Multidisciplinary Research. SAP publisher, All the GARI affiliated academic partners, Further the support given by GARI Tours as Travel partner, Official Creative Partner Sameera Artco, Siththam Advertising & Sri Lanka Convention Bureau. The conference committee expresses deep gratitude to the panel of reviewers for the priceless service rendered. Finally the committee extends sincere thanks to the presenters and participants for the valuable contribution and active participation.

Conference Committee
WMRS 2019
ABOUT SRI LANKA

This is an island of magical proportions, once known as Serendib, Taprobane, the Pearl of the Indian Ocean, and Ceylon. Set in the Indian Ocean in South Asia, the tropical island nation of Sri Lanka has a history dating back to the birth of time. It is a place where the original soul of Buddhism still flourishes and where nature’s beauty remains abundant and un-spoilt. Few places in the world can offer the traveler such a remarkable combination of stunning landscapes, pristine beaches, captivating cultural heritage and unique experiences within such a compact location. Within a mere area of 65,610 kilometers lie 8 UNESCO World Heritage Sites, 1,330 kilometers of coastline - much of it pristine beach - 15 national parks showcasing an abundance of wildlife, nearly 500,000 acres of lush tea estates, 250 acres of botanical gardens, 350 waterfalls, 25,000 water bodies, to a culture that extends back to over 2,500 years. Sri Lankan cinnamon, ivory and gems had been the main cause for invasion of two nations, Portuguese and Dutch, who followed the Moor traders to the country in search of the world’s best spices and riches. According to the Dutch, who reorganized the cultivation and marketing of cinnamon in Sri Lanka, the ‘shores of Sri Lanka had been full of it, that you can smell it eight leagues out to sea’. Even today the country produces the world best cinnamon and one of the world’s top cinnamon exporters. With Endless beaches, timeless ruins, welcoming people, herds of elephants, killer surf, cheap prices, fun trains, famous tea, flavorful food, newly gained peace and improved infrastructure Sri Lanka had been repeatedly named the next tourist destination worth all the investments. Meanwhile Sri Lanka is fast gaining popularity in the MICE tourism industry, with 11% of the total visitors coming into the country representing the segment, while the industry anticipates the arrival of 240,000 MICE tourists by 2016, which is nearly 10% of the 2.5 million tourist target. With more than one million tourist arrivals in 2012 the Sri Lankan tourism service providers has set a target of 22,500 rooms in the next five years when tourist arrivals are expected to reach 2.5 million.

Discover Refreshingly Sri Lanka!
# Table of Contents

**Keynote | Co-Chair**  
Scientific Team  

## Abstracts

1. Recycling and Waste Management practices adopted by the Sri Lankan Entrepreneurs  
   *(Dr. Thesara V.P. Jayawardane)*  
2. Do Men and Women Perceive Digital Economy in India Differently?  
   *(Dishani Sen)*  
   *(Dr. Casey Jordan)*  
4. Deaf People at Work: Opportunities and Challenges for Employers  
   *(Charuka W.A.A, Samarakkody N.W, Senaviratne, IWijayanayaka, Suraweera. T)*  
5. The Effect of Privatisation of Health Care In India: An Analysis of Karnataka and Maharashtra State  
   *(Sagarika M P)*  
   *(Nicha Tovankasame, Jakraphan Chaopreecha)*  
   *(W.G.T. Yashodha Thilakarathne)*  
   *(Saimeera Kanagaratnam)*  
9. Digital Platforms to Motivate English Learning among Young Learners in Sri Lanka  
   *(K.S.N. Prasangani)*  
10. The Impact of English on the Economy of the Philippines  
    *(Shigeru Ozaki)*  
11. The Long-Run and Short-Run effect of the ‘Make in India’ Initiative on the Indian Economy  
    *(Ananya Atri)*  
12. Challenges Encountered by Language Learners in Learning a Second Language  
    *(Tharindu Jayanth Thotagamuwa)*  
13. Item Development and Reduction in Test Construction: Intimate Relationship Security Scale  
    *(Rachel Jayaseelan, Tony Sam George)*  
14. Decoding Learners’ Silence in English Language Class  
    *(U. Thulasivanthana)*
15. Analysing the necessity of reforming Animal Welfare Laws in Sri Lanka
   (Seethawaka Gamage Dona Dulki Tharika) ..................................................26
16. Ethical Practices and Technology in Financial Institutions of Sri Lanka
   (Dr. Thesara V.P. Jayawardane) .................................................................27
17. Party Autonomy in the Arbitration Process of Developing Countries:
    The Case of Sri Lanka (Harshi Bamunuachchige, B.A.K.S Perera) ........28
18. Gosikhurd Dam Project, India: Success and Benefit to Society
    (Archana Parlewar, Dr. Prafulla Parlewar) .............................................29
19. Women at Work: are the Steps to the Top Fragile? An Empirical Study on
    Women’s Career Advancement in the Sri Lankan Public Education System
    (M.M.N. Chathuranga) ..................................................................................30
20. Accessibility and inclusion challenges for Visually Impaired Community in
    Academic Context and Non-Academic Context (Gunjan Chelani) ..........31
    Constitution of Gender and Sexual Non-conforming Identities
    on Sri Lankan Instagram Profiles (Thilini Prasadika, Amalka Kadugodage) ......32
22. Recognizing Right to Vote by way of Judicial Activism in Sri Lanka -
    A Legal Analysis (K.K.G. Anuththara) ........................................................33
23. Effects of Gender, Socioeconomic Status and Schooling system on
    Occupational aspirations of Senior Secondary School Students (Abhilasha Gandhi) …34
24. Culture-Specific Items (CSIs) in the French translation of Martin
    Wickramasinghe’s Viragaya based on Foreignization and
    Domestication principle (Hiruni Samarasinghe) ........................................35
25. Grassroots Development and Community Radio: Drawing Insights
    on Community, Communication, and Participation (Chaitanya Shinkhede) ......36
26. The impact of SMS Language on Writing in English Language
    among the Students of Arts in the University of Jaffna
    (Sri Ranjini Anandakumarasamy) ................................................................37
27. The Rise of Populist Nationalism: An Inquiry into the Systemic
    Retrenchment of the Liberal International Order (Lammuansiam Gangte) ......38
29. An analytical Study on the Collection Development Policy of
    Public Libraries: study base on the Public Library of the Kegalle
    District (H.U.C.S Kumara, K.W.A.M Konpola) .........................................40
30. South African Bank Consumers’ Perception of Corporate Social
    Responsibility (N Hoadley, KK Govender) ..................................................41
31. Perception of Foreign Tourists on Dual - Pricing of Entrance Fees: Case
    S, Kahapala Arachchi. R, Dr. D.T. Kingsley Bernard) .............................42
32. Effectiveness of E-commerce Websites as a means of Transforming Traditional Grassroots Businesses in Sri Lanka (Anuruddika U.B.R) ..........43
33. Career decision making difficulties and career decision making self-efficacy: understanding the moderating effect of personality (WDNSM Tennakoon, WJAJM Lasanthika) .............................................44
34. Graduate unemployment in Sri Lanka: Causes and Possible Corrective Actions (R.H.R.S. Wijayawardhana) .................................................................45
35. The Impact of Public Trasnpotation on Tourists Satisfaction: Case Study of Colombo Fort to Galle (D.M.K.T Dissanayake, A. Salith Harsha) .................46
37. Preventing Disability-Discrimination in Employment to achieve Sustainable Development Goal 8: International legal perspective (W.N.G. Panditharatne) ........48
40. Identification of Lactobacillus in Fermented Cheese and the analysis of their Antibiotic Resistance (Nafla Shafi, T.A.H.C Piyasena, Punsisi W) ..............51
41. Attitudes and Knowledge of Sri Lankan Speech and Language Therapists towards Stammering (Kumara J.A.L.R, De Silva M.D.K, Sivasubramaniam G) ......52
42. Comparison between two DNA extraction methods for the detection of Lactobacillus in Yoghurt (Wijini A.W, Punsisi R.W) ...................................................53
43. Assessment of human health risk of Cadmium (CD) and Lead (PB) through consumption of Cow’s Milk (E.M.N.S. Senarathne, E.M.R.K.B. Edirisinghe) ............54
44. Pancreatic β Cell Regeneration from Human Embryonic Stem Cells as a Possible therapy for Type 1 Diabetes (Haemasaanth K., Dr.Michelle B) ..........55
46. Comparative phytochemical Analysis and Antioxidant Activities of Nigella sativa Linn powder and Anethum sowa Linn powder (Kaumadi K, P.K. Perera, Hemantha S, Menuka A.) .................................................57
47. Pharmacognacy of Paththu Dravya for Amavatha Shotha used in Nadungamuwa Weda Parampara (W.A.A.P.S. Weerasooriya) ...............................58
48. Identification of Streptococcus in Table Olive Samples and Analysis of their Antibiotic Resistance
   (Mohammed Faizan Mohammed Mishal, Punsisi Rasara Weerasooriya) .................... 59

49. Comparative Phytochemical, Chromatographical Analysis and Antioxidant Activities of Nisha Tripal Decoction and It's freeze Dried Powder (keshani Randima, P.K Perera, Menuka Arawwawala) ......................... 60


51. Experience in Translational Research of Traditional Medicine: Values and Challenges (Olukemi A. Odukoya) ........................................ 62


53. Identifying the Challenges of Big Data Usage in the Educational Sector of Sri Lanka (Anuruddika U.B.R) ................................................... 64


55. An Application to Categorize the Grammatical Formation of a given Sinhala Text Using NLP Techniques and developing a Sinhala Grammar Checker Prototype (K.K.G.M. Chathurika, M.D.W. De Silva, S.M.D.K. Senanayake, N. Samarasinghe, Dr. K.P.P.S Pathirana) ................................. 66

56. Technology Transfer Opportunities for Introducing Vacuum Assisted Resin Transfer Moulding Technique to Sri Lankan Boat Building Sector (M.T.T Ranjan, Galappaththi U. I. K, Baduge S. Wimalsiri W.K) ......................... 67

57. Study on Women’s Perspective towards Aviation Careers in Sri Lanka (K. A. D. D. Kuruppu, C. J. Hettiarachchi) ....................................................... 68

58. Performance evaluation of a Sustainable Metalworking Fluid for turning of 0.2% C and AISI 304 Steels (Krishan Wickramasinghe, Indika Perera, Himan Punchihewa, Hiroyuki Sasahara) .... 69

GUEST SPEECH
By
Dr. Pathirage Kamal Perera
Consultant Ayurveda Physician, Institute of Indigenous Medicine, University of Colombo
Title: Recent Clinical Research Advances in Sri Lankan Traditional Medicine

KEYNOTE & CO-CHAIR
Dr. S. Damayanthi Edirisinghe
Senior Lecturer, Faculty of Commerce & Management Studies, University of Kelaniya

Dr. Dhishna Pannikot
Associate Professor, School of Management, National Institute of Technology, India
Title: Advances in research in Comparative Literature

Dr. Anoja Attanayake
Department of Biochemistry, Faculty of Medicine, University of Ruhuna
Title: Targeting beta cell mass in diabetes mellitus: Promise of natural drug leads

Dr. U.I.K. Galappaththi
Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, University of Ruhuna

SESSION CHAIR
Prof. Krishna Govender
Executive Dean / Vice-Principal, Da Vinci Institute for Technology Management, South Africa

Dr. Sivaji. K
Senior Lecturer, English Language Teaching Centre, University of Jaffna

V. Paranthaman
Senior Lecturer, English Language Teaching Centre, University of Jaffna
SCIENTIFIC TEAM
Dr. Wajeed Masood - Cape Fear Valley Medical Center, USA
Dr. Mathi Kandiah - BMS, Sri Lanka
Dr. Mayank Singhal - Campbell University, USA
Dr. Jestoni D. Maniago - Majmaah University, Saudi Arabia
Dr. Dushani Palliyaguru - University of Pittsburgh, USA
Prof. Dr. Mohammad Rezaul - North South University, Bangladesh
Dr. Abdul Rehman - University of the Punjab, Pakistan
Dr. S Ramaratnam - Jagadguru Kripalu University, India
Prof. Hend Ezzeldin - Ain Shams University, Egypt
Dr. Mohammad Mujahheed B. Hassan - Universiti Putra Malaysia
Dr. Carolina Jiménez Sánchez - Universidad de Málaga, Spain
Dr. Mohammad Mujahheed B. Hassan - Universiti Putra Malaysia
Ratchaphon Amsuk - Valaya Alongkorn Rajabhat University, Thailand
Prof. Luminita Andrei Cocarta - University of Iaşi, Romania
Prof. Aref Maalej - Engineering School of Sfax, Tunisia
Dr. Milos D. Duric - University of Belgrade, Serbia
Dr. M. Eswaramoorthy - Shri Mata Vaishnodevi University, India
Shafiq Ur Rehman - Sir Syed University of Engineering and Technology,
Dr. Krupal Prabhakar Pawar - Sandip University, India
Dr. Guelailia Ahmed - Research Department of Space Mechanics, Algeria
Dr.纳斯M Shatarat - The University of Jordan
Dr. Jill Nash - Bournemouth University, UK
Dr. Ahmet Demir - Ishik University, Iraq
Dr. Asep Hermawan - Trisakti University, Indonesia
Pim-On Kaewdang - Rajamangala University, Thailand
Dr. Jagbir Singh Kadyan - University of Delhi, India
Dr. Terseer Hemben - University of Riverside, USA
Dr. Bhavik U Swadia - GLS University, India
Dr. H. K. Manikyam - GM Head Lead Research and Formulation Development, Akums
Drugs and Pharmaceuticals Limited India
Dr. Swarna Hapuarachchi - Institute of Indigenous Medicine, Sri Lanka
Dr. S. Ajith – Director, Australasian institute of Ayurvedic Studies, Australia / New Zealand
Prof. Dr. R. Sentharamai - Periyar College of Pharmaceutical Sciences, India
Dr. Manojkumar V. Chaudhari - Ashtang Ayurved College, India
Dr. Kaumadi Karunagoda - Institute of Indigenous Medicine, Sri Lanka
Dr. Thakur Rakesh Singh - Government Ayurvedic College, India
RECYCLING AND WASTE MANAGEMENT PRACTICES ADOPTED BY THE SRI LANKAN ENTREPRENEURS

Dr. Thesara V.P. Jayawardane
Department of Industrial Management, University of Moratuwa, Sri Lanka.
thesaraj@uom.lk

ABSTRACT

According to the United Nations environment programme, about 280 million tonnes of waste is produced globally each year and only a very small percentage is recycled. According to the waste management authority and the central environmental authority, Sri Lanka generates 7000 metric tonnes of waste per day with the capitol city Colombo, accounting for nearly sixty percent of waste generation. Waste management presents practical management challenges for the Sri Lankan government. The need for better waste management has become increasingly obvious with the rise in population. The objective of writing this paper is to identify the current practices related to the various waste management techniques adopted by the Sri Lankan entrepreneurs, as well as recognise the various barriers they face in doing so. The next objective is to provide some suggestions and recommendations to improve the waste management practices followed by these entrepreneurs in Sri Lanka. Further, this paper will examine the role of Sri Lankan entrepreneurs in waste management in terms of the emergence of numerous entrepreneurial firms working to making a profitable business out of conserving and returning resources. This paper is based on secondary research. Existing reports related to waste management and recommendations prepared by engineers, academics, planners, charitable organisations, consultants, ministries of the government and key industry experts are studied and analysed. This paper recognises that these Sri Lankan entrepreneurs will not only build social capital and create environmental awareness in Sri Lanka, but also will contribute to the development of the country.

Keywords: Sri Lanka, Recycling, Waste Management, Entrepreneurs
DO MEN AND WOMEN PERCEIVE DIGITAL ECONOMY IN INDIA DIFFERENTLY?

Dishani Sen
CHRIST (Deemed to be University) India
dishani.sen@science.christuniversity.in

ABSTRACT

After two and a half years of demonetization, digitalization of the economy in forms of payments, online banking and Artificial Intelligence powered digital economy, promises to make India an empowered society. The perceptions and attitude of Indians towards this new wave of digital revolution, which is mainly application of Artificial Intelligence plays a vital role. The present study aims at exploring whether men and women have different attitudes towards acceptance and adaptation of this new wave of automation and digitization among the working, middle aged adults in India. The study also aims at exploring the factors based on which the differences or similarities have developed. Participants include twenty adults (male=10, female=10) in the age of 25-55 years, residing in the metropolitan city of Bengaluru. Data was collected using a semi-structured interviewing technique and was analyzed using content analysis. Using the content analysis four categories evolved which talks about why and why not adults participate in digitalization. Analyzing the results, it was found there is an overall optimism among the participants towards digitalization, both men and women driven the some key factor ease of use. Risk of fraud also prevail. Results also revealed that men believe that digitalization has positive effect on their lifestyle as well as an improved quality of life. Women tend to differ.

Keywords: Qualitative Enquiry, Digitization, Middle aged adults, Perception, Men and women.
THE EVOLUTION OF MASS MURDER & SOCIAL RESPONSIBILITY: A
QUALITATIVE ANALYSIS OF MASS MURDER SINCE COLUMBINE (1999-2019)

Dr. Casey Jordan
Western Connecticut State University, USA

ABSTRACT

This research: Provides context for the evolution of mass murder to reveal how it has changed over the past two decades since the epochal media coverage of the 1999 Columbine massacre. Discerns the motivational factors of the perpetrator and identify them as extrinsic or intrinsic locus of behavior to determine if they are mis-categorized as “terrorism”; and Assesses the role that live- and social- media play in inspiring consequent “copycat” incidents. Conducts data-mining and construct a comprehensive database for multi-variate analysis followed by qualitative triangulation to construct new typologies or paradigms which more accurately represent current trends in mass murder. Makes recommendations for policy to increase social responsibility in identify and assessing potential threats of mass murder in schools, with a focus on common sense gun control legal changes and law enforcement as well as increased focus on intervention through social workers, counselors, and mental health services in schools.
DEAF PEOPLE AT WORK: OPPORTUNITIES AND CHALLENGES FOR EMPLOYERS


Sri Lanka Institute of Information and Technology

¹malkiwije.official@gmail.com

ABSTRACT

This study examines the challenges and opportunities of employing deaf persons in organizations in Sri Lanka. Although there are several studies on employing differently abled persons in the Western World, only a limited number of studies have been published in the developing Nations. An exploratory investigation has been conducted in five small and large organizations where deaf people are hired. Managers who supervise 23 operational level deaf employees in these organizations were interviewed for about one hour each, with a semi structured protocol. The discussions aimed at identifying the challenges and opportunities encountered employers due to hiring deaf employees (DEs). Results confirmed that the skills, learning ability, concentration capacity and efficiency are notably higher than their counterparts. Companies have not faced extra hardships due to their physical or psychological limitations. Thus, no special facilities have been granted. Customer feedback in two organizations with DEs direct contacts with customers is positive. Managers also face some challenges when hiring DEs. Most DEs become emotionally distressed when others could not understand their messages clearly. As a precautionary measure, the DEs are placed with others when dealing with risk prone areas. Opportunities of hiring DEs overly surpass the challenges and the managers admitted that their initial reluctance to employing DEs had declined with experience. This study confirmed that employing DEs is more beneficial to organizations and is in conformity with past research. Employing more DEs in organizations would lead to a more responsible society.

Keywords: Disability, Deaf Employees, Employment, Opportunities and Challenges
THE EFFECT OF PRIVATISATION OF HEALTH CARE IN INDIA: AN ANALYSIS OF KARNATAKA AND MAHARASHTRA STATE

Sagarika M P

Christ (Deemed to Be University), India

sagarikaprakash10@gmail.com

ABSTRACT

India has been well known for its public health care sector and for its free services to the people who are below poverty line. The debate on the privatisation of health care has been a major controversial topic and the government of India privatised the health care sector in 2018. Where privatisation referred to ‘profit’ making by the government and by the private sector. The aim and the purpose of this paper is to examine whether privatisation by the government of India the right move in the health care field, the limitations and the program implemented and its effects on Karnataka and Maharashtra as a case study. The paper concludes that privatising health services has the potential to solve some, but not all, of the problems faced in the country. The core area focused in the paper are: International Experience with Marketisation of Health Care, Evolution of Health Services, private-public model, the Ayushman Bharat Yojana and Hospitals as an industry.

Key words: Ayushman Bharat Yojana, Viability Gap Funding (VGF), The National Health Agency (NHA), NITI Aayog
BARISTA: THE RISE OF IMMATERIAL LABOR IN THE CREATIVE ECONOMY OF THAILAND

1Nichha Tovankasame, 2Jakraphan Chaopreecha

1nicha.t@phuket.psu.ac.th, 2jakraphan.c@phuket.psu.ac.th

1Faculty of International Studies, Prince of Songkla University, 2College of Computing, Prince of Songkla University, Thailand

ABSTRACT

Coffee consumption has become a popular culture among Thai youth in the past five year. Such huge demand results in the increasing numbers of global-chain cafe house all over Thailand. It is also noticeable that there are many small-scale independent cafés widely opening in the high competitive market with the uniqueness of presenting their coffee. In this regard, café culture is part of the creative economy that emphasizes on the lifestyle product and requires the process of value adding in commodities. Aside from the standard of coffee bean, barista is considered as the main actor in making a cup of decent coffee and valorizing the coffee taste through the numerous trainings, brewing experiment, knowledge exchange with colleagues, and participating in various competition events. Nowadays, since many consumers become connoisseurs of specialty coffee, it becomes a challenge for the baristas to accumulate more coffee-related knowledge and improve their skills in brewing refined coffee. This study aims to understand the roles of barista in contributing the atmosphere of creative economy and to examine in what ways they become an actor in the process of coffee valorization. By utilizing the lens of immaterial labor to study the attribute of barista, it gives more alternatives to develop the monetary value of coffee in Thai economy.

Keywords: Barista, Café Culture, Immaterial Labor, Cultural Economy, Thailand
NECESSITY OF INTEGRATING LEGAL SAFEGUARD FOR DOMESTIC ANIMALS IN SRI LANKA - A LEGAL ANALYSIS

W.G.T. Yashodha Thilakarathne
The Open University of Sri Lanka
yashtilakarathne@gmail.com

ABSTRACT

Recent interest in having domestic animals in the society is being increased. Regardless of places urbanized or rural, people tend to domesticate animals. As far as the domestication of animals are concerned, in Sri Lanka there are many issues to be identified, lack of awareness towards animals, restricting their freedom, neglecting them, restricting their reproduction, are few of them. Ownership has given an immense power to treat them like property and they have being tread in cruel way by intentionally or not. The country has seen its last amendment to the law addressing cruelty to animals in 1995 and the prevention of cruelty to animal’s ordinance 1907 under which welfare of animals is taken into consideration is over a century old. But still there are no any provisions included to safeguard or to address the welfare necessities of domestic animals. Therefore, it is mandatory to amend the existing law which would address the protection of domestic animals and rights of those animals or draft a new legal framework which would cover specifically the matters relating to the domestic animals. Basically, the main research problem of this research is why we would need to amend the existing law or draft a new law concerning the matters of domestic animals. This research relies on doctrinal method in nature. It intends to find out the importance of having an Act for Protection and Welfare of Domestic Animals in Sri Lanka to minimize the abuses towards domestic animals by analysing lessons from legislations of United Kingdom. Relevant legislative enactments, case studies have been used as primary sources and research papers, journal articles are the secondary sources.

Key words: animal welfare, domestic animals, legal framework
THE ENIGMA OF IDENTITY IN SRI LANKAN DIASPORIC LITERATURE: WITH SPECIAL REFERENCE TO MICHAEL ONDAATJE’S NOVEL “ANIL’S GHOST”

Saimeera Kanagaratnam
Department of English Language Teaching, University of Jaffna
saimeerakanags@gmail.com

ABSTRACT

The cultural politics of the pluralist world has made the issue of identity a really complex one. Being persistent almost through nine decades the concept of ‘Identity’ is much discussed in postcolonial diaspora studies. Diasporic consciousness being a sense of cultural hybridity; the mixing up of heterogeneous cultures, urges the diaspora to reclaim original identity through ‘cultural and material links.’ Like all other mass migrations across the globe, the migration of people of Sri Lanka too involves departure, dislocation and dispossession from their homeland. In the host country the migrants tend to negotiate between two different polarities while adapting, between roots and adopted culture, between feelings of outsider and belonging. The literature produced by Sri Lankan diasporic writers is bound to express agony and painful experiences as they encounter in an alien land. This study attempts to analyze one such writer Michael Ondaatje’s novel “Anil’s Ghost” as a microcosmic representation of a state of perpetual foreignness and transition, and a sense of being caught up in an ‘in-between’ or ‘third space’ experienced by the migrants. His reference to ‘distance’ with which he writes histories signifies his dislocation, which in turn is symbolized by the novel’s protagonist Anil Tissera. Configured as a nomadic character, Anil projects a radical critique of diasporic forms of belonging and their potential to intervene effectively into normative patterns of identity. Based on the above novel the study aims to present the fact that the search for identity is not exclusive to those who live in their homeland.

Key words: Identity, Diaspora, Cultural hybridity
DIGITAL PLATFORMS TO MOTIVATE ENGLISH LEARNING AMONG YOUNG LEARNERS IN SRI LANKA

K.S.N. Prasangani

Department of English Language Teaching, Sabaragamuwa University of Sri Lanka

nilushikap@yahoo.com

ABSTRACT

English has become the global lingua franca. In fact, English as a Second Language (ESL) learners are exposed to the wide variety of social activities in English. This has led the informal English learning among the young learners, specially they link with the digital flat forms. This study focused on young learners ’motivation to learn English outside the classroom. Reading, writing, speaking, listening, and access of popular global culture were considered to account the motivation to use English outside the classroom. A quantitative method of questionnaire survey was conducted among 121 students of a government university. SPSS descriptive analysis was conducted to identify the motivation of the students for learning English outside the classroom. It is important to highlight that the young undergraduates do not have a tendency to improve their English reading, writing, speaking and listening skills via printed media. Further, they do not speak in English outside the class. Anyhow, it is important that these learners use English widely in their digital flat forms. More than that, it is evident that shyness, afraid of mistakes and others, and inadequacy of the vocabulary hinder the active use of English outside the classroom. This study suggests the applicability of digital platforms to motivate the outside classroom English learning among the young learners.

Key words: ESL motivation, informal English learning, outside classroom activities, digital platforms
THE IMPACT OF ENGLISH ON THE ECONOMY OF THE PHILIPPINES

Shigeru Ozaki
Doshisha University, Japan
shigeruozaki@hotmail.com

ABSTRACT

English is commonly used as an official language, second language for business and commerce, and/or medium of instruction in countries in the Outer Circle, one of which is the Philippines. A large number of people all over the world are studying English out of economic necessity, and there have been some studies concerning the impact of the English language on the economies of some Outer Circle countries. However, no existing research comprehensively tackles this issue in the Philippine context, although the country is well-known for excellence in industries such as BPO and ESL, which have been developed based on the people’s high English proficiency. Thus, this article comprehensively describes the relationship between the English language and the economy of the Philippines and discusses the problems the country has been facing concerning this issue. First, it briefly explains the history of English education in order to demonstrate why there are a large number of people with high English proficiency. Second, it focuses on Filipinos’ English proficiency by looking into average scores on international standardized English tests and the Business English Index. Third, it investigates the economic status of the Philippines as expressed in GDP and GDP per capita. Fourth, it examines English-based industries such as BPO and ESL. Finally, it discusses the following two problems: use of English as a medium of instruction (EMI) and excessive dependence on developed countries.

Keywords: Philippines, English, economy, English as a medium of instruction, dependence
THE LONG-RUN AND SHORT-RUN EFFECT OF THE ‘MAKE IN INDIA’ INITIATIVE ON THE INDIAN ECONOMY

Ananya Atri
Christ (Deemed To Be University), India
ananyaatri3@gmail.com

ABSTRACT

In the era of speedy globalization, international investments and trade, the ‘Make in India’ initiative was introduced by the Indian government on September 25, 2014, with the primary goal of making India a global manufacturing hub, by encouraging both multinational as well as domestic companies to manufacture their products within the country. Make in India has introduced multiple new initiatives, promoting foreign direct investment, implementing intellectual property rights and developing the manufacturing sector. It targets 25 sectors of the economy. The aim of this paper is to examine the long-term and short-term effects of this initiative on the Indian economy, and to study whether or not the initiative is beneficial to the country. The paper concludes that the short-term effects of this initiative are certainly highly beneficial, but it has certain drawbacks which need to be addressed. The core area focused in this paper are: Automotive sector, Pharmaceutical sector, Electronics system design and Manufacturing sector, Tax Reforms (GST), Amendments in FDI policies of India from 1991.

Keywords: Goods and Services Tax (GST), Single Brand Retail Trading (SBRT), Automatic route for investment, Brownfield-Greenfield pharmaceutical projects
CHALLENGES ENCOUNTERED BY LANGUAGE LEARNERS IN LEARNING A SECOND LANGUAGE

Tharindu Jayanath Thotagamuwa

Department of Linguistics, University of Kelaniya, Sri Lanka

tharindu96jayanath@gmail.com

ABSTRACT

Language, which is considered as an inseparable part of human society, is used in each and every task in the day to day life of humans. Communication would never have been possible without language. Language is something acquired and practised by humans since the childhood. Apart from that, people tend to learn different languages with different types of intentions and meanwhile the levels of language development differ with the age. This study attempts to analyse the second language learning difficulties of humans with relation to the linguistic theories and to provide solutions to overcome those difficulties. The situation of learning a second language is quite different when compared to the acquisition of the mother tongue. It takes a large period of time for a learner to being perfect in a second language. Second language learners face more difficulties mainly due to the negative interference of the mother tongue and the cultural differences. This research is mainly based on the qualitative and quantitative data which are collected through questionnaires and statistics of second language learners. There are various types of methods used in second language learning. However, the outcomes of those methods would be either positive or negative because of the challenges arising during the acquisition of second language. The problems could be different according to each language learner based on various strategies such as the cognition, comprehension and memory of the learner. In conclusion, suitable systems should be followed to become a professional or as fluent as the first language by learners overcoming the challenges of second language acquisition.

Keywords: Acquisition, Difficulties, Language, Learner, Second Language
ITEM DEVELOPMENT AND REDUCTION IN TEST CONSTRUCTION:
INTIMATE RELATIONSHIP SECURITY SCALE

1Rachel Jayaseelan, Tony Sam George
Christ (Deemed to Be University), India
1racheal.anusha@res.christuniversity.in

ABSTRACT

Relationship security operates in the context of any close relationship where attachment is present or expected. This construct however, has received very little focus in Indian literature, although it is has been known to influence relationship satisfaction, stability and longevity. A preliminary qualitative study revealed its significance and influence in intimate relationships among pre-marital and married couples in the city of Bangalore (urban India). The objective of the next phase of study was to develop a tool to measure the relationship security. The construct was operationalized from existing literature, experts and stake-holder interviews. Items were developed taking into consideration scales that measure similar constructs such as trust, satisfaction and focussed group discussion with participants between the ages of 18 to 45. Thematic analysis helped generate themes that validated the item content. The initial item pool consisted of 206 items which was subjected to content and face validation processes and further, to reliability analysis, and expert reviews which narrowed the pool down to 67 items. Data collection for this phase involved the use of purposive and snow-ball sampling technique, consisting of 640 male and female participants, who were either married or dating, with the pilot study being conducted among 50 individuals.

Keywords: Relationship security, item development, item reduction, scale construction
DECODING LEARNERS’ SILENCE IN ENGLISH LANGUAGE CLASS

U. Thulasivanthana
Swamy Vipulananda Institute of Aesthetic Studies, Eastern University
vanthana22@gmail.com

ABSTRACT

Classroom silence is a common phenomenon in English language class. It is one of the major hindrances in language learning process. Silence instigated by learners is challenging, troubling and unsettling. It is harmful as it inhibits the learners from reaching the intended learning outcomes and achieving fruitful results. This paper aims to examine English language learners’ classroom silence and the reasons for remaining silent in second language learning context. Through examining these issues this study seeks to present some effective strategies to reduce silence in English class. Thus, this study seeks to improve teaching and learning efficacy. The second year English language learners in SVIAS are reluctant to speak in English and depend greatly on teacher’s explanation. Most learners prefer to sit at the back of the class to avoid being called to answer but outside the class they talk spontaneously. When the lecturer asks questions the learners often tend to respond with silence. Unless called upon individually to answer, they sit passively in the class. This problem generates frustration and fiasco in English language teaching and learning. Learners’ inactivity in the class prompted the researcher to find out the causes for their silence. Classroom observations, questionnaires and interviews are used to collect data from sixty English language learners in SVIAS.

Key words: Silence, English, Classroom, Learning
ANALYSING THE NECESSITY OF REFORMING ANIMAL WELFARE LAWS IN SRI LANKA

Seethawaka Gamage Dona Dulki Tharika

ABSTRACT

It is quite evident that recently the global ethics of animal welfare have been following an evolutionary trend. However, the existing 112 years old laws in Sri Lanka relating to animal welfare provided in the Prevention of Cruelty to Animals Ordinance, No.13 of 1907 are not sufficient to safeguard the animals from the unnecessary exploitation often caused by human beings. While the global community is actively participating to change the perceptions on animal welfare, Sri Lanka desolately lags behind despite the rich cultural heritage of animal protection that existed in the times of the Kings. Therefore, this research paper will discuss the necessity of reforming animal welfare laws in Sri Lanka. The objectives of the paper include investigating the progresses the world has gained relating to animal welfare, discussing the importance of reforming the animal welfare laws in Sri Lanka with regard to recent situations of animal cruelty, analysing the Prevention of Cruelty to Animals Ordinance, No.13 of 1907 and the newly drafted Animal Welfare Act of 2006 and evaluating appropriate recommendations on animal welfare with reference to Sri Lankan context. The research is will be directed in the form of a Hypothesis-Testing (Experimentation) Research. The primary sources include relevant legislations in Sri Lanka. The secondary sources consist of text books, research articles and newspaper articles by Sri Lankan and foreign media relating to animal welfare. Personal interviews will be conducted with the drafting members of legislation and prominent environmentalists. The research will be a guideline to understand the importance of reforming animal welfare laws in other developing countries and provide for applicable recommendations.

Key Words: Animal Welfare, Prevention of Animal Cruelty, Recommendations
ETHICAL PRACTICES AND TECHNOLOGY IN FINANCIAL INSTITUTIONS OF SRI LANKA

Dr. Thesara V.P. Jayawardane

Department of Industrial Management

University of Moratuwa, Sri Lanka.

thesaraj@uom.lk

ABSTRACT

Ethical practices in Financial Institutes require constant improvement along with the rapid growth of technology. Conducting your business activities following ethical principles and facing advancements of technology are difficult matters to handle for financial institutes in Sri Lanka. Nevertheless it is important for the financial institutes to ensure that the new technologies operate in an ethically sound manner. This research paper intends to look at the connection between business ethics, policy-making, and technology and will investigate the relationship between ethical practices and performance of firms with the focus on financial institutions. The study started with investigation of ethical practices as a concept and, the literature on ethical practices and different theories and empirical evidence in the area were critically reviewed. In summary the outcomes of this paper will identify that there is a relationship between ethical practices and the performance of financial institutions of Sri Lanka, that there are potential impacts and challenges of digital technology in these financial institutes and that there is a link between ethical practices and the firm performance.

Key Words: Ethics, Digital Technology, Financial Institutions, Sri Lanka
PARTY AUTONOMY IN THE ARBITRATION PROCESS OF DEVELOPING COUNTRIES: THE CASE OF SRI LANKA

1Harshi Bamunuachchige, 2B.A.K.S Perera

Department of Building Economics, University of Moratuwa
1harshimadu28@gmail.com, 2pererabaks@gmail.com

ABSTRACT

International arbitration is one of the most popular dispute resolution methods used in the commercial world, since it provides an opportunity to the parties concerned to understand the impact of globalization on the international practice of commercial law. Arbitration is the most commonly used method to resolve these disputes because of the principle of party autonomy it allows although there are concerns about it. Thus, the aim of this study was to propose a framework for the party autonomy allowed in arbitration so that an amicable settlement can be easily reached through arbitration in Sri Lanka. In order to achieve this aim, a literature review, a document survey and expert interviews were conducted and manual content analysis was used to analyze the data gathered. Study findings revealed that it is essential to consider the elements of party autonomy and strategies in the initial stage of the contractual process itself, if an amicable settlement to any dispute that arises during the implementation of the project is to be reached through arbitration. It was also revealed that parties to the contract have to be more knowledgeable about the arbitration procedure and on the different elements and sub-elements of the party autonomy allowed in arbitration that can be made use of to reach an amicable settlement of the construction project disputes. Because of their importance in reaching an amicable settlement between the parties concerned, the elements, sub elements and strategies of party autonomy that have been agreed to have to be properly documented.

Keywords: Arbitration, Party Autonomy, Elements and Strategies, Amicable settlement
GOSIKHURD DAM PROJECT, INDIA: SUCCESS AND BENEFIT TO SOCIETY

1Archana Parlewar, 2Dr. Prafulla Parlewar

1Town Planner, Urban Development Department, Government of Maharashtra
2Director, City Development Corporation, India

pparlewar@gmail.com

ABSTRACT

The water resource management in India has significantly benefited the social and economic development of the country. Gosikhurd Dam project is a major project in central India near the town Pauni. The paper here illustrates the history of irrigation dam projects in India, significance of such projects, social and economic benefit, and approach for rehabilitation. Some of the major irrigations projects in India are Bhakra Nagal, Beas, Koshi, Hirakund, Nagarjunsagar, Chambal, Damodar Valley and Gosikhurd Project. These projects are conceived by Government of India after independence to reach its ultimate irrigation potential. The project is located near town Pauni in Bhandara district in Maharashtra state of India. It was inaugurated on April 22, 1988 to divert water to Wainganga, Wardha and Tapi Basin. The major benefits of the projects are irrigation to Western Vidharba and generation of Hydro-electric power for many villages. The project provides water to an extent of 3, 38,500 Ha. This directly benefit to agriculture in this region for development of commercial crops. This project aims to irrigate about 2.5 lakh hectare of land. It is designed to provide an annual irrigation to an area of 89,856 Ha in Bhandara district 19,481 Ha in Nagpur district, 1, 41,463 Ha in Chandrapur district. About 718 villages will be affected by the irrigation project in central India. The paper will conclude the necessary methods adapted for effective water resource management of Gosikhurd project. Moreover, it will conclude on the future research and development of similar projects in India.

Keywords: Irrigation Projects, Gosikhurd Dam, Indrasagar Project, Rehabilitation, Water Resource Management
WOMEN AT WORK: ARE THE STEPS TO THE TOP FRAGILE? AN EMPIRICAL STUDY ON WOMEN’S CAREER ADVANCEMENT IN THE SRI LANKAN PUBLIC EDUCATION SYSTEM

M.M.N. Chathuranga

Department of Business Administration, University of Sri Jayewardenepura, Sri Lanka
nirmal@sjp.ac lk

ABSTRACT

In the Sri Lankan public education system, school and government educational administrative positions are those in which a teacher can advance in his/her career path. Though women teaching at public schools in Sri Lanka comprise of more than three-fourths of the total teaching population, female representation in school administration as well as in government educational administration is low when compared to female representation in the teaching profession in Sri Lanka. By exploring afore mentioned context through this study, it exposes the issues and problems that block advancement opportunities for women in administrative positions in the public educational system. Primary data of the study were generated through conducting ten in-depth interviews with women who are currently employed in the public educational sector. The data were analyzed using thematic analysis and three theoretical concepts, namely, the Glass Ceiling, the Glass Escalator and the Queen Bee syndrome were when interpreting the analyzed data. Findings of the study reveal that women face many obstacles when attempting to gain administrative positions, mainly due to gender bias which results in certain sociocultural and behavioral barriers. Therefore, indirectly, this context has created an advantage for men when they compete for these administrative positions in the public educational system in Sri Lanka. Thus, the researcher argues that the fragility of career steps occurs due to certain features of Sri Lankan culture which is based on patriarchal values, where the notion of “womanhood” is largely shaped by men and is built up within the socialization process of women.

Key words: Administrative Positions, Career Advancement, Glass Ceiling, Glass Escalator, Queen Bee Syndrome
ACCESSIBILITY AND INCLUSION CHALLENGES FOR VISUALLY IMPAIRED COMMUNITY IN ACADEMIC CONTEXT AND NON-ACADEMIC CONTEXT

Gunjan Chelani
Christ University, India
chelanigunjan@gmail.com

ABSTRACT

This study makes a contribution to the field of higher education by representing the first effort to listen to the voices of visually impaired (especially low vision) students as they tell their stories of the challenges and coping mechanism they face in education sector. The knowledge gained from this research will have implications for practice, including the development of teaching strategies and other interventions to improve the quality and efficacy of education for disabled students. For example, individuals with a higher degree of visual impairment may need to be provided with additional opportunities for success through the college's disability program than what is currently offered. Finally, this study will bring much-needed attention to ambiguous issues facing students with visual impairment in today's academic environment, thus adding to the emerging field of disabilities studies.

Keywords: visual impairment, educational and social challenges

1Thilini Prasadika, 2Amalka Kadugodage

1University of Colombo, Sri Lanka, 2Mercy Hospital, Australia

1thilinipr.91@gmail.com

ABSTRACT

This study intends to explore the semiotics of the narratives of visibility which constitute gender and sexual non-conforming identities on Sri Lankan Instagram profiles. For the purpose of this study, around ninety Instagram profiles will be analyzed. The profiles will be decoded as a text, making theoretical inquiries into the changing socio-cultural, political and economic contexts which has, in recent times, facilitated “increasing” visibility of Sri Lankan gender and sexual non-conforming identities on the digital space. This study will further discuss the ways in which Instagram, as a social media platform, reinforce/sustain these changes. Even though many research have been conducted on the visibility of gender non-conforming identities on digital platforms, little or no research has been conducted on this area in Sri Lanka; therefore, this study will make an attempt to theorize the above areas of focus with reference to theoretical frameworks such gender performativity by Judith Butler (1988: 2009) and the medial identity by Michael Ermann (2006).

Keywords: Digital space, Gender and sexual nonconformity, Instagram, Visibility
RECOGNIZING RIGHT TO VOTE BY WAY OF JUDICIAL ACTIVISM IN SRI LANKA - A LEGAL ANALYSIS

K.K.G. Anuththara

Dept. of Legal Studies, Faculty of Humanities and Social Sciences, The Open University of Sri Lanka

kkganuththara@gmail.com

ABSTRACT

One and the basic ways that general public can take part in government decision making is voting. It ensures the fundamental right to a participatory government. While international instruments like the Universal Declaration of Human Rights, International Covenant on Civil and Political Rights, European Convention for the Protection of Human Rights widely and expressly recognized right to vote as a fundamental human right, the Constitution of Sri Lanka do not explicitly recognize the right to vote as a fundamental right. The problem of this research is to find out whether Sri Lanka law recognize right to vote as a fundamental right impliedly. Except provisions like procedure of the franchise and provisions for free, equal and secret ballots there are no any specific references to the Right to Vote mention in the Constitution of Sri Lanka. The research findings reveal that there are some progressive decisions delivered by the Supreme Court held that the right to vote can be recognized under Freedom of Speech and Expression mention in the Article 14 of the Constitution. Hence the basic Argument of this research centralized in to the role of judicial activism in recognizing right to vote in Sri Lanka. This research will be of exploratory in nature which provides an analyze on some of these existing judgements and further this research is normative in nature and based on the literature review and preliminary and secondary sources would be used. In this research paper it basically analyzes the judgements of well-known cases which are recognized right to vote by expanding Freedom of Expression in the Constitution of Sri Lanka by the mean of judicial activism. Further it recommend the possible ways of recognizing right to vote under the fundamental right capacity by judicial activism. The conclusion of this research paper is, judicial activism of Sri Lanka would be a greater mechanism to recognize and ensure the right to vote in Sri Lanka.

Key Words: Fundamental Rights, Constitution of Sri Lanka, Article 14, Judicial Activism, Right to Vote
EFFECTS OF GENDER, SOCIOECONOMIC STATUS AND SCHOOLING SYSTEM ON OCCUPATIONAL ASPIRATIONS OF SENIOR SECONDARY SCHOOL STUDENTS

Abhilasha Gandhi

CHRIST (Deemed to be University)

India

ABSTRACT

One’s aspirations, that is the hope or ambition to achieve something, are the guiding light for their success in life. This research studies these aspirations with respect to one’s occupation. Occupational aspirations are the thoughts, or feelings one has for their work or future career. These are affected by a number of factors. The research tries to identify some of these factors by analysing their impact on the occupational aspirations of senior secondary school students in Delhi. For this purpose, the occupational aspirations of 200 male and female students from government and private school were analysed in relation to their gender, socioeconomic status, and schooling system. The research concluded that there was no significant relationship between gender and occupational aspirations, however, it showed a major impact of socioeconomic status and schooling system on these aspirations. These conclusions have major implications for the youth, their future and hence for the future of the nation. Occupational aspirations in the formative years of life influence the vocational choice in the later life, which determine an individual’s success in regard to job satisfaction, productivity and adjustment. Students usually plan for their future at this stage. So, it is imperative for the teachers, parents, guides etc. to be involved in harnessing and flourishing the ambitions and aspirations of students. As the socioeconomic status and the schooling system were found playing a major role in the occupational aspirations of the students, it can be said that there is a need for improvement in the guidance and career counselling of socially backward students, especially those in government schools.

Keywords: Occupational aspirations, gender, socioeconomic status, government schools, private schools
CULTURE-SPECIFIC ITEMS (CSIS) IN THE FRENCH TRANSLATION OF MARTIN WICKRAMASINGHE’S VIRAGAYA BASED ON FOREIGNIZATION AND DOMESTICATION PRINCIPLE

Hiruni Samarasinghe
Rajarata University of Sri Lanka

ABSTRACT

Martin Wickramasinghe is a well-known Sri Lankan writer. His book Viragaya which is an outstanding work in modern Sinhalese fiction was translated into many languages. In 1995, it was translated into French language by Bikku Mandawala Pannawansa and it is considered as the first translation to French language. Wickramasinghe’s style of writing is deeply faithful to philosophy of Buddhism. Viragaya is based on a rural Sinhalese Buddhist environment and brings out a Buddhist philosophy. Hence, the French reader may be confronted with the CSIs used in Sinhala text and misunderstandings may be occurred due to the differences in cultures. Moreover, it causes for a clash between cultures as the target text reader from French culture reads the text from a different perspective with their own cultural identity. The object of the present study is to examine whether the French translation is domesticated or foreignized. Both the Sinhala text and the French translation were analyzed and strategies used by the translator was categorized according to Davie’s taxonomy. The French translator has foreignized certain Sinhala CSIs by using the strategies of preservation, globalization and footnotes in order to explicit Sri Lankan context to the French reader. However, the most prevailing principle in the translation is the domestication. Out of 75 of total 42 CSIs were domesticated using the strategies of addition, omission, localization, transformation and creation to release the burden of unfamiliarity of the foreign culture.

Key words: Culture Specific Items (CSIs), Foreignization and Domestication, strategies
GRASSROOTS DEVELOPMENT AND COMMUNITY RADIO: DRAWING INSIGHTS ON COMMUNITY, COMMUNICATION, AND PARTICIPATION

Chaitanya Shinkhede
PhD Scholar of Tilak Maharashtra Vidyapeeth, Pune, India
chaitanyashinkhede@gmail.com

ABSTRACT

Perceiving Community Radio (CR) as a tool of development communication, this article poses two essential questions: (1) Does CR successfully adopt the approach to influence not only the life of marginalized groups but eradicate deep-rooted issues affecting their growth? Also, (2) How CR manages to communicate sustenance through active and comprehensive participation from the community? To address these questions, Case Study (Participant Observation, FGDs, In-depth interviews, and Survey Analysis) of two Rural Indian Community Radio Stations (CRS) was carried out – dividing the structure of this study into three segments. The first segment elucidates and critically examines the cause and effect nature of prominent impediments bounding the community. The second segment profoundly analyses the communication policy, strategy, and efforts of CR in implementing practical action against these impediments. The third segment evaluates the social sustainability of CR in terms of the participation level of community in programming, management, ownership, and decision-making. Also, in order to understand the nature of community and community development issues, the contextual background of the selected regions was thoroughly studied.

Understanding the holistic nature of community radio, two prominent observations emerged from the achieved results: First, the interface between the marginalized communities and community radio is established and opened. However, participation and communication are interrelated yet distinctive terms. Second, apart from the broadcasting, CRS can be the base for multi-purpose tele-bureau – providing internet access to the community, selling audio records, making studio available on rent, organizing development initiatives, and act as a conveyor between local government and people. Implications and recommendations are further discussed.

Keywords: Community Radio, Participatory Content Production, Development, Community, Programming, Social Sustainability
THE IMPACT OF SMS LANGUAGE ON WRITING IN ENGLISH LANGUAGE AMONG THE STUDENTS OF ARTS IN THE UNIVERSITY OF JAFFNA

Sri Ranjini Anandakumarasamy
Lecturer in English at Department of English Language Teaching, University of Jaffna
sanandakumarasamy@gmail.com

Abstract

Writing is a skill that expresses one’s thoughts, feelings and ideas to others. It is a significant skill that expresses one’s competency in the language as well as improves their academic performances. The present study aimed at finding the impact of SMS language on writing in English Language among the tertiary students who are in the Arts stream in the University of Jaffna. 1st year, 2nd year and 3rd year students were given assignments to write small notes, informal and formal letters and articles on different topics. The influence of SMS symbols, characters and vocabulary are collected. The findings revealed that the students unconsciously use these symbols in their academic writing. The study insisted on differentiating short messages and academic writing and recommended the steps to be followed by the stakeholders.

Keywords: Short messages, Academic writing, symbols, Language competency
THE RISE OF POPULIST NATIONALISM: AN INQUIRY INTO THE SYSTEMIC RETRENCHMENT OF THE LIBERAL INTERNATIONAL ORDER

Lammuansiam Gangte
Christ (Deemed to be University)
lammuansiam.gangte@arts.christuniversity.in

ABSTRACT

Today, the liberal international order stands challenged. Not so much by the usual suspects, as by its main architect. The postwar rules-based system that set the initial stage for international development is now found wanting. Globalization, which once quadrupled the world’s output, today no longer serves the nation-state, much less the denizens thereof, claim the dissidents. This paper discusses current challenges to the global order, albeit situating the debates on issues experienced within domestic politics. It is an attempt to arrive at a nuanced understanding of the threats radical politics pose to democratic practices, and even more so — the lesser explored risk factor — of their implication on social cohesion and geopolitical stability. It involves unearthing the political economy underpinning a series of events that preceded the (re) emergence of populist movements in the American politics. This includes among other things, chronicling important political dispensations ranging from the inception of the Welfare State in the New Deal of 1932 through the return of market ideology Neoliberalism in the 1980s and to the ultimate collapse of the financial sector in 2008. It offers both empirical and conceptual analyses on the relevant findings and suggests that developments from within — political polarization, economic inequality and, cultural backlash — pose more threat to the order than do revisionist elements from without. The central thesis of the paper argues that the aforementioned domestic factors coupled with the incumbent’s protectionist and inward-looking policy responses to the plight of the populace has systematically undermined the liberal international order today.

Key words: populism, nationalism, globalization, order, and liberalism
ISSUES OF ENGLISH LANGUAGE TEACHING IN SRI LANKA

Tharindu Jayanath Thotagamuwa

Department of Linguistics, University of Kelaniya, Sri Lanka

tharindu96jayanath@gmail.com

ABSTRACT

English language which is considered as the universal language, plays a major role in each and every field of study at present. As a result, English is taught as a second language in Sri Lanka as a section of the education system. Learning English has been made essential by the education system because of its great importance in the current world. However, the level of English knowledge of most of the learners falls under a lower level. It is a general viewpoint that English Language Teaching has been a failure in Sri Lanka. This study attempts to observe the current issues of the English language teaching of Sri Lankan educational system. The lack of performance in English language is mainly occurred due to not using the appropriate approaches in the process of English teaching. Interviews are conducted with persons related to English language teaching as the main source of data for the research and ESL learners would also be contacted to get their ideas as well. In addition, reports of respective programmes are evaluated in gathering data for this research. The contribution of English language teachers for the failures are examined as the major intention of this research. A question arises whether the practise and experience of English language teachers in the country are sufficient considering about the professional development of English Language Teachers in Sri Lanka. To conclude, the professionalism and positive attitudes of English language teachers in Sri Lanka should be empowered in order to overcome the issues of English language teaching and moreover, it is the responsibility of the teachers to initiate their programmes to offer the best for the ESL learners.

Keywords: English, Issues, Sri Lanka, Teaching
AN ANALYTICAL STUDY ON THE COLLECTION DEVELOPMENT POLICY OF PUBLIC LIBRARIES: STUDY BASE ON THE PUBLIC LIBRARY OF THE KEGALLE DISTRICT

H.U.C.S Kumara, K.W.A.M Konpola
University of Sri Jayewardenepura
kumara@sjp.ac.lk, anura@sjp.ac.lk

ABSTRACT

The Public Library is explained in the UNESCO's charter as a public institution that is used to promote mutual understanding, peace, and harmony in nationalities. The main purpose of this research was studied how to use the collection development policy of public libraries. The other objectives ware to study how the collection development policy was implemented. It also aims to study the embodied methodology in the collection of developmental policies and identify areas to develop on the collection development policy. The survey method was used to achieve the objectives of this research. In the study, primary data and secondary data were used for data collection. Here were used methods of questionnaires and interviews. There were uses of public libraries in the Kegalle district as the sample. Accordingly, Kegalle, Mawanella, Rambukkana and Ruwanwella Pradeshiya Sabhas were selected. According to, as 05 libraries were used. In those librarians and 50 readers were used to collecting data. After conducting the study, it was noted that the lack of recognition a collection development policy in these libraries was 100%. Accordingly, collection development, management, and maintenance were not implemented according to the collection development policy was 100%. Users suggested that collection should be increased 80%. The conclusion can be indicated as the lack of recognition a collection development policy in these libraries. Accordingly, collection development, management, and maintenance were not implemented according to the collection development policy. There was no methodology in those fields and it was possible to identify that the field should be developed according to development policy. By means of the suggestion is that a collection development policy must be developed in accordance with the procedures in every library. Accordingly, it can be noted that should be implemented collection development, management, and maintenance.

Key words: Public Library, Collection development policy, Collection development, Collection Management, Collection maintenance
SOUTH AFRICAN BANK CONSUMERS’ PERCEPTION OF CORPORATE SOCIAL RESPONSIBILITY

N Hoadley, KK Govender
South Africa

ABSTRACT

The research addressed South African bank consumers’ perception of CSR, and the relationship between a bank’s CSR efforts and consumers’ bank choice. Carroll’s CSR pyramid which categorises and ranks the following four corporate responsibilities in hierarchical order, namely, Economic, Legal, Ethical and Philanthropic, was used to survey a convenience sample of bank customers. A link was posted on the researcher’s social media pages and emailed to peers at work and the university where the researcher was a student. The survey included questions which required respondents to rank on a scale of 1-5, statements related to each CSR category. It became evident that contrary to Carroll’s framework/pyramid, South African consumers perceive CSR in the following order: Legal, Economic, Philanthropic and Ethical, which could be influenced by inter-alia, South African legislation such as Black Economic Empowerment, the King Code of Corporate Governance and because South African consumers perceive philanthropic responsibilities to be more important than ethical ones. The only CSR category which had a partial influence on consumer support, was philanthropic responsibilities, which is in line with the notion that philanthropy is more highly valued in developing countries. South African banks can use the findings from this study to better allocate their CSR resources.

Keywords: philanthropy; social responsibility, banks; CSR
PERCEPTION OF FOREIGN TOURISTS ON DUAL - PRICING OF ENTRANCE FEES: CASE OF SRI LANKAN TOURIST DESTINATIONS

SLIIT Business School, Sri Lanka
wijesuriya.thusara@gmail.com

ABSTRACT

Dual-Pricing on entrance fees for tourist destinations around the world is a topic that has been debated by travelers, tourism industry critics and policy makers, to which both, rationales for its existence and reasons for this concept to be unacceptable and discriminatory have been argued. While the western world evade this concept, it is evident that the issue of dual-pricing is more eminent in the global south countries, of which Sri Lanka is a part, and as such this study focuses on identifying the factors that influence the willingness-to-pay entrance fees of foreign tourists in Sri Lanka and to understand their perception on using the concept of dual-pricing at tourists sites. Identification of the factors was done through a critical literature survey, followed by data collection through a structured questionnaire, using convenience sampling technique to understand the perception by deploying a mixed approach of techniques. Findings from the literature survey identified that, Income, Knowledge, Perceived price fairness, and Visitor Expectations are the key factors that influence the willingness-to-pay entrance fees in a dual-pricing context. Furthermore, it was revealed that a majority of tourists accepted the dual-pricing policy, while highlighting the following concerns; the differentiated price should be informed beforehand and not blindfolded, entrance fees should not be too high compared to the locals, and the revenue should contribute to the development of the destinations. Outcomes of this study will be useful for policy makers and beneficiaries of the tourism sector to draft amendments to existing policies for more sustainable tourism.

Keywords: Dual-Pricing, Willingness-to-pay, Perception, Foreign Tourists, Sri Lanka
EFFECTIVENESS OF E-COMMERCE WEBSITES AS A MEANS OF TRANSFORMING TRADITIONAL GRASSROOTS BUSINESSES IN SRI LANKA

Anuruddika Upul Bandara Ratnamalala

Faculty of Business Management
International College of Business and Technology, Sri Lanka
aubupul@gamil.com, aubr84@mun.ca

ABSTRACT

The majority of traditional grassroots businesses are seeking continuous support from online platforms to expand their operations globally and within Sri Lanka. A grassroots business can be defined as an independently owned small business established with limited funds (e.g., bakers, florists, estheticians, and clothing manufacturers). The utilization of e-commerce websites to improve business activities within grassroots level businesses have been a continuous obstacle for many new entrepreneurs in Sri Lanka. This is mainly due to the fact that grassroots businesses lack the proper training on integrating e-commerce platforms into their current business infrastructure. Additionally, outdated technology, lack of trust in e-commerce, high costs associated with integrating e-commerce websites, and the lack of expertise in using the Internet and e-commerce websites are critical problems associated with grassroots businesses transitioning to e-commerce. Thus, the objective of this paper is to further investigate these challenges pertaining to building meaningful relationships among traditional grassroots entrepreneurs and their consumers through the integration of e-commerce websites into their current business landscape. Moreover, this study also attempts to identify the key factors that help enhance these relationships among grassroots businesses and their consumers. The findings of this research would aid traditional grassroots businesses in understanding the current issues and obstacles in transitioning to e-commerce and help build impactful relationships with other businesses and consumers. Moreover, this research would enable grassroots businesses to further expand their business activities, and in turn, contribute to the economic development of Sri Lanka.

Keywords: Grassroots businesses, e-commerce, grassroots entrepreneurs, Internet, Sri Lanka
CAREER DECISION MAKING DIFFICULTIES AND CAREER DECISION MAKING SELF-EFFICACY: UNDERSTANDING THE MODERATING EFFECT OF PERSONALITY

WDNSM Tennakoon, WJAJM Lasanthika

Department of Business Management, Wayamba University of Sri Lanka
jananijayawardana@gmail.com

ABSTRACT

The role of personality type (A or B) in career decision making process is addressed seldom in existing literature. This paper investigates the moderating effect of personality type on the relationship between Career Decision Making Difficulties (CDMD) and Career Decision Making Self-Efficacy (CDMS). Quantitative inquiry of the research problem employed a field survey of 106 Management undergraduates representing Sri Lankan state universities. Instruments with greater measurement properties measured the key variables. Results of multiple regression analysis specify the significant interaction effect of personality type and CDMD (β = -0.046, p = 0.041). This implies personality types hold a moderating power which can lead to the variations in the Career Decision Making Self-Efficacy. Further, Type B personalities appear to be less self-efficacious than Type A personalities with respect to career decision making. Implications lead the necessity of developing personalities to improve the self-efficacy of deciding on a future career.

Keyword: Career Decision Making Self-Efficacy, Personality, Career Decision Making Difficulty, Sri Lanka, Undergraduates
GRADUATE UNEMPLOYMENT IN SRI LANKA: CAUSES AND POSSIBLE CORRECTIVE ACTIONS

R.H.R.S. Wijayawardhana
Lanka Nippon BizTech Institute, Sri Lanka
ravindusankha@gmail.com

ABSTRACT

In order to meet the rising demand for higher education in Sri Lanka, both the public and private sector higher education providers have increased their provision resulting in acute graduate unemployment and under employment situation. Given this context, the main objective of this paper is to examine the principal causes contributed to this and possible corrective actions for the mitigation of the crisis. Attention is primarily drawn to understand a) the education mismatch and skills mismatch, b) insufficient attention given to quality and relevance of study programs. c) poor attention given to existing job opportunities and new jobs being created in the international job market and d) heavy dependence given to the public sector as the job creator.

Keywords: Skills mismatch, Education mismatch, Graduate Unemployment, under employment
THE IMPACT OF PUBLIC TRANSPORTATION ON TOURISTS SATISFACTION: CASE STUDY OF COLOMBO FORT TO GALLE

D.M.K.T Dissanayake, A. Salith Harsha

NSBM Green University Town, Sri Lanka

kasun@nsbm.lk

ABSTRACT

This study aims to assess tourists’ satisfaction level and transport services in Sri Lanka (case study at Fort to Galle), and to identify the relationship between tourist satisfaction and transport service quality. In this study, five objectives and five questionnaires were developed in the study model. The empirical data were collected from tourists via a survey that yielded 300 usable questionnaires, these data were analyzed using a series of multiple regressions to determine the relationship between public transportation service quality and tourist satisfaction. The findings confirmed that service quality directly impacted tourist satisfaction throughout transport mode facilities, destination accessibility and destination attraction. As a result, this study argued that there is a significant impact of the public transportation service quality on tourist satisfaction, and therefore service quality plays an important role in tourism by increasing the level of tourist satisfaction. This study provides some theoretical and managerial implications based on the findings to academicians and managers/policy makers of tourism sector. The researcher identified areas for future studies and he discussed the main limitations in this study.

Keywords: tourist’s satisfaction, public transportation, punctuality and reliability, safety and security, service frequency
EVALUATION OF SUSTAINABILITY OF A TOURISM DESTINATION: A CASE STUDY OF PIGEON ISLAND IN TRINCOMALEE

1Dillhara Dissanayake, 2Suresh Shanaka Kariyawasam

1Planning Officer, Urban Development Authority, 2Department of Town & Country Planning, University of Moratuwa

2shanakakss@yahoo.com

ABSTRACT

To meet the growing demand for tourism, a large number of destinations are being exposed and developed rapidly without proper planning and management harming the natural environment and excluding local communities and local content – the very foundation and uniqueness of the Sri Lankan travel experience. Although Sustainable tourism is a huge concern, its practical applicability has limitations due to lack of a method to evaluate the implications of sustainable principles. This study attempts to develop a framework to evaluate sustainability in a tourism destination based on three pillars of sustainable tourism; economic, environmental and socio-cultural which were selected as the mandates of the framework. The indicators of each expression were initially developed based on existing indicators of sustainable tourism and further narrowed down as appropriate for Sri Lankan context. Then the proposed framework was applied to Pigeon Island Marine National Park (PIMNP) at Trincomalee. The data was collected through past records, field surveys, perception surveys, analyzed using quantitative and qualitative methods and presented using a descriptive statistics. After quantifying all indicators multi-criteria analysis framework was used to derive overall and thematic sustainability levels. The results indicated; overall sustainability level of PIMNP as 42% composing of 47% of economic, 35% of environmental and 44% of socio-cultural thematic sustainability levels. PIMNP has relatively high economic sustainability and lower environment sustainability. Since PIMNP is a tourist attraction based on natural asset, the environment sustainability plays a major role in making the overall venture a sustainable tourism venture.

Keywords: Sustainability, sustainable tourism principles, framework of indicators
PREVENTING DISABILITY-DISCRIMINATION IN EMPLOYMENT TO ACHIEVE SUSTAINABLE DEVELOPMENT GOAL 8: INTERNATIONAL LEGAL PERSPECTIVE

W.N.G. Panditharatne

Department of Legal Studies, The Open University of Sri Lanka
wasanapanditharatne@yahoo.com

ABSTRACT

Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which may hinder their full participation in society on an equal basis with others. As per available data, persons with disabilities comprise 15% of the world population equal to one billion in number. Decent work and employment are essential for the well-being and dignity of all including persons with disabilities. Being employed has a positive impact on social inclusion and quality of life. However, persons with disabilities often encounter discrimination and exclusion in various opportunities including employment in particular. Recognizing the importance of this issue, the 2030 Agenda for Sustainable Development included persons with disabilities emphasizing their participation and recognition as active contributing members of the society. Sustainable Development Goal 8(SDG 8) focuses on promoting inclusive and sustainable economic growth, full and productive employment and decent work for all, explicitly refers to persons with disabilities in its Target 8.5. While various international legal instruments and domestic legislation have laid the legal foundation towards an inclusive environment to employment for persons with disabilities, practical implementation remains inadequate. This study attempts to assess the effectiveness of existing international and domestic legal framework which facilitate prevention of disability discrimination in employment as a means of achieving SDG 8. Principle methodology applied is a literature survey. A comprehensive analysis has been done on the existing legal instruments and scholarly publications. After identifying the drawbacks in the existing legal framework, suggestions have been made to enhance its effectiveness.

Key words: Disabled persons, Discrimination, Employment
ACTIVITY BASED FOOD PANEL FOR NUTRITION PROMOTION

Alagiyawanna A, Illangasinghe D, Muthuarachchi I, Pathirana A, Prasanna S, Wijesekara L

Health Promotion Bureau

dhananjachami@gmail.com

ABSTRACT

Nutrition promotion is of prime importance to overcome unhealthy food habits. Activity based food panel is an innovative IEC (Information-Education-Communication) materiel designed for the ongoing Happy village initiative which is a health promotion setting develop for best practices in Sri Lanka. Objective of the panel is to empower people to select healthy diet based on food functions and categories. It allows interactive participation of individuals, or small groups, with the health worker. It consists of a magnetic board and magnetic pieces to be stick on the board. There are 5 activity areas includes, namely, identify food based on functions, identify food categories, discuss key messages, serve your food plate, categorize food within the group based on frequency of consumption. Panel addresses the risk factor ‘unhealthy diet’. Training given for Consultant Community Physicians, Health Education Officers, Health Education Nursing officers and divisional health staff. Distributed the panels for district, divisional and hospitals. Inputs for the development taken from public health experts, field health care staff. No of 187 trainings done in focal, district and divisional levels. Trained, 52 Health Education Officers, 175 Medical Officers of Health and a no of 359 compulsorily divisional health staff, in the Happy village. Outcomes set as % of increasing the favorable dietary practices. Conclusions and recommendations, Health literacy on nutrition grounds is poor in the society. Individual and community empowerment need to establish via this type of IEC materials.

Key words: Nutrition promotion, Food panel, happy village
EPIDEMIOLOGICAL TREND OF COMPLETED SUICIDE IN BATTICALOA DISTRICT OF SRI LANKA: A QUANTITATIVE APPROACH

Karthikesu Kartheepan, M. Bagavandas, T. Gadambanathan

Department of Primary Health Care, Faculty of Health-Care Sciences, Eastern University,
Division of Biostatistics, School of Public Health, SRM Institute of Science and Technology, India, Teaching Hospital Batticaloa, Sri Lanka

ABSTRACT

Suicide is considered as a significant social and public health problem in Sri Lanka, however it is primarily preventable. The morbidity and mortality of suicide has been immensely increased in recent past in Batticaloa district of Sri Lanka. Since the absence of specific scientific studies concern suicidal epidemiology in Batticaloa district; one of the specific objectives of current study was, to find out the epidemiological trend of completed suicide during the recent past years (2015-2017). This was a descriptive cross sectional study. Data were collected from the records of Division Crime Detection Bureau (DCDB) of Senior Superintendent of Police (SSP) Office, Batticaloa for the period of 2015-2017 with the prior official permission. Statistical software (SPSS 25.0) was used to analyze the data and p-value < 0.05 was considered significant for all analyses. Ethical approval was obtained from Ethical Review Committee, Faculty of Health Care Sciences, Eastern University, Sri Lanka. Majority (64.2%) of the diseased are male of the total of 366 cases. Hanging was the commonest (55.7%) mode of suicide. Married people were more (73.5%) vulnerable to suicide. Predominant (15.8%) age categories of cases were 21-25 years old. Tamil ethnic community was at highest (95.1%) risk. Hindu religious people were most susceptible (91.3%) group of completed suicide. Significant association was observed among age category, gender, mode of suicide and civil status of completed suicide cases. It was evidenced that increasing trend of completed suicide in Batticaloa district has been observed in recent past years.

Keyword: Completed suicide, Epidemiological trend, Batticaloa, Sri Lanka
IDENTIFICATION OF LACTOBACILLUS IN FERMENTED CHEESE AND THE ANALYSIS OF THEIR ANTIBIOTIC RESISTANCE

Nafla Shafi, T.A.H. Chanuka Piyasena, 1Punsisi Weerasooriya

BMS, School of Science, Sri Lanka

1punsisi@bms.edu.lk

ABSTRACT

Probiotics are living microorganisms, which can improve health by providing benefits beyond that of the traditional nutritional value when consumed in required amounts. They are present in various fermented foods, including cheese where Lactobacillus is one of the most commonly found species. This study was designed to isolate and evaluate the antibiotic resistance patterns of Lactobacillus present in ten commercially available Cheddar (n=5) and Gouda cheese (n=5) samples. The Lactobacillus from homogenized cheese samples were isolated on Lactobacillus specific MRS agar, and phenotypic identification was achieved by morphological and biochemical investigations such as colony morphology, gram’s staining and catalase test. The genomic DNA from isolated Lactobacillus colonies were extracted from the Wizard genomic DNA purification kit and modified boiled cell method. Extracted DNA was quantified using the spectrophotometer. Results revealed that the DNA yields significantly varied between the two methods (P < 0.05). PCR based genotypic detection of Lactobacilli using genus-specific primers revealed the presence of bands in all samples. Furthermore, in a PCR assay for the detection of antibiotic resistance genes, the erm(B) gene was found in 1 sample (n=1) and no sample was positive for the tet(M) gene (n=0). In conclusion, the wizard method was confirmed as the most efficient extraction method since it indicated higher DNA yields and purity. Screening of antibiotic resistance of probiotics used in the food industry is essential for the safety of probiotic food products as resistance genes can be transferred to pathogens.

Keywords: Probiotics, Lactobacillus, Cheese, Antibiotic Resistance
ATTITUDES AND KNOWLEDGE OF SRI LANKAN SPEECH AND LANGUAGE THERAPISTS TOWARDS STAMMERING

Kumara J.A.L.R, 1De Silva M.D.K, Sivasubramaniam G.

Department of Disability Studies, Faculty of Medicine, University of Kelaniya, Sri Lanka

1dumini@kln.ac.lk

ABSTRACT

Previous research has revealed many Speech-Language Therapists (SLTs) to demonstrate negative stereotypical perceptions towards stammering and People Who Stammer (PWS) despite being professionals responsible for treatment for stammering. Many of them felt uncomfortable and less confident in working with PWS. The study sought to determine the attitudes and knowledge of Sri Lankan SLTs towards stammering, its treatments, PWS, and parents of children who stammer. This study also aims to explore whether the attitudes and knowledge of SLTs towards stammering would be different according to their sociodemographic characteristics. A quantitative, cross section survey research design was used. The Clinician Attitudes towards Stammering (CATS) inventory was completed by 116 SLTs practicing in Sri Lanka who were recruited through snowball sampling. Overall, negative attitudes towards stammering were found despite the acceptance of multifactorial nature of stammering. SLTs demonstrated misconceptions about PWS and their parents. Respondents felt confident of their ability to treat PWS effectively. However, they were not comfortable to work with PWS. They recognized parent counselling as a critical factor in the treatment of pre-schoolers and adolescents who stammer. Although teachers were perceived as being accurate in identifying students who stammer, SLTs were not confident in the teachers’ ability to handle stammering behaviours and psychological ramifications. Promoting continuing professional development in the area of fluency disorders would be beneficial to both speech and language therapy students and practicing clinicians for eliminating their negative stereotypical perceptions of stammering and to improve their comfort and skills for treating PWS.

Keywords: Stammering, Speech and language therapists, Attitudes, Knowledge
COMPARISON BETWEEN TWO DNA EXTRACTION METHODS FOR THE DETECTION OF LACTOBACILLUS IN YOGHURT

Wijini Amanda Wijayabandara, 1Punsisi Rasara Weerasooriya

Department of Biomedical Science, Business Management School, Sri Lanka

1punsisi@bms.edu.lk

ABSTRACT

Probiotics are formulated into dairy products like yoghurt to enhance its functional properties. By definition probiotics are a group of live microorganisms, capable in providing health benefits to the host when delivered in adequate quantity. The genera most commonly used in this dietary preparation is Lactobacillus. The aim of this study was to evaluate the efficiency of the Lactobacillus DNA extraction from yoghurt using a commercial kit (PromegaTM WizardTM Genomic DNA purification kit) and an optimized boiled cell extraction method. A total of 5 isolates, obtained from 5 different commercial brands were characterized as Lactobacillus by considering physiological, morphological and biochemical characteristics. The DNA was then extracted by each of the two methods, and tested in genus-specific PCRs to confirm the presence of Lactobacillus. The DNA quantity and quality was determined by spectrometry. The most efficient method of extraction was the kit based method, in which a substantial DNA yield with purity was generated. The DNA yields from both extractions were further subjected to one-way analysis of variance (ANOVA) using SPSS (Version 21, IBM) statistical software, in which a significant difference [P (0.019) < 0.05] was observed. In conclusion, the study emphasizes on the use of appropriate DNA extraction protocol as the DNA purity and the quantity contributes to quality biological analyses such as polymerase chain reaction (PCR).

Key words: Yoghurt, Lactobacillus, DNA yield
ASSESSMENT OF HUMAN HEALTH RISK OF CADMIUM (CD) AND LEAD (PB) THROUGH CONSUMPTION OF COW’S MILK

1E.M.N.S. Senarathne, E.M.R.K.B. Edirisinghe

Department of Physical Sciences, Faculty of Applied Sciences, Rajarata University of Sri Lanka, Mihintale, Sri Lanka

1sathsarasenarathne@gmail.com

ABSTRACT

Various anthropogenic activities and natural phenomena cause distribution of heavy metals in the environment and along with food chains, heavy metals enter into human body creating serious health issues. Cow’s milk acquires an important role in human diet and therefore, determination of heavy metal content in cow’s milk could be a significant indicator of the human health risk. Totally 40 samples of cow’s milk were collected from Nochchiyagama, Padaviya and Mihintale, areas in Anuradhapura district of North central province of Sri Lanka. Cadmium and lead levels of fresh milk were assessed by ICP-OES (Inductively coupled plasma - optical emission spectrometry). The highest level of Cd in milk, 9.13 μg/kg, was reported from Nochchiyagama while the lowest level, 0.046 μg/kg, was reported from Padaviya. The average Cd levels in milk in Nochciyagama (2.18 μg/Kg), Padaviya (0.89 μg/Kg) and Mihintale (0.23 μg/Kg) were lower than the maximum allowable limit of Cd in milk, 2.6 μg/kg. The average Pb levels in milk were varied between 40.67 (Padaviya) and 21.85 μg/Kg (Mihintale) with the highest value of 170.249 μg/Kg from Padaviya, showed higher values than maximum allowable limit of Pb, 20 μg/kg. The Provisional Tolerable Weekly Intake (PTWI) of Cd, calculated based on extreme exposure, varies between 193.07 and 1,831.40 L per week of 60 Kg for body weight person. The PTWI values for Pb varies between 36.9 and 68.7 L, thus contamination levels of Cd and Pb may not cause any health risk by consumption of fresh milk.

Keywords: Cadmium, Lead, fresh milk, ICP-OES
Type 1 diabetes (T1D) is an autoimmune disorder characterized by the destruction of functional insulin-producing pancreatic β-cells caused by autoreactive T cells. Two possible approaches for replenishing the β-cells are replacement by transplanting cadaveric islets or β-cells derived from induced pluripotent stem cells (iPSC) or human embryonic stem cells (hESC) and induction of endogenous regeneration. As of today, the use of pluripotent stem cells (PSCs), including embryonic stem cells (ESCs) and induced PCSs (iPSCs) is one of the most promising therapeutic approaches. Production of glucose-sensitive, insulin-secreting beta cells derived from pluripotent hESC is an ideal cure for the treatment of diabetes. However, studies suggest the need to improve induction approaches as the production of insulin of these cells is lower than that of the endogenous pancreatic β-cells. The current review focuses on an overview of the advances in the generation of hESC-derived pancreatic β cells, generation of insulin-secreting islet-like clusters from hESCs in vitro and how the in vivo environment responds to glucose by the secretion of human C peptide and insulin when transplanted into animal models and the limitations and challenges of this therapy for the successful treatment of diabetes. Thereby, emphasizing the fact that further maturation of differentiated β-cells will be able to generate insulin-secreting cells for transplantation into patients with T1D as a potential therapy. Currently, the first phase 1/2 clinical trials with ESC-derived pancreatic progenitor cells are ongoing.

Keywords: Type 1 diabetes, pancreatic β cells, human embryonic stem cells
ARE PRISON OFFICERS IN SRI LANKA AT RISK OF ACQUIRING TB?

1A. I. P. Samarasinghe, 2N.C. Pallewatte, 3Dhammika Sirisena Vidanagama, 4A. Ramachandran, 5P. C. Liyanage, 6R. Senthikumara, 7R.M.A.D.I. Rathnayake

1Anti Filariasis Campaign, Ministry of Health, 3National Hospital Sri Lanka, 4,5National Programme for Tuberculosis Control and Chest Diseases, 2,6,7District Chest Clinic, Colombo

aipsamarasinghe@gmail.com

ABSTRACT

Tuberculosis (TB) remains a major public health problem in Sri Lanka. Prisoners and prison employees are at a higher risk of acquiring TB due to environmental conditions favouring airborne transmission in prisons. To determine the prevalence of pulmonary TB (PTB) among officers employed in main prisons in Colombo. A descriptive cross-sectional study was carried out among 526 prison officers working directly in contact with prisoners for more than 3 months. A self-administered questionnaire was used to collect socio-demographic, lifestyle, medical and contact information. All study participants underwent symptom screening and clinical examination by a medical officer to identify presumptive PTB cases. Identified presumptive PTB cases were subjected to chest X-ray and sputum testing with direct microscopy and Xpert (MTB/RIF). Majority (84.6%) were males and 60% aged between 30-50 years. Majority (84.8%) were guards and 3.4% were health workers. Sixty four percent had worked in prisons for more than 5 years. Eighty-three (15%) were identified as having presumptive PTB. One of them (0.1%) with diabetes and chronic kidney disease had chest X-Ray suggestive of TB, bacteriologically confirmed by positive sputum microscopy and Xpert (MTB/RIF) test. Study reveals a PTB prevalence of 190 per 100,000 among prison officers. It is threefold higher than the TB prevalence estimated for the general population of Sri Lanka. This highlights the importance of further studies among employees in high risk settings especially those with co-morbidities.

Keywords: Tuberculosis, prison officers
COMPARATIVE PHYTOCHEMICAL ANALYSIS AND ANTIOXIDANT ACTIVITIES OF NIGELLA SATIVA LINN POWDER AND ANETHUM SOWA LINN POWDER

1Kaumadi Karunagoda, 2Pathirage Kamal Perera, 3Hemantha Senanayake, 4Menuka Arawwawala

1Department of Prasutitantra Kaumarabhritya, 2Department of Dravyaguna Vignana,
3Department of Obstetrics and Gynecology, Faculty of Medicine,
1,2Institute of Indigenous Medicine, University of Colombo, Sri Lanka
4Industrial Technology Institute

ABSTRACT

Nigella sativa (Family: Ranunculaceae) and Anethum sowa (Family: Apiaceae) are commonly use herbs in Ayurveda medicine from ancient time and used in the treatment of uterine fibroids island wide in Sri Lanka. Uterine fibroids are the most common benign tumor of the female reproductive tract and occur in about 25% of all women of reproductive age and up to 30 – 40% of women over age 40. Uterine fibroids are most common uterine tumor in reproductive age women which still have no gold standard medical treatment. A clinical study was conducted to investigate the efficacy of N. sativa and A. sowa in reduction of volume of uterine fibroids by ultra sonography after the treatment of these drugs respectively. As both drugs were able to reduced the of volume of uterine fibroids in a successful manner, present study was focused to compare the chemical profiles (by TLC fingerprints) and antioxidant activities (DPPH scavenging activity, total phenol content and total flavonoid content) of N. sativa and A. sowa. Compared to the TLC fingerprint profile of N. sativa and A. sowa, more spots were prominent in A. sowa. Furthermore, TLC fingerprints of N. sativa and A. sowa can be used as standards for authentication of these plants. DPPH radical scavenging activity was significantly higher in A. sowa than that of N. sativa. Free radical scavenging activity was not demonstrated in low concentrations of Nigella sativa seeds. Moreover, total polyphenol and flavonoid contents were significantly higher in A. sowa than that N. sativa. In conclusion, A. sowa had shown more antioxidant activities than that of N. sativa and may useful for treating uterine fibroids.

Key words: Phytochemical Analysis, Antioxidant Activities, Nigella sativa Linn, Anethum sowa Linn
PHARMACOGNACY OF PATHTHU DRAVYA FOR AMAVATHA SHOTHA
USED IN NADUNGAMUWA WEDA PARAMPARA

W.A.A.P.S. Weerasooriya

Department of shalya shalakya, Gampaha Wickramarachchi Ayurveda institute, Sri Lanka
parshadi90@gmail.com

ABSTRACT

Traditional medicine is the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences. Chronic/Acute inflammatory joint disease Amavata (Rheumatoid Arthritis) is a disease that some medical systems are failed with treating. This causes swelling, pain and stiffness of joints. As Ayurveda texts, it manifested in joints of hasta, pada, sira, trika, gulpha, janu and uru. The main symptoms produced are Angamarda Aruchi, Trishna, Gouravam, Apaka & Shotha. In traditional system the shothahara paththu is most significantly used in ama vatha shatha locally. As the Ingredients of paththu Thala, Sathakuppa, Eranda seeds, Aralu, Rathhadun, and Siyabala leaves prominently it shows Thiktha-Madhura rasa reading the Rasa property. And as to the descending order of other rasa katu-Kashaya-Amla rasa can be seen. lawana rasa was not found. According to the Guna Property mostly Lagu-Ruksh-Thikshna guna were included and snigdha-Sara-Guru guna were containing in very less amount. Regarding the Property of Veerya. It contains 78% of Ushna Veerya and 22% of Sheetha Veerya. Under the property of Vipaka 80% of drugs in Katu Vipaka, 20% madhura vipaka and 4% in Amla Vipaka. So the Amla Vipaka herbs may used in very little. Therefore the shotha contributed by Madura Rasa Vipaka, Ushna Veerya, and Vatha dosha will be removed and thiktha Rasa, ushan veerya and kapha dosha became to shaman state. It clearly shows in the traditional ama vatha shotha paththu reduce the shotha condition by contributing shamana of Vata and kappa dosha very well.

Keywords: Shothahara, Amavatha, Paththu, Dravya, Guna
IDENTIFICATION OF STREPTOCOCCUS IN TABLE OLIVE SAMPLES AND ANALYSIS OF THEIR ANTIBIOTIC RESISTANCE

Mohammed Faizan Mohammed Mishal, Punsisi Rasara Weerasooriya
BMS, School of Science, Sri Lanka
mishaalfaizan@gmail.com, punsisi@bms.edu.lk

ABSTRACT

Fermented olives are a rich source of nutritional compounds and probiotics. Probiotics are defined as living bacteria that confer health benefits to the host when administered in adequate amounts. The purpose of this study was to identify the genus of Streptococcus in fermented olives samples and analyze their antibiotic resistance. The process was carried out by culturing 5 samples in MRS agar followed by biochemical tests to identify pure Streptococcus colonies and then subculturing was performed. Afterwards DNA extraction was carried out by boil cell and kit based extractions method. The DNA yield and purity were compared between the two methods. PCR was performed using genus specific primers to identify Streptococcus. In addition to that, the resistance gene for tet(M) and erm(B) were detected by PCR and visualized by gel electrophoresis. Out of 5 samples, 4 samples had proper growth in MRS agar. After extraction when comparing DNA yield between the two methods were statistically significant (p-value < 0.05). The highest yield was observed by boil cell method. Out of 4 samples, 2 were positive for streptococci in PCR identification. Sample 2 was identified to contain erm(B) and tet(M) was not found. Some probiotics have been reported to harbour antibiotic resistance genes which can be transferred to pathogens in the gut. Therefore probiotic bacteria used in the food industry should be screened for resistance genes in order to ensure safety of the consumers.

Keywords: Streptococcus, Probiotics, Resistance
COMPARATIVE PHYTOCHEMICAL, CHROMATOGRAPHICAL ANALYSIS AND ANTIOXIDANT ACTIVITIES OF NISHA TRIPAL DECOCTION AND IT'S FREEZE DRIED POWDER

keshani Randima, P.K Perera, Menuka Arawwawala

1,2Institute of Indigenous Medicine, University of Colombo, 3Industrial Technology Institute, Sri Lanka

ABSTRACT

NishaTripal decoction is a traditional polyherb formulation which is used extensively by Sri Lankan Ayurvedic and Traditional medical practitioners to treat Diabetes Mellitus. Eight different medicinal plants are present in this decoction. The aim of the present study was to establish phytochemical, chromatographical analysis of the decoction and its freeze dried powder. In addition, invitro antioxidant activity was evaluated for the freeze dried powder of Nisha Tripal decoction. Phytochemical screening of the decoction and its freeze dried powder exhibited many primary and secondary metabolites. Organoleptic properties indicated, the decoction was a dark brown liquid with a characteristic odor, bitter taste and was sticky on touch. pH and density of the decoction were 5.22 and 1.009075g/cm3 at 27 °C. Furthermore, peaks at similar Rf values for both decoction and freeze dried powder indicated the presence of similar bioactive compounds. Invitro antioxidant activity revealed that total polyphenolic content and DPPH radical scavenging activity were in significant levels in freeze dried form of Nisha Tripal decoction. The findings from this study provided evidence that the decoction contains medicinally important bioactive compounds which helps amelioration of Diabetes Mellitus. In addition, quality control parameters were established for Nisha Tripal decoction and its freeze dried form for the first time.

Keywords: NishaTripal, TLC, HPTLC, phytochemicals, antioxidants
EVALUATION OF SHELF LIFE OF READY TO USE DOSAGE FORM OF TAMALAKYADI DECOCTION: AN AYURVEDIC FORMULATION

1Dahanayake J. M, 2Perera P. K, 3Galappaththy P, 4Fernando P. I. P. K, 5Arawwawala L.D.A.M

1,2Department of Dravyaguna Vignana, Institute of Indigenous Medicine,
3Department of Pharmacology, Faculty of Medicine, University of Colombo, 4,5Research and Development Complex, Industrial Technology Institute, Sri Lanka

ABSTRACT

Sri Lankan traditional system of medicine is a combination of the indigenous medicine of the country and the Ayurveda system of medicine received from India. These two medicinal systems contain different types of dosage forms which are used effectively for preventing and curing diseases since long time. Among these dosage forms decoctions are widely used for the treatments. Decoctions are liquid dosage forms with 24 hour shelf life. Therefore, patients on treatments with decoctions need to prepare it every day which causes difficulties in their busy lifestyles. Also they have to spend more hours per day to prepare decoction. Due to these reasons people are trying to deviate from these inconveniences and move to easy to use dosage forms in Traditional systems as well as in the allopathic system. Hence there is a high demand in globally for developing novel dosage forms from the traditional preparations. When developing novel dosage forms using Traditional medicines it is essential to ensure quality of the product used. Quality control of Traditional medicine is therefore, a prerequisite for a clinical trial involving a traditional medicinal product. Determination of the stability of the finished product is an important part of the drug standardization. Hence in present research work, evaluation of accelerated stability study under accelerated conditions (Temperature: 40o C ± 2o C and Relative humidity: 75 ± 5 %) was conducted to find out the shelf life of freeze dried powder as ready to use dosage form of Tamalakyadi decoction (TD) which is an effective herbal decoction for allergic rhinitis. Accelerated stability studies were done to evaluate the shelf life of Freeze dried powder. Organoleptic characters and the analytical parameters including moisture content, pH value, total ash, water soluble extractives, microbial load and TLC fingerprint patterns were evaluated at regular intervals (at initial stage, after 1, 3 and 6 months) according to the WHO guidelines. There was no significant change when compared the organoleptic characters, physic-chemical parameters, microbial load and TLC fingerprint profile at initial stage with that of 1 or 3 or 6 months. The present investigation reveals that the freeze dried powder of the TD was stable (in terms of physico-chemical and Phytochemical parameters) under accelerated conditions of storage up to 6 months.

Keywords: Traditional medicine, shelf life, stability study, decoctions
EXPERIENCE IN TRANSLATIONAL RESEARCH OF TRADITIONAL MEDICINE: VALUES AND CHALLENGES

Olukemi A. Odukoya

Department of Pharmacognosy, Faculty of Pharmacy, University of Lagos, Nigeria
olukodukoya@unilag.edu.ng

ABSTRACT

Herbal medicines play an enormous role in peoples’ health care and livelihood as form of Traditional Medicine (TM) in Nigeria. TMs are available for all to use, in communities with the knowledge passed from generation to generation from observations, experiences and needs. People therefore rely on these herbal medicines for their health and also as income generators through gathering and selling the herbs. The Nigerian government recognizes the importance of herbal medicines for the citizens so the products and formulations are listed by the regulatory body. In recent times, the Nigerian markets have become flooded with expensive foreign herbal products. Hence, the impetus to develop market of herbal medicinal products, sourced from indigenous plants and prepared after careful simple scientific analysis. There is indeed a vital need to address in a formal manner the use and sales of herbal medicine products and the plants used for their production. Several local markets in Nigeria have special areas for sale of herbal medicinal products such as plant/animal parts and minerals, for formulation. As an academic, interest in TM developed into formulation and production of galenicals first privately and later translated into community use within the University in Nigeria. Operating a private enterprise, eight products are currently being enlisted with NAFDAC as teas to be able to use them as is. Preservation of herbal medicines and sustainability of herbal factories remains a big challenge in Nigeria with collection of raw materials from the wild which can lead to over exploitation of the biodiversity.

Keywords: Traditional Medicines, Herbal formulations, Wealth creation, Sustainability
CASE STUDY ON ASSESSING STUDYING PATTERNS OF AERONAUTICAL ENGINEERING UNDERGRADUATES OF GENERAL SIR JOHN KOTELAWALA DEFENCE UNIVERSITY IN SRI LANKA

K. A. D. D. Kuruppu, C. J. Hettiarachchi

Department Aeronautical Engineering, Faculty of Engineering, General Sir John Kotelawala Defence University, Sri Lanka

ABSTRACT

Study patterns consider as one of the prominent factors in academic achievements. These studying patterns can be evaluated under several parameters such as regular study, study space, efficient in reading, listening to lectures, and active participation for the lessons, doing homework, efficient writing of notes, preparation for exams and attending for exams. In this research, the sample consisted of all the undergraduates (29) studied in the Department of Aeronautical Engineering at their final year in 2015. The data related to studying patterns were collected using a self-administered questionnaire which includes 30 questions in the form of four point Likert. The objectives of this study were to evaluate the studying patterns of Aeronautical Engineering undergraduates who studied at their final year in the university and compare the influence of their studying patterns with their Academic class they obtained. A self-administered questionnaire was used to collect the data. Six studying pattern parameters were evaluated in this study. The Academic class achieved by the students who took part in this survey, were also considered for this study after they obtained their Final Grade Point Average (FGPA). The measured studying pattern parameters included reading text books, studying, memorizing, preparing for exams, time management and taking down notes. If the score relating to any study pattern parameter increases, the overall study pattern also increases. When the total points gathered from all study pattern parameters is high, the overall study pattern of that particular student is also getting higher. As per the statistics this scale reported the high level of reliability (internal consistency) as 0.604. In this research, internal consistency of the scale was found as 0.564. Descriptive statistics method was applied at this stage in order to analyze the study pattern of the students. Based on the responses given by the responders, the frequency levels for each question was tabulated in MS Excel worksheet. The Excel worksheet was uploaded to the IBM Statistical Package for the Social Sciences (SPSS) software and each study pattern parameter was evaluated. It was found that only 31.7 % of the studied group effectively practice the habit of reading text books and only 39.3 % effectively engage in studying. 33.8 % from the whole population practice effective memorizing methods while 56.6 % of students prepare for exams well in advance. Moreover, only 26.9 % of students practices effective time management practices but only 32.4 % of students were good in effective note writing skills. As these studying skills are inefficiently used by majority of the students only 7% of the students from the total were obtained First Class degrees while the rest could get only general passes.

Keywords: Study patterns, Aeronautical Engineering, Undergraduates
IDENTIFYING THE CHALLENGES OF BIG DATA USAGE IN THE EDUCATIONAL SECTOR OF SRI LANKA

Anuruddika Upul Bandara Ratnamalala

Faculty of Business Management, International College of Business and Technology, Sri Lanka

aubupul@gamil.com, aubr84@mun.ca

ABSTRACT

The volume and velocity of data generated have increased substantially in the education sector of Sri Lanka. Although there is an increase, the majority of educational employees do not realize the importance or value of data and often discard without taking into consideration the numerous benefits big data can offer to students and educational institutions. The root causes that contribute to the lack of utilization of big data are mainly due to lack of infrastructure, trained workforce, standards of data usage, security issues, policies, and education of employees. The main objective of this study is to identify the challenges faced by the education sector of Sri Lanka when dealing with big data implementation and further recognize the incentives that encourage the use of big data to support the development, profitability, and decision-making capabilities of Sri Lanka. Qualitative data will be collected from interviews taken from managers, marketing professionals, accountants, and lecturers in various educational institutions across Sri Lanka using snowball and convenience sampling techniques. Furthermore, to establish how educational employees use big data, a survey will be distributed to various educational employees working in different regional educational institutions across Sri Lanka. SPSS is used to determine the correlation between independent variables (infrastructure, trained workforce, policies, education, security, and standards) and dependent variable (data usage). The findings of this research would help educational employees understand the value of big data. Moreover, this research would contribute to improving the profitability and standards of decision-making processes in the education sectors of Sri Lanka.

Keywords: Big data, data usage, education sector, Sri Lanka, data velocity
MODELLING, SIMULATIONS AND PROTOTYPING OF ORAL PHYSIOTHERAPY DEVICE

Kumara, K.J.C., Galappaththi U. I. K., Induruwa I.V.T.P, Wijesekara W.A.M.S

Department of Mechanical and Manufacturing Engineering, Faculty of Engineering,
University of Ruhuna, Sri Lanka

ABSTRACT

One degree of freedom soft actuated device developed by this research is operated by using soft-actuation to eliminate problems of existing mouth exercising devices by taking the patient jaw opening biodynamics, comfortability, shape of the oral cavity into account. The lowering push and pressure required to apply through a hand bole manually, is determined by taking the estimation data of the jaw opening forces, safety factor, cyclic operation and elastomer properties of the medical grade soft rubber. OSF is a common disease has been identified among most South Asians and Africans and that also has a trend of spreading in the Europe. In Oral Submucous Fibrosis [OSF], fibrous bands and burning mucosal pain are restricted to oral opening and that resulted limited speech and eating ability. Oral physiotherapy and the surgical treatments are mainly used to treat such patients depending on the severity of the disease. FEA simulations conducted for the design shows that the device is capable enough to maintain jaw opening gap while maintaining highest pressure with no material failures. Lab experiment shows that the device is in proper working condition and can withstand for such a pressure when operating continuous up-down motion. OSF and TMJ disorder patients will be benefitted by this works.

Key Words: Oral Physiotheraphy, OSF, Soft Actuators
AN APPLICATION TO CATEGORIZE THE GRAMMATICAL FORMATION OF A GIVEN SINHALA TEXT USING NLP TECHNIQUES AND DEVELOPING A SINHALA GRAMMAR CHECKER PROTOTYPE

K.K.G.M. Chathurika, M.D.W. De Silva, S.M.D.K. Senanayake, N. Samarasinghe, Dr. K.P.P.S Pathirana

\texttt{kariyawasamadushi@gmail.com}

ABSTRACT

\
iyārabā (Viyarana) is an application which separates words in a given text according to the grammatical groupings and rules using POS (Part of Speech) tagging. POS tagging is an NLP (Natural Language Processing) related technique. NLP is a branch of AI (Artificial Intelligence) that helps computers understand, interpret and manipulate human language. POS tagger can be used as a prerequisite to other linguistic programs like Sinhala grammar checkers and voice recognition systems. In iyārabā application, when the user enter a text, the tagger will categorize each inserted text according to the Sinhala grammatical properties and as the output it will state the grammatical property of that inserted text as whether it is a noun, a verb, an adjective or a pronoun in front of the each word. Ambiguity (different meanings for one word) problem in Sinhala words and having large number of grammatical rules are the main points to be considered when developing this system. Through this application it can identify the ambiguous words by using Hidden Markov Model (HMM) and use of stochastic methodology to implement the tagger provides the opportunity to identify new unknown words which cannot be found in the training data. As a further extend to this POS tagger, a prototype of a Sinhala grammar checker is to be implemented which is a unique application. This will be a novel implementation which will aid the end-users to learn the Sinhala language easily and to know the grammatical properties of this complex language.

Keywords: POS (Part of Speech) tagging, NLP (Natural Language Processing), Hidden Markov Model (HMM), AI (Artificial Intelligence), iyārabā (Viyarana)
TECHNOLOGY TRANSFER OPPORTUNITIES FOR INTRODUCING VACUUM ASSISTED RESIN TRANSFER MOULDING TECHNIQUE TO SRI LANKAN BOAT BUILDING SECTOR

M.T.T Ranjan, Galappaththi U. I. K, Baduge S. Wimalsiri W.K.

1,2,3 Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, University of Ruhuna, 4 Department of Mechanical Engineering, Faculty of Engineering, University of Moratuwa, Sri Lanka

ABSTRACT

The boat building industry is one of a key export sector identified under the national export strategy of Sri Lanka (2018-2022), which has the capacity to substantially contribute to accelerate national economic growth. Currently, the boat building industry of Sri Lanka is having a number of issues which include poor quality, lack of trained human resources for boat building, productivity issues and environmental issues. Integration of advanced composite materials and manufacturing technologies will be able to hinder these existing issues of boat manufacturing industry in Sri Lanka. Vacuum Assisted Resin Transfer Moulding (VARTM) is one of the advanced composite manufacturing techniques used for boat manufacturing in the global industry. There are around 25 active boatyards in Sri Lanka manufacturing various types of boats for local and international market. Nevertheless, the survey data of this research work shows around 80% of them are using traditional hand layup and spray layup techniques for boat manufacturing. The main objective of this research is to explore the opportunity of integrating VARTM process for boat manufacturing sector in Sri Lanka. Consequently, field studies and surveys were conducted to identify the barriers and issues faced by the local boat manufacturers in integrating novel VARTM technique for their industries. The results of the study illustrate that the boat manufacturing sector of Sri Lanka is facing significant challenges which include product design, manufacturing, lack of specialized framework to continuously guide technology transfer, the negative behavior pattern of consumers, and the issues associated with the supply chain. This study presents a framework for addressing the current issues by emphasizing the step by step procedure to integrate VARTM process for the Sri Lankan boat manufacturing industry.

Key Words: Boat manufacturing, Composite designing and manufacturing, Technology integration.
STUDY ON WOMEN'S PERSPECTIVE TOWARDS AVIATION CAREERS IN SRI LANKA

K. A. D. D. Kuruppu, C. J. Hettiarachchi

Department Aeronautical Engineering, Faculty of Engineering, General Sir John Kotelawala Defence University, Sri Lanka

ABSTRACT

The aviation sector is very important to Sri Lanka both in terms of contribution to employment as well as for the growth in Gross Domestic Product. The aviation sector is dominated by men rather than women. As according to the literature, one of the major issues that women have to face is lonesomeness while other factors including public opinions and political pressure. Besides, the women who were seek to enter for aviation related jobs have under gone challengers related to educational and occupational stereotypes in physical, cognitive and psychological abilities. It is imperative to understand the underrepresentation of women in other sectors in aviation other than in flight crew which induce professionalism to women in aviation. The purpose of this study was to identify the women’s perspective towards aviation sector jobs in Sri Lanka. 10 in-depth semi structured face-to-face interviews were conducted with females who were selected as embedded - single case design method as per in statistics to order to represent different divisions in aviation. Prior to conduct in-depth semi structured face-to-face interviews, the questions were predetermined. 10 females from different divisions in a same organization was considered for the interview. The responders (10 women) were selected based on embedded - single case design and all the face-to-face interviews were conducted at the same day. Individual interviews were carried out to collect unbiased information from the responders. The research objectives were briefed to each interviewee prior to the interview. The snowball sampling method was enabled the interviewees to introduce the research for other responders who were in the target population. The results revels that there are several issues that women should overcome if they select aviation sector as their long term career path. In-flexible work schedules, lack of training opportunities, and also male work culture were identified as the major factors that influence of their work capacity. The gender imbalance can be rectified by implementing employer level and national policies which nurture more women in aviation. Majority of the women who are in the aviation sector jobs like to see more female representation in aviation sector jobs. Hence, as per this study reveals, it is mandatory to address the difficulties pertaining with in-flexible working hours for women in order to retain more women in aviation sector jobs.

Keywords: Aviation, Sri Lanka, Careers, Women
PERFORMANCE EVALUATION OF A SUSTAINABLE METALWORKING FLUID FOR TURNING OF 0.2% C AND AISI 304 STEELS

1Krishan Wickramasinghe, 2Indika Perera, 3Himan Punchihewa, 4Hiroyuki Sasahara

1,4Department of Mechanical Systems Engineering, Tokyo University of Agriculture and Technology, Japan, 2Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, University of Ruhuna, 3Department of Mechanical Engineering, Faculty of Engineering, University of Moratuwa, Sri Lanka

ABSTRACT

Metal machining is widely used to produce machine components for various applications in automotive, aerospace and marine industries. Mineral based water-soluble Metal Working Fluids (MWFs) which are frequently consumed during machining process content harmful chemical ingredients and express adverse effect to the human health and environment. Recently, the potential of vegetable oils have identified to address the existing problems in mineral based MWFs and proven the industrial applicability. The authors have developed a water soluble MWF, based on white coconut oil and food grade surfactants. The rise of the work tool interface temperature with the increment of the cutting speed substantially soften the work material and changes the chip curl radius. The application of the MWF reduces the temperature gradient with better cooling and lubrication by reducing the frictional force between contact surfaces. Hence, the identification of chip curl radius can be used to evaluate the cooling and lubrication capability of the MWF. This paper describes the experimental investigation on chip curl radius with based on empirically developed methodology for 0.2% C and AISI 304 Steels in turning operation with the recommended cutting parameters by the tool and materials manufactures under dry machining, mineral oil based MWF and developed MWF.

Key Words: Chip Curl Radius, Turning, Metal Working Fluid
POTENTIAL APPLICATIONS OF 3D BIO PRINTING ON TUMOR PRINTING APPLICATIONS

1J.G.Varuna Priyanka, 2Galappaththi U. I. K, 3Baduge S, 4Sameera R. Samarakoon
1,2,3Department of Mechanical and Manufacturing Engineering, Faculty of Engineering,
University of Ruhuna, 4The Institute of Biochemistry, Molecular Biology & Biotechnology,
University of Colombo, Sri Lanka

ABSTRACT

Modern manufacturing has revolutionized the life through the adaptation of new technologies. In this regards one of the most eye opening area is 3D printing. The 3D printing process also identified as additive manufacturing. The technology is such that material is placed layer by layer on top of each other to any shape of object designed by Computer Aided Design (CAD) tools. The opposite is subtractive manufacturing and it also gained popularity. Simply it is defined as the process of joining materials to make objects from 3D model data, usually layer upon layer, as opposed to subtractive manufacturing methodologies. Currently the 3D bio printing is tried as a mean of manufacturing human organs with soft tissues such as ears. The idea is already tested and shown lots of promises. The tumor printing is more complex than printing organs like ears and cartilages. It obviously requires more parameters to be considered in broader scopes of applications. These applications are varied from study of the tumor behavior to drug discovery. Tumor is a very complex entity because its characteristics are not uniform. The printing of tumors is much more difficult because of the geometrical complexity and the variance of the Extra Cellular Matrix (ECM). The task could get more complex if the chemical properties such as density, temperature effects and viscosity are also considered. This requires to manufacture customized machines, adaptable processes and discovering suitable bio materials.

Keywords: Additive Manufacturing, Tumors, Biomaterials, Extra-Cellular Matrix, Model Data
**FUTURE CONFERENCE CALL FOR PAPERS OPEN NOW**

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>03rd International Conference on Peace and Conflict Management</td>
<td>Pretoria, South Africa</td>
<td>27th &amp; 28th February 2020</td>
</tr>
<tr>
<td>03rd International Conference on Sustainable Development</td>
<td>Pretoria, South Africa</td>
<td>27th &amp; 28th February 2020</td>
</tr>
<tr>
<td>04th International Conference on Apparel Textiles and Fashion Design</td>
<td>Colombo, Sri Lanka</td>
<td>27th March 2020</td>
</tr>
<tr>
<td>06th International Conference on Education and Distance Learning</td>
<td>Colombo, Sri Lanka</td>
<td>21st &amp; 22nd May 2020</td>
</tr>
<tr>
<td>03rd International Conference on GLBT Studies</td>
<td>Colombo, Sri Lanka</td>
<td>21st &amp; 22nd May 2020</td>
</tr>
<tr>
<td>03rd International Conference on Non Communicable Diseases</td>
<td>Colombo, Sri Lanka</td>
<td>21st &amp; 22nd May 2020</td>
</tr>
<tr>
<td>03rd International Conference on Agribusiness Marketing</td>
<td>Colombo, Sri Lanka</td>
<td>21st &amp; 22nd May 2020</td>
</tr>
<tr>
<td>03rd International Conference on Election and Democracy</td>
<td>Paris, France</td>
<td>05th June 2020</td>
</tr>
<tr>
<td>International Conference on Colour, Culture and Modern Art</td>
<td>Paris, France</td>
<td>06th June 2020</td>
</tr>
<tr>
<td>International Conference on Ocean Engineering &amp; Maritime Technology</td>
<td>Maastricht, Netherland</td>
<td>12th June 2020</td>
</tr>
<tr>
<td>International Conference on Management, Health, Social Science &amp; Engineering</td>
<td>Kathmandu, Nepal</td>
<td>20th &amp; 21st August 2020</td>
</tr>
<tr>
<td>05th International Conference on Ayurveda Traditional Medicine and Medicinal Plants</td>
<td>Brisbane, Australia</td>
<td>28th &amp; 29th August 2020</td>
</tr>
<tr>
<td>02nd International Conference on Arts, Business and Education</td>
<td>Colombo, Sri Lanka</td>
<td>29th &amp; 30th October 2020</td>
</tr>
<tr>
<td>02nd International Conference on Drug Abuse Prevention and Illegal Drugs</td>
<td>Colombo, Sri Lanka</td>
<td>29th &amp; 30th October 2020</td>
</tr>
<tr>
<td>04th International Conference on Multidisciplinary</td>
<td>Colombo, Sri Lanka</td>
<td>29th &amp; 30th October 2020</td>
</tr>
</tbody>
</table>

For abstract submission fill in the online submission form on each website **OR** Email Paper / Abstract with CV to helpdesk@gariteam.com
Whatsapp / Viber +94 70342 8651