# CRITERION III - RESEARCH, INNOVATION AND EXTENSION

## 3.4.3 Number of research papers in the Journals notified on UGC website during the last five years

### LIST OF RESEARCH PUBLICATION -2020-2021

| S.No | Title of the Paper | Name of the Author/S | Department | Name of the Journal | Link |
|---|---|---|---|---|---|
| 1 | Iraimaiyum Manithamum : Mathura kaviyar Matrum Thirupaanar padalkal - Or Aaivu | S. Chenjulakshmi | Tamil | International Journal of Tamil Language and Literary Studies | VIEW |
| 2 | Valluvarum Sithere | D. Kanaja Devi | Tamil | Modern Tamil Research | VIEW |
| 3 | Silapathigarathil Pen Deivangal | D.Kanaja Devi | Tamil | Modern Thamizh Research | VIEW |
| 4 | Pen Theiva Vazhipaaddil Mangalampettai Mangala Gnayaki | S.Lakshmi | Tamil | Modern Thamizh Research | VIEW |
| 5 | Ilakiyangal karpithal-naveena padathittam | S.Menaka | Tamil | ModernWorld Curriculam | VIEW |
| 6 | Odupparai Naagaramman koyil Thangammai Thaayammai Vazhipaadu | Padmavilasini | Tamil | Modern Thamizh Research | VIEW |
| 7 | Creating Phonemic awareness through Skill based activities | K. Kanthimathi | B.A English | Indian Journal of Adult Education | VIEW |
| 8 | A Sound Approach to teach speech sounds | K. Kanthimathi | B.A English | Kala Sarovar | VIEW |
| 9 | Aspect of Transformation in Woman's Life : A Study in A.K.Ramanujan's " A Flowering Tree" | S.Sharmila | B.A English | IJCRT | VIEW |
| 10 | Exploitation of the Subaltern Women in Mahasweta Devi's "Kunti and the | S.Sharmila | B.A English | JICR | VIEW |

| | | | | | |
|---|---|---|---|---|---|
| | Nishadin" | | | | |
| 11 | Exploring Literariness in Stephen King | S. Sivaranjani | B.A English | European Journal of Molecular & Clinical Medicine | VIEW |
| 12 | Mathematical Model for the Effects of HPA Axis Pertaining to Sleep Loss by Applying Properties of Certain Subclasses of Analytic Univalent Functions | V. G. Shanthi | B.Sc Mathematics | Drugs and Cell Therapies in Hematology | VIEW |
| 13 | Mathematical model for abnormalities of HPA axis due to stress associated with analytic univalent functions | V. G. Shanthi | B.Sc Mathematics | Malaya Journal of Matematik | VIEW |
| 14 | Mathematical model for abnormalities of HPA axis due to stress associated with analytic univalent functions | Reimila Judit | B.Sc Mathematics | Malaya Journal of Matematik | VIEW |
| 15 | Perfect Matching of Bridge Graph based on Geometric and Algebraic multiplicity | S Hemalatha | B.Sc Mathematics | Journal of Xidian University | VIEW |
| 16 | P System for patterns of Seirpinski Square Snowflake Curve | S.Hemalatha | B.Sc Mathematics | Punjab University Journal of Mathematics | VIEW |
| 17 | The stability of independent transversal domination in trees | K Priya Bhanthavi | B.Sc Mathematics | Discrete Mathematics Algorithms and Applications | VIEW |
| 18 | Dual of B-Almost Distrubutive Fuzzy Lattices | K. Rekhalakshmi | B.Sc Mathematics | Journal of Critical Reviews | VIEW |
| 19 | Crystal structure analysis and quantum chemical study of two macrocyclic compounds | S. Lakshmi | BSc., Physics | Jounal of Molecular structure | VIEW |
| 20 | An over review on recently developed techniques,mechanism and intermediate involved in the advanced azo dehydration for industrial applications | C.Mansiya | B.Sc Chemistry | Journal of molecular structure | VIEW |
| 21 | Synthesis, spectroscopic, thermal, structural investigations | S. Niranjani | B.Sc Chemistry | Journal of Molecular Structure | VIEW |

| | | | | | |
|---|---|---|---|---|---|
| | and biological activity studies of charge-transfer complexes of atorvastatin calcium with dihydroxy-p-benzoquinone, quinalizarin and picric acid | | | | |
| 22 | Heavy-vehicle classification and detection using deep learning models transfer-learning techniques | R.Radha | B.Sc Computer Science | International Journal of iInformation Technology and Electrical Engineering | VIEW |
| 23 | Heavy-vehicle detection based on YOLOv4 featuring data augmentation and transfer-learning techniques | R.Radha | B.Sc Computer Science | Journal of Physics: Conference Series | VIEW |
| 24 | Big Data Analytics Parameters, Domains and Techniques in a Nutshell | Tina Sherin | B.Sc Computer Science | Annals of R.S.C.B | VIEW |
| 25 | Efficiency - Optimized Approach - Vehicle Classification Features Transfer Learning and Data Augmentation Utilizing Deep Convolutional Neural Networks | R. Radha | B.Sc Computer Science | INTERNATIONAL JOURNAL OF APPLIED ENGINEERING RESEARCH | VIEW |
| 26 | An Empirical Research on Vehicle Detection employing YOLOv2 features Transfer Learning and Data Augmentation | R. Radha | B.Sc Computer Science | JOURNAL OF ENGINEERING, COMPUTING & ARCHITECTURE | VIEW |
| 27 | An effective approach to feature extraction for classification of plant diseases using machine learning | R. Radha | B.Sc Computer Science | Indian Journal of Science and Technology | VIEW |
| 28 | Comparative Analysis of Various Feature Extracting Algorithms Using Satellite Images | R. Radha | B.Sc Computer Science | Journal of Advanced Research in Dynamical & Control Systems | VIEW |
| 29 | A Greenhouse Monitoring and Crop Prediction System Implemented using IoT, | M. Lavanya | B.Sc Computer Science | International Journal of Recent Technology and Enginee-ring (IJRTE) | VIEW |

| | | | | | |
|---|---|---|---|---|---|
| | Arduino Uno and Nodemcu | | | | |
| 30 | A Multiple Linear Regressions Model for Crop Prediction with Adam Optimizer and Neural Network Mlraonn | M. Lavanya | B.Sc Computer Science | (IJACSA) International Journal of Advanced Computer Science and Applica-tions | VIEW |
| 31 | Perspective Study on Content Based Video Retrieval | D. Rajeswari | B.Sc Computer Science | International Journal on Emerging Technologies | VIEW |
| 32 | An over review on recently developed techniques, mechanisms and intermediate involved in the advanced azo dye degradation for industrial applications | T. Swarna karthika | B.Sc. Clinical Nutrition and Dietetics | Journal of Molecular Structure | VIEW |
| 33 | Formulation and analysis of cost effective Home-made Enteral feeds | M Aruna | B.Sc. Clinical Nutrition and Dietetics | INFOKARA RESEARCH | VIEW |
| 34 | Formulation, sensory, texture and nutrient analysis of jowar waffle | P Sangavi | B.Sc. Clinical Nutrition and Dietetics | JOURNAL OF ADVANCED APPLIED SCIENTIFIC RESEARCH | VIEW |
| 35 | Comparison of the Efficacy of Cinnamon Capsule over Cinnamon Infusion on Type 2 Diabetes Mellitus Subjects | T Sivapriya | B.Sc. Clinical Nutrition and Dietetics | American Journal of Biochemistry and Molecular biology | VIEW |
| 36 | Formulation of Kattuyanam Rice cupcake and its quality assessment | T.S Lakshmi | Nutrition,FSM & Dietetics | The Indian Journal of Nutrition and Dietetics | VIEW |
| 37 | Assessment of eating behaviour among adults residing in Chennai- A Cross sectional study. | S Sarah Priscilla | Nutrition,FSM & Dietetics | Nutritional Sciences Studies in Indian Place Names | VIEW |
| 38 | Comparative Analysis of Various Feature Extracting Algorithms Using Satellite Images | G. B. Hema Malini | BCA | Journal of Advanced Research in Dynamical & Control Systems | VIEW |
| 39 | A Study on The Impact of Social Media on Chennai Youth | G.Sakunthala Devi | BBA | Tathapi (UGC Care Journal) | VIEW |
| 40 | Consumer Buying Behaviour towards | R.Savithri | Commerce | Sambodhi | VIEW |

| | | | | | |
|---|---|---|---|---|---|
| | Home made chocolates-A study with special reference to Chennai City | | | | |
| 41 | A Study on the factors influenicing Consumer Attitude in builidng affinity towards purchase of handloom products | R.Savithri | Commerce | Sambodhi | VIEW |
| 42 | Buyer behaviour of government school students as regards usage of sanitary napkins - A study with special reference to Nanmangalam government school, Chennai | R. Savithri | Commerce | Sambodhi | VIEW |
| 43 | Consumers' willingness to pay more for organic food products-A study with reference to the Chennai city | R.Neela Anuradha | Commerce | Turkish Journal of Computer and Mathematics Education | VIEW |
| 44 | Work from home at IT Companies-The new normal | S.Seethalakshmi | Commerce | Turkish Journal of Computer & mathematics Education | VIEW |
| 45 | Consumer Buying Behaviour towards Home made chocolates-A study with special reference to Chennai City | R.Srividhya | Commerce | Sambodhi | VIEW |
| 46 | Digital Banking – An Emprical Study | S I Fathima Farhana | Commerce | Dogo Rangsang Research journal | VIEW |
| 47 | Paradigm Towards New Digital Education – Triangular Approach, | K.Shyamala | B.Com (CS) | AksharWangmay, | VIEW |
| 48 | Contemporary Banking Scenario: Bankers' Perspective on Green Banking. | K.Shyamala | B.Com (CS) | Annals of R.S.C.B, | VIEW |
| 49 | Work from home at IT Companies-The new normal | K.Shyamala | B.Com (CS) | Turkish Journal of Computer & mathematics Education | VIEW |
| 50 | A study on the factors influencing consumer attitude in building affinity towards purchase of handloom | T. Metilda Devakirubai | B.Com A & F | Sambodhi | VIEW |

| | | | | | |
|---|---|---|---|---|---|
| | products | | | | |
| 51 | A study on Work life balance of employees in IT sector | Y. Kalaivani | B.Com A & F | Studies in Indian Place Names | VIEW |
| 52 | Paradigm Towards New Digital Education – Triangular Approach, | R Subhasri | B.Com PA | AksharWangmay, | VIEW |
| 53 | Contemporary Banking Scenario: Bankers' Perspective on Green Banking. | R Subhasri | B.Com PA | Annals of R.S.C.B, | VIEW |
| 54 | Patterns of Anthropocentrism and Colonialism in Sherris. Teppers's Grass and its manifestation in the present Covid 19 Scenario - A Study | R. Archana | M.A. English | KALA: THE JOURNAL OF ART HISTORY CONGRESS | VIEW |
| 55 | Psychographic impact on preference and satisfaction on investment products | M.Nagamalar | MA HRM | International Journal of Psychosocial rehabilitation | VIEW |
| 56 | A Rumination on Land, Environment and Human Displacement in Atia Abasts a land of permanent Goodbyes from the Purview of Ecofeminism | R. Archana | M.A. English | INDIAN JOURNAL OF ADULT EDUCATION | VIEW |
| 57 | Mathematical Model For The Effects Of Hpa Axis Pertaining To Sleep Loss By Applying Properties Of Certain Subclasses Of Analytic Univalent Functions | S. Alamelu. | M.Sc.Applicable Mathematics | Drugs and Cell Therapies in Hematology | VIEW |
| 58 | Mathematical model for abnormalities of HPA axis due to stress associated with analytic univalent functions. | S. Alamelu | M.Sc.Applicable Mathematics | Malaya Journal of Matematika | VIEW |
| 59 | Spectroscopic elucidation (FT-IR, FT-Raman and UV-visible) with NBO, NLO, ELF, LOL, drug likeness and molecular docking analysis on 1-(2-ethylsulfonylethyl)-2- | P.Manjusha | M.Sc Physics | Computational Biology and Chemistry | VIEW |

| | | | | | |
|---|---|---|---|---|---|
| | methyl-5-nitro-imidazole: An antiprotozoal agent | | | | |
| 60 | Preparation of polyaniline/ manganese dioxide nanocomposites by in situ polymerisation method and their conductivity properties | R.Indira | M.Sc Chemistry | Functional materials | VIEW |
| 61 | Preparation and Investigation of structural, Optical and conductivity properties of Polyaniline/Titanium Dioxide Nanocomposites | R.Indira | M.Sc Chemistry | Journal of Ovonic Research | VIEW |
| 62 | Facile green route sol-gel synthesis of nanotitania usingbio-waste materials as templates | T.Preethi | M.Sc Chemistry | Clean technologies and Environmental policy | VIEW |
| 63 | Perspective Study on Content Based Video Retrieval | C. Victoria Priscilla | M.Sc Computer Science | International Journal on Emerging Technologies | VIEW |
| 64 | Potential Breast Cancer Drug Prediction using Machine Learning Models | N.Priya | M.Sc Computer Science | IEEE | VIEW |
| 65 | Edubot-Automation of Python Tutorial Using Voice input and output | M.Mahadevi | M.Sc Computer Science | Journal of Critical Reviews | VIEW |
| 66 | Driver Drowsiness Detection using Circular Hough Transform | C. Victoria Priscilla | M.Sc Computer Science | Journal Of Critical Reviews | VIEW |
| 67 | Analysis of Performance on Classification Algorithms for Credit Card Fraud Detection | C. Victoria Priscilla | M.Sc Computer Science | Journal of Advanced Research in Dynamical and Control Systems | VIEW |
| 68 | Influence of Optimizing XGBoost to handle Class Imbalance in Credit Card Fraud Detection | C. Victoria Priscilla | M.Sc Computer Science | IEEEXPlore | VIEW |
| 69 | Machine Learning Approaches to Predict the Abiotic and Biotic Stress Tolerance Genes in Plants-A Survey | N.Priya | M.Sc Computer Science | JOURNAL OF CRITICAL REVIEWS | VIEW |

| | | | | | |
|---|---|---|---|---|---|
| 70 | Performance Analysis of Various Bully Leader Election Algorithms in Multiple Perspectives | S.Rajeswari | M.Sc Computer Science | International JOunral of Advanced Science & Technology | VIEW |
| 71 | Driver Drowsiness Detection using Circular Hough Transform | S.Rajeswari | M.Sc Computer Science | Journal Of Critical Reviews | VIEW |
| 72 | Formulation of Kattuyanam Rice Cupcake and its Quality Assessment | R Vijayavahini | M.Sc FSND | The Indian journal of Nutrition and Dietetics | VIEW |
| 73 | Formulation, Sensory ,texture and nutrient analysis of jowarwaffel | R.Subaratinam | M.Sc FSND | Journal of advanced applied scientific reserach | VIEW |
| 74 | Covid -19 Lockdown in South India :Observational Study on Lifestyle Modifications,Dietary habits and Elevation in BMI | R.Subaratinam | M.Sc FSND | The Indian Journal Of Nutriton and Dieteitcs | VIEW |
| 75 | Formulation and analysis of cost Effective Homemade Enteral Feeds | V.Subasshini | M.Sc FSND | INFOKARA- Research Journal | VIEW |
| 76 | Formulation and evaluation of guava flavoured cotton seed milk | .R.Subaratinam | M.Sc FSND | INFOKARA | VIEW |
| 77 | Formulation and Quality Evaluation of sesame seed Based Non Diary Milk Alternative | R Vijayavahini | M.Sc FSND | The Indian journal of Nutrition and Dietetics | VIEW |
| 78 | Formulation and Quality Assessment of Black rice milk Assimiliated paneer | V Subasshini | M.Sc FSND | The Indian Journal of Nutrition and Dietetics | VIEW |
| 79 | Students' perception and involvement in volunteering services | D.Lalitha | M.Com | International Journal of Business & Management Invention (IJBMI) | VIEW |
| 80 | Buyer behaviour of government school students as regards usage of sanitary napkins - A study with special reference to Nanmangalam government school, Chennai | R.Harini | M.Com CS, | Sambodhi | VIEW |

தமிழ்மொழி மற்றும் இலக்கிய பன்னாட்டு ஆய்விதழ்

253

International Journal of Tamil Language and Literary Studies
A Bi-Yearly Peer-Reviewed International Journal

E-ISSN: 2581-7140 UGC CARE Listed Journal
Vol. 3: Special Issue - 3, Vol.2, January 2021 Available at: www.ijtlls.com

# இறைமையும் மனிதமும்: மதுரகவியார் மற்றும் திருப்பாணர் (ஆழ்வார்கள்) பாடல்களில் ஓர் ஆய்வு

# Divinity and Humanity: A Comparative Study in Madhurakkavi's and Thiruppaanar's (Alvars) Paasurams

முனைவர் சீ செஞ்சுலட்சுமி , உதவிப்பேராசிரியர் , எஸ்.டி.என்.பி மகளிர் வைணவக் கல்லூரி , சென்னை – 44.
Dr. S Chenjulakshmi, Assistant Professor of Tamil , Sdnb Vaishnav College For Women , Chennai - 44
ORCID: https://orcid.org/0000-0003-2855-3478
DOI: 10.38067/ijtlls.2021.spl.v03i03v2.038

## Abstract

*Bhakti is the purest form of love towards the Divine God. Out of the six Hindu denominations, which were prevalent in India in olden times, Vaishnavism considers Maha Vishnu as the Supreme Being. Followers of Vaishnavism are called as Vaishnavas or Vaishnavites. The Alvars, which literally means "those immersed in God", were Vaishnava poet-saints who sang praises of Vishnu as they travelled from one place to another. They established temple sites such as Srirangam, and spread ideas about Vaishnavism. Their poems, compiled as Divya Prabhandham, developed into an influential scripture for the Vaishnavas. The focus of this essay is on Madhurakavi Alvar and Thiruppaana Alvar ,who saw human in divine form and divinity in human form respectively .*

**Keywords:** Divinity, Humanity, Alvars, Paasurams, Vaishnavism

## முன்னுரை

சங்க காலம் தொட்டு நம் தமிழ் மக்களிடையே மிகச்சிறப்பாகப் பின்பற்றி வரக்கூடிய பண்பாடு, கலாச்சாரங்களில் முக்கியத்துவம் வாய்ந்தது என்று கூறினால் அது பக்தி என்ற ஒன்று மட்டும்தான். பக்தி என்ற அன்புச் சரணாகதியால் தான் இந்த உலகம் இன்றளவும் தழைத்தோங்கி வருகின்றது. நாம் யாரிடம் அதிக அன்பு வைத்து இருக்கிறோமோ அவர்களிடம் நம்மை அறியாமல் நம் உடல், பொருள், ஆவி என அனைத்தையும் ஒப்படைத்துச் சரணாகதி அடைந்து விடுவோம். அத்தகைய சரணாகதி என்ற உயரிய தத்துவத்தைப் போதித்ததே நம் தமிழ் மண்ணில் தோன்றிய பக்தி இலக்கியங்கள் தாம். இந்தப் பக்தியானது இன்று நேற்று தோன்றியதல்ல. கல்தோன்றி மண் தோன்றாக் காலத்தே தோன்றி நம் ரத்தத்திலேயே ஊறி நம்மை ஆட்கொண்டு வருகிறது. மேலும் பக்தி என்ற ஒன்று தான் சாதி, மதம் போன்ற பேதங்களை நீக்கிக் கடவுளை மனிதனாகவும் மனிதனைக் கடவுளாகவும் கண்டறியும் திறனை வளர்க்கிறது. மதுரகவி ஆழ்வார், திருப்பாணாழ்வார் தங்களது பக்தியை வெளிப்படுத்தியமையைப் பொருண்மையாகக் கொண்டது இக்கட்டுரை.

## ஆழ்வார்கள்

பழந்தமிழகத்தில் அறுவகைச் சமயங்கள் போற்றப்பட்ட காலத்தில் விஷ்ணுவை

# வள்ளுவரும் சித்தரே

முனைவர் து. கனஜா தேவி
தமிழ்த்துறை உதவிப்பேராசிரியர்,
ஸ்ரீமதி தேவ்குன்வர் நானாலால்பட்
மகளிர் வைணவக்கல்லூரி, குரோம்பேட்டை, சென்னை - 44

ஆய்வு சுருக்கம்

மனித வாழ்வியலுக்கு தேவையான உடம்பை பேணல் உயிரை போற்றல் ஆன்மாவின் வயிலாக அட்டமாசித்திகளை வருவித்தல், மனதை ஒருநிலைப்படுத்த தியானம் மேற்கொள்ளல் சமாதி நிலை எய்துவதற்காக வழிகோலல் ஆகியவற்றை குறித்து சித்தர்கள் விரித்து கூறிய செய்திகளை தம் குறுகிய வடிவிலான குறளைக் கொண்டு வாழ்வியல் சராம்சத்தை தெளிவாக சித்தர் பாணியிலேயே விளக்கிய 'வள்ளுவரும் சித்தரே' என்பதை எடுத்து கூறும் பொருண்மையாக இக்கட்டுரை அமைந்துள்ளது.

முன்னுரை

அறம், பொருள், இன்பம் என்ற மூன்று உறுதிப் பொருள்களை நுகர்ந்துப்பின் பற்றற்ற நிலையான 'வீடுபேறு' என்ற உன்னத நிலையை அடையவதற்கான வழிமுறைகளை உலக மக்களுக்குப் போதிக்கும் ஓர் ஒப்பற்ற இலக்கியமாகத் திருக்குறள் விளங்குகின்றது. ஆகவே தான் வள்ளுவரின் வாக்கைத் தெய்வ வாக்காக எடுத்துக் கொண்டு அவரைத் தெய்வப்புலவர் என்றும் பெருமைப்பட அழைக்கின்றோம். எனவே இம்மைக்கும், மறுமைக்கும் இன்பம் பயக்கும் வாழ்வியலைப் போதித்த சித்தர் கொள்கைகளைத் நம் வாழ்வில் மிகுதியாகப் போதித்தமையால் 'வள்ளுவரும் சித்தரே' என்பதே ஆய்வின் பொருண்மையாகக் கொள்ளப்பட்டுள்ளது. எனவே முதலில் சித்தர் என்பதற்கான விளக்கம் தேவைப்படுகின்றது.

சித்தர்

சித்து + அர் - சித்தர் என்று பொருள்படும் சித்து என்றால் அறிவு. 'அர்' : ஆண்பாலையும் பெண்பாலையும் குறிக்கும் மரியாதைக்குரிய பலர்பால் வினைமுற்று விகுகி பாலின வேறுபாடு என்பது மனித உடலுக்குத் தானே அன்றி அறிவிற்கோ, உயிருக்கோ கிடையாது. ஆகவே தான் 'அர்' என்ற சொல்லைப் பயன்படுத்தியுள்ளனர். தனது அறிவைக் கொண்டு ஆன்மாவின் துணை கொண்டு செயலாற்றுவர்கள் சித்தர்கள். எண்ணம், சொல், செயல் இவற்றால் இயங்கும் ஆன்மாவை இயமம், நியமம், ஆசனம், பிராணாயாமம், பிரத்தியாகாரம், தாரணை, தியானம், சமாதி ஆகிய எட்டு வகை அட்டமாசித்திகள் வாயிலாக மனத்தை ஒருநிலைப்படுத்தி வாழ்வியலின் உண்மைப் பொருளை உணர்ந்து , உன்னத்தை அடைந்தனர்.

"இயம நியமமே எண்ணிலா ஆசனம்
நயமுறு பிராணாயாமம் பிரத்தியா காரம்
சயமிகு தாரணை தியானம் சமாதி
அயமுறும் அட்டாங்க மாவாது மாமே" (1)

என்று அட்டமாசித்திகளை வகைப்படுத்துகிறார் திருமூலர். இந்த எண்வகைச் சித்திகளைக் கையாண்ட பதிணெண் சித்தர்களின் வரிசையில் திருவள்ளுவர் இடம்பெறவில்லை என்றாலும், முறையே எண்வகை யுக்திநிலையைக் கையாண்டதில் அவரும் ஒருவரே என்பதை.

"கோளில் பொறியில் குணம்இலவே
எண்குணத்தான்
தாளை வணங்காத் தலை" (2)

என்ற குறளில் எட்டுவகையான குணங்களான தன்வயத்தனாதல், துய உடம்பினனாதல், பாச உணர்விலிருந்து நீங்கி நிற்றல், இயற்கை உணர்வின் ஆதல், பேரறிவுடைமையாகிய முற்றறிவுடைமை, எல்லையில்லாத ஆற்றல்





Go to page 1

போன்றவை முக்கியப் பங்கு வகிக்கின்றன. அம்ம தெய்வத்திற்குப் பூசை செய்வதில் பெண்களும் தொடக்க காலங்களில் பூசாரிகளாக இருந்து வந்துள்ளனர்.

அடிக்குறிப்பு விளக்கம்:

1. அச்சுதமேனோன் சேலநாடு, கேரளத்தில் காளி சேவை, யூனிவேழ்சிற்றி ஆப் மெட்ராஸ், பக். 34)
2. சோமம். பி, அம்ம தெய்வமும் சமஸ்காரமும், கேரள பாசா இன்ஸ்டியூட், பக். 64
3. சங்குண்ணி நாயர் எம். பி, படேனி, மாத்ருபூமி பப்ளிகேசன்ஸ், பக். 2
4. அச்சுதமேனோன் சேலநாடு, கேரளத்தில் காளி சேவை, யூனிவேழ்சிற்றி ஆப் மெட்ராஸ், பக். 34
5. Nilakanda Sastri, K. A, Development of Religion in South india, Orient Logman, Madras, Page. 64
6. குறுப்பு, கெ. கெ. என், ஆர்யதிராவிட ஹடகங்கள், மலபாரிலெ நாடன்கலையில், கேரள பாசா இன்ஸ்டியூட், பக். 23
7. அச்சுதமேனோன் சேலநாடு, கேரளத்தில் காளி சேவை, யூனிவேழ்சிற்றி ஆப் மெட்ராஸ், பக். 29
8. அச்சுதமேனோன் சேலநாடு, கேரளத்தில் காளி சேவை, யூனிவேழ்சிற்றி ஆப் மெட்ராஸ், பக். 29
9. James Frazer C. G, The Golden Bough, Macmillan, London, P. 578





# சிலப்பதிகாரத்தில் பெண்தெய்வங்கள்

முனைவர் து. கனஜா தேவி
தமிழ்த்துறை உதவிப் பேராசிரியர், ஸ்ரீமதி தேவ்குன்வர் நானாலால்பட் மகளிர் வைணவக் கல்லூரி, குரோம்பேட்டை, சென்னை – 600044, தமிழ்நாடு, இந்தியா.

ஆய்வுச் சுருக்கம்

பூமியின் ஆக்க சக்தியின் அற்புதபடைப்பே பெண்பெண் துன்புறுத்தப்படுவதாலோ, வன்கொலை செய்யப்படுவதாலோ அதனை எதிர்க்க முற்பட்டதன் விளைவே பெண்தெய்வம் தோன்றியதற்குக் காரணமாக இருக்கலாம். இந்தப் பெண் தெய்வம் குறித்துச் சிலம்பில் காடுகாண் காதை ,கட்டுரைக் காதை,நீர்ப்படைக்காதை , அழற்படுகாதை,வரந்தரு காதை ஆகிய காதைகளில் பெண் தெய்வம் குறித்து எடுத்துரைப்பதோடு,கண்ணகியின் பெருமை பொருந்திய குணங்களும், கற்பின் திறமையும், அவள் தெய்வமாக மாறிய,மாற்றிய தன்மையும் கூறுவதே இக்கட்டுரையின் நோக்கமாகும்.

கலைச்சொற்கள்:

ஆக்கசத்தி, ஆலயம், அருந்ததி, ஐம்பூதம், ஆரிய குண்டம், சோமகுண்டம்.

முன்னுரை

மனிதனின் வாழ்வியல் முறையானது நிலம் நீர் காற்று ஆகாயம் நெருப்பு ஆகிய ஐம்பூத சக்திகளால் இயங்குகின்றது. இவற்றில் ஒன்று குறைந்தால் கூட மனிதனால் உயிர்வாழ இயலாது. இத்தகைய ஐம்பூதங்களின் சீற்றத்தால் ஏற்படும் பூகம்பம் (நிலம்), வெள்ளப் பெருக்கு (நீர்), சூறாவளி (காற்று), கோள்களின் மாற்றம் (ஆகாயம்) எரிமலை (நெருப்பு), இவற்றைக் கண்டு அஞ்சிய மனிதன் இதிலிருந்து தன்னைப் பாதுகாத்துக் கொள்ள இயற்கையை வழிபடத் தொடங்கினான் என்பதை,

"திங்களைப் போற்றுதும் திங்களைப் போற்றுதும்
ஞாயிறு போற்றுதும் ஞாயிறு போற்றுதும்"
(சிலம்பு -1)

என்ற சிலம்பின் வரிகள் மெய்ப்பிக்கின்றன. இவ்வாறு இயற்கையை அருவமாக வழிபட்ட தமிழன் நிலப் பாகுபாடு, நாகரிகம், பண்பாடு கலாச்சாரத்தின் வளர்ச்சி காரணமாக உருவ வழிபாட்டை மேற்கொள்ளத் தொடங்கினான். இவ்வழிபாடு சங்ககாலம் முதல் இக்காலம் வரை தொடர்ந்து வருகின்றது. இத்தகைய தெய்வ வழிபாட்டு முறைகளில் பெண் தெய்வ வழிபாடு என்பது முக்கிய இடத்தை வகிக்கின்றது. அதிலும் குறிப்பாக காப்பிய இலக்கியமான "சிலப்பதிகாரத்தில் பெண் தெய்வங்கள்" குறித்த ஆய்வாக இக்கட்டுரை அமைந்துள்ளது.

வழிபாடு

இறைவன் உறைகின்ற இடம் கோயில். ஆலயம் எனப் பலவாறு அழைக்கப்படுகின்றது. ஆன்மா லயிக்கின்ற இடம் ஆலயம் எனவும், கோ (அரசன், இறைவன்) என்னும் தலைவன் குடி கொண்டுள்ள இடம் கோயில் எனவும் அழைக்கப்படுகின்றது. கோ என்பதற்கு அரசன் என்ற பொருளும் உண்டு. இயற்கையோடு இயைந்து குழுக்களாக வாழ்ந்த மனிதன் தங்களுக்கு ஏற்படும் துன்பங்களிலிருந்து தங்களைப் பாதுகாத்த ஒருவனைச் சிறந்த மனிதனாகவும் தலைவனாகவும் மதிக்கிறான். அவனே அக்குழுவை ஆளக்கூடிய அரசனாகப் போற்றப்படுகின்றான். இவ்வாறு ஆண்ட அரசன் மாண்ட பிறகு அவன் நினைவாக நடுகல் வைத்து வழிபடத் தொடங்கினான். பிறகுகல்லையே ஆண்-பெண் சிற்பமாகச் செதுக்கி உருவ வழிபாட்டைத் தொடங்கினான். இதில் பெண் தெய்வ வழிபாடு குறிப்பிடத்தக்கது.

பெண் தெய்வ வழிபாடு

பூமியின் ஆக்க சக்தியின் அற்புதபடைப்பே பெண். பெண் அன்பு, இரக்கம், ஈகை, பொறுமை

# பெண் தெய்வ வழிபாட்டில் மங்கலம்பேட்டை மங்கள நாயகி

முனைவர் சு. லட்சுமி

உதவிப் பேராசிரியர், தமிழ்த் துறை, ஸ்ரீமதி தேவ்குன்வர் நானாலால் பட் மகளிர் வைணவக் கல்லூரி, குரோம்பேட்டை, சென்னை 600044, தமிழ்நாடு, இந்தியா.

ஆய்வுச் சுருக்கம்

நாட்டுப்புற மக்களால் தொன்று தொட்டு வழிபடப்பட்டு வரும் கிராம தெய்வங்களே நாட்டுப்புறத் தெய்வங்கள் என்று அழைக்கப்படுகின்றன. அவை அங்கு வாழுக்கூடிய மக்களின் காவல் தெய்வங்களாக, நோய் நீக்கி நலம் தருபவையாக, வாழ்க்கைக்கு வளம் சேர்க்கக் கூடியவையாக இருந்து வருகின்றன. இத்தெய்வங்கள் பெரும்பான்மையாக பரந்துபட்ட எல்லையைக் கொண்டு அமைகின்றன. குறைந்தபட்சம் சுற்று வட்டாரத்தில் உள்ள ஏழு ஊர்களுக்காவது அது காவல் தெய்வமாக விளங்குகின்றது. அந்தவகையில் கடலூர் மாவட்டம், விருத்தாசலம் வட்டத்தில் மங்கலம்பேட்டை என்னும் ஊரில் எழுந்தருளும் மங்கள நாயகி அம்மன் என்னும் கிராம தேவதை பற்றிய வரலாறும் அவ்வாலயத்தில் நடைபெறும் வழிபாட்டு முறைகள் பற்றியும் இந்தக் கட்டுரையில் காண உள்ளோம்.

கலைச் சொற்கள்

மங்களநாயகி - மங்கலம்பேட்டை - மாடு வெட்டி மங்கலம் - முகாசா – முகாசா பரூர் - சாத்துக்காரர் - கடா வெட்டித் தெரு.

முன்னுரை

பெண் தெய்வ வழிபாடு என்பது இன்று நேற்றுத் தோன்றியதல்ல. இயற்கை வழிபாட்டினைத் தொடர்ந்து மனிதன் இல்லத்துப் பெரியோரையும் வணங்கி வந்தான். அவர்கள் உலக வாழ்வை நீத்த பிறகும் இவ்வழிபாடு தொடர்ந்தது. தன்னை ஈன்றாரை வணங்குதல் என்பதுவும் அதோடு இணைந்தது. "அன்னையும் பிதாவும் முன்னறி தெய்வம்" என்ற அடிப்படையே பெண் தெய்வ வழிபாட்டின் சான்று என்று கூட்டிக் கொள்ளலாம். இப்படியாகப் பெண் தெய்வ வழிபாட்டு முறைகள் நம் மண்ணில் வேறூன்றி இருக்கலாம். இந்தப் பெண் தெய்வ வழிபாட்டில் பெண்மை நலன் மிளிரக்கூடிய காத்தருளுதல் என்ற பண்பே முதன்மைப் பண்பாக விளங்குவதால் பெரும்பாலும் காவல் தெய்வங்களாக பெண் தெய்வங்கள் விளங்குகின்றன. அன்னை தன் வீட்டைக் காத்தாள்வதுபோல ஊரைக் காத்தாளக்கூடியவளாக அன்னை, பெண் தெய்வமாக விளங்குகிறாள். தமிழ்நாட்டில் கடலூர் மாவட்டத்தில் விருத்தாச்சலம் வட்டத்தில் அமைந்துள்ள மங்கலம்பேட்டை என்னும் ஊரில் எழுந்தருளி அருள் பாலித்துக்கொண்டிருக்கும் மங்களநாயகி அம்மன் கோயில் 17ஆம் நூற்றாண்டில் தோன்றியது என்று ஒரு குறிப்பு உள்ளது. ஆனால் அதற்கான ஆதாரங்கள் சரிவர கிடைக்கப்பெறவில்லை. இக்கோயிலின் முதன்மை தெய்வமாக மங்களநாயகி அம்மன் வீற்றிருக்கிறாள். மங்களநாயகி அம்மன் சந்நதியும் கால பைரவர், மங்கள விநாயகர், காளி, விஷ்ணு துர்க்கை, மற்றும் பிற சந்நதிகளும் அமைந்துள்ளன.

இலக்கியத்தில் பெண் தெய்வம்

சங்க காலத்தில் பாலை நிலத்திற்குரிய தெய்வமாகப் பெண் தெய்வத்தை வழிபட தொடங்கினர். இதனை

"ஓங்குபுகழ் கானமர் செல்வி"[1]

என்ற அகநானூறு வரியும்

"விரல்கெழு கூலி"[2]

என்ற குறுந்தொகை வரியும் மெய்ப்பிக்கின்றன. மேலும்

# இலக்கியங்கள் கற்பித்தல் - நவீன பாடத்திட்டம்

முனைவர் செ.மேனகா
உதவிப்பேராசிரியர்
ஸ்ரீமதி தேவ்குன்வர் நானாலால் பட் மகளிர் வைணவ கல்லூரி.

**ஆய்வுச்சுருக்கம்**

இலக்கியங்கள் கற்பித்தல் நவீன பாடத்திட்டம் என்ற தலைப்பில் இலக்கியக் கல்வியின் நோக்கம், பயன், மொழியும் இலக்கியமும், மொழி கற்பிக்கும் முறை, இலக்கியம் கற்பிக்கும் முறை, இலக்கியம் கற்பித்தலில் பாடத்திட்டங்கள், இணைய பயன்பாட்டின் அவசியம் மொழித் திறனை ஊக்குவிக்கும் முறைகள் குறித்த ஆய்வாக இக்கட்டுரையின் பொருண்மை அமைந்துள்ளது.

**முன்னுரை**

தமிழினம் பல நூற்றாண்டுகளுக்கு முன்பே தனக்கென ஒரு வாழ்வையும் வரலாற்றையும் கொண்டதுடன் தனி ஒரு சிறந்த பாரம்பரியத்தைக் கொண்டது ஈராயிரம் ஆண்டுகளுக்கு முன்னரே தமிழ் மொழி உலக அரங்கில் நின்று நிலவும் இலக்கிய இலக்கணங்களையும் கற்பனை காவியங்களையும் கொண்டு விளங்குகின்றது ஒரு நாட்டு வரலாற்றில் மேம்பாட்டிற்கும் சமூக நல்லிணக்கத்திற்கும் இலக்கியங்கள்தாம்அடித்தளமாக அமைகின்றன. இலக்கியங்களைப் படித்து புரிந்துகொள்ள வேண்டும் அறிதலின் தேவை பெருகப் பெருக மொழியும் வளருகின்றது. புரிதல் திறன் தான் ஒரு மொழியின் வளர்ச்சிக்குப் பக்கபலமாக அமைகின்றது. அந்த வகையில் ஆரம்பக் கல்வியிலேயே இலக்கியங்களைப் புரிந்து கற்கும் திறனை மாணவர்கள் அறிந்து கொள்ளும்படி பாடத்திட்டங்கள் அமைய வேண்டும் எனவே தான் நவீன பாடத்திட்டம் இலக்கியங்கள் கற்பிக்கும் முறைமை குறித்த ஆய்வாக இக்கட்டுரையின் பொருண்மை அமைந்துள்ளது.

**இலக்கியம்-வரையறை**

இலக்கியம் என்பது "லஷியம்" என்ற வடசொல்லின் திரிபு என்பர். இலக்கியத்தைச் செய்யுள் என்பர் பண்டைத்தமிழர். ஆங்கிலேயர் literature என ஆங்கிலத்தில் சொல்வர். ஆங்கிலத்தில் இலக்கியம் என்னும் பொருள் பயக்கும் literatureh என்னும் சொல் கி.பி ஆயிரத்து 1812 ல் தான்வழக்கிற்கு வந்ததாக ஆங்கில ஆக்ஸ்போர்டு அகராதி அறிவிக்கிறது.

இலக்கியம் மனித வாழ்க்கையை மையமாகக் கொண்டது மனிதனின் சிந்தனைக்கும் உணர்வுக்கும் கற்பனைக்கும் விருந்தாக அமைவது மனிதனின் மொழியோடு தொடர்புடையதுமொற கோலமாக விளங்குவது குறிப்பிட்ட ஒரு வடிவினை செய்யுளாலோ உரைநடையாலோ உடையதுளு கற்பவருடைய எண்ணத்தில் எழுச்சியையும் இதயத்தில் வளர்ச்சியையும் உண்டாக்கும் ஆற்றல் வாய்ந்தது இன்புறுத்துவதோடு அறிவுறுத்தும் ஆற்றலையும் உடையது எனலாம்.

மனிதன் சிந்திக்கத் தொடங்கிய போதே இலக்கியங்களும் தோன்றிவிட்டன மனிதன் என்பவன் சமுதாயத்தோடு கூடி வாழ்பவன் ஆவான். அவனுடைய அறிவு உணர்ச்சிகளின் வெளிப்பாடாகவே வாழ்க்கையும் செயலும் அமைகின்றது.இலக்கியக் கல்வி அதனை விசாலப்படுத்துகின்றது.

இலக்கியம் முழுவதும் சொற்களேயே ஆகிய கலை. ஆகையால் அந்த மொழி பயிற்சி மட்டுமே நுகர முடியும் என முவ குறிப்பிடுகின்றனர். அந்தவகையில் ஆரம்பக் கல்வியிலேயே மொழி வளர்ச்சி அறிவு வளர்ச்சி ஆகிய இரண்டும் மாணவர்களின் மன வளர்ச்சிக்கு உறுதுணையாக

# ஒடுப்பறை நாகரம்மன் கோயில் தங்கமை தாயம்மை வழிபாடு (ஏழூர் செட்டு சமுதாய மக்களின் குலதெய்வம்)

முனைவர் கோ. பத்மலிலாசினி
தமிழ்த்துறைத் தலைவர் (சுய உதவிப்பிரிவு),
ஸ்ரீமதி தேவகுன்வர் நானாலால் பட் மகளிர் வைணவக் கல்லூரி,
குரோம்பேட்டை, தமிழ்நாடு, இந்தியா.

ஆய்வுச்சுருக்கம்:

ஏழூர் செட்டு சமுதாயம் வரலாற்றுச் சிறப்புமிக்க சமுதாயம் ஆகும். காவிரிப்பூம்பட்டினத்தைப் பூர்வீகமாகக் கொண்ட மக்கள் பலவேறு காரணங்களால் அங்கிருந்து சேரநாட்டின் பல பகுதிகளான இரணியல், கோட்டார், குளச்சல், மிடாலம், திருவிதாங்கோடு, பத்மநாபபுரம், கலபதிபுரம் ஆகிய ஏழு ஊர்களில் குடியேறினர். அவர்கள் தங்கள் மானத்திற்காக உயிர்நீத்த தங்கமை தாயம்மை இருவரையும் குலதெய்வமாகக் கொண்டு வழிபட்டு வருகின்றனர். நாட்டுக்கோட்டைச் செட்டியார்கள் பூம்புகாரில் சித்திரைத் திருவிழா கொண்டாடுவதைப் போல இவர்கள் சித்திரை மாதக் கடைசி ஞாயிறு அன்று தென்மன்னர் சாலை என்று அழைக்கப் படக்கூடிய ஒடுப்பறை சந்நிதியில் சித்திரை விழா கொண்டாடுகின்றனர். ஆடு மாடு மேயாத ஆலமரத்துச் சன்னிதியில் தங்கம்மை தாயம்மை வழிபாடும் நாகரம்மனுக்குப் படைக்கும் ஆயிலிய கொழுக்கட்டை விழா குறித்தும் ஆராய்வதே இக்கட்டுரையின் நோக்கமாகும்.

கலைச்சொற்கள்: ஒடுப்பறை நாகரம்மன், இரணியல், தங்கம்மை - தாயம்மை, ஏழூர் செட்டு, ஆயில்ய கொழுக்கட்டை, ஆடு மாடு மேயாத ஆலமரம்.

முன்னுரை:

ஏழூர் செட்டு சமுதாய மக்களின் பூர்வீகம் கடல் கொண்ட லெமூரியா கண்டத்தில் அமைந்த நாக நாடாகும். அங்கிருந்த மக்கள் காஞ்சிபுரத்திற்கும் காவிரிப்பூம்பட்டினத்திற்கும் குடிபெயர்ந்தனர். கி.பி 200-ல் கண்ணகியும் கோவலனும் செட்டிகுலத் தோன்றல்களாவர். பின்னர் மணிமேகலை காலத்தில் கி.பி 299ல் கடல் கோள் நிகழ்வுகளால் அங்கிருந்து செட்டி சமுதாயத்தவர் எங்கெங்கோ பெயர்ந்து இறுதியில் பாண்டிய நாட்டிலுள்ள இளையாத்தன்குடி, குலசேகரபுரம், மாத்தூர், வீரபாண்டியபுரம், வைரவன்பட்டி, நேமம், இலுப்பைகுடி, சூரங்குடி, வேலங்குடி ஆகிய ஏழு ஊர்களில் குடியேறினர். இதனால் அவர்கள் ஏழூர் செட்டி என்று அழைக்கப்பட்டனர்.

"ஏழூர் செட்டியார்கள் கி.பி 700 க்குப் பின்னர் தான் நாட்டுக்கோட்டை செட்டியார் என்று அழைக்கப்பட்டதாக எட்கர் தர்ஸன் மற்றும் தொல்லியல் அறிஞர் மா.சந்திரமூர்த்தி அவர்களும் "நகரத்தார் மரபும் பண்பாடும்" என்ற நூலில் குறிப்பிட்டுள்ளனர்."[1]

செட்டி பெயர்க் காரணம்:

செட்டி என்ற சொல்லுக்கு எட்டி என்ற சொல் வித்தாகிறது. சோழர்கள் காலத்தில் (கி.பி 846-1279) பின் பாண்டியர் காலத்திலும் (கி.பி 1190 - 1310) தமிழ் அரசர்களால், செல்வம் படைத்த வியாபாரிகளுக்கு அளித்த ஒரு கௌவரவப் பெயரே எட்டி என்பதாகும். உதாரணமாக சிலப்பதிகாரத்தில் எட்டிச் சாயலனையும் மணிமேகலையில் எட்டிக் குமாரனையும் (காவிரிப்பூம்பட்டினத்து வணிகன்) எனக் குறிப்பிடுவதைக் காண்கிறோம். முந்தய நூற்றாண்டுகளில் உள்ளூர் வியாபாரிகளைச் செட்டு என்றும் வெளியூர் வாணிபத்தில் பெரும் செல்வம் ஈட்டும் அளவு சிறப்பு கொண்டவர்களை எட்டி என்ற பட்டத்தாலும் அழைத்தனர். இதுவே பிற்காலத்தில் செட்டியாக மாறி இருக்கலாம் செட்டி

**Indian Journal of Adult Education** **ISSN : 0019-5006**
**Vol. 81, No. 3(I)** **July-September 2020**

# Creating Phonemic Awareness Through Skills-based Activities

**B. Maria Arul Antony Bobby**, M.A., M.Phil., Research Scholar, Department of English, S.D.N.B. Vaishnav College for Women (Autonomous), Chromepet, Chennai- 600044 Tamil Nadu, India.

**Dr. K. Kanthimathi,** Research Supervisor, Assistant Professor, S.D.N.B. Vaishnav College for Women (Autonomous), Chromepet, Chennai- 600044 Tamil Nadu, India.

**Abstract**

Though the importance of teaching pronunciation is acknowledged worldwide, it is still neglected or ignored in most of the educational institutions. There are many spoken English courses available, but teaching the symbols of speech sounds and the phonemic script is hardly found. Creating phonemic awareness can be done through experimental learning method, i.e., skills-based activities, where the participation of the students is given prior importance, the contrary of traditional class room setting. The aim of this paper is to inculcate among the learners, the phonemic awareness, positive attitude for language learning and strong motivation which would avoid the hindrances of second language acquisition. Through this pronunciation training, the learners learnt the phonemic script which helped them in self- directed learning.

**Key words:** Phonemic awareness, pronunciation, second language acquisition, phonemic script, experimental learning method.

## Introduction

Most of the universities and institutions around the world have designed their vision and mission; the primary among them is preparing their students to be competitive in the global market. One of the consequences of such aim is, the growing demand of the English language day by day. Phillipson (2003) rightly said that the significance and importance of English language as lingua franca on the international basis is not only considerable in the field of politics, commerce, technology and media but it is mostly irreplaceable in the spheres of professional qualifications, education systems and economy as it brings vigour to all its aspects. The internalization of an institution is greatly associated with the quality of training given to the students to speak the international language – English.

## The place of pronunciation in Second Language Acquisition

English Phonology plays a predominant role in this twenty first century milieu of widespread knowledge of English as a second language. Fluency and pronunciation (quality of speech), are considered as two important objectives in second language teaching and learning. Phonology is a branch of linguistics that deals with the sound system of a particular language. Phonetics is distinguished from phonology, which studies the production, transmission and perception of speech sounds.

Second Language Acquisition refers to the study of second language (L2), in addition to their first language (L1). One can acquire the second language either in a classroom setting or being the active participants of the second language society. Second language is also called as the target language. The spoken units of language, the basic feature, from the syllable to connected speech, are expressed only through the speech sounds or the phonemes which are called as segmental features of the language.

Pronunciation is a much more important and penetrating feature in ESL context than it is generally acknowledged. Researches in ELT demonstrate that pronunciation demands more

Kala Sarovar
(UGC Care Group-1 Journal)
ISSN: 0975-4520
Vol-23 No.02(I) July-September 2020

# A Sound Approach to Teach Speech Sounds

**B. Maria Arul Antony Bobby**, M.A., M.Phil., Research Scholar, Department of English, S.D.N.B. Vaishnav College for Women (Autonomous), Chromepet, Chennai- 600044 Tamil Nadu, India.
**Dr. K. Kanthimathi**, Research Supervisor, Assistant Professor, S.D.N.B. Vaishnav College for Women (Autonomous), Chromepet, Chennai- 600044 Tamil Nadu, India.

**Abstract**
Learning English pronunciation is closely related to the learning of the speech sounds of English language. Basic knowledge about the speech sounds is necessary to learn the correct pronunciation. In second language acquisition,the struggle faced by the leaners is not only because of the difference in language structure between L1 and L2, but also because of less emphasis on teaching Phonetics.The goal of our language curriculum would become wholesome and fruitful if and only the syllabus for pronunciation plays an integral part. But the still unanswered question is "why the teaching of pronunciation is not given that much importance in our language curriculum?" or How the acquisition of language is possible without teaching the speech sounds?The impact of teaching the phonemes and the phonemic script which would enhance the pronunciation skills is studied in this paper. This paper mainly focuses on pronunciation training of individual words,which are the pillars of the connected speech, through interactive activities.

**Key words:** Phonemes, phonemic script, second language acquisition, phonetics, pronunciation.

## Introduction

Among all the world's languages, it is undoubtedly said that English is the richest in vocabulary. It has greatly influenced almost all the languages of the world. It has acquired a dominant status as a world language by its international use.

To learn the pronunciation of a foreign language, one should understand the relationship between the spelling and pronunciation of the language. Usually, a letter in the alphabetic writing system should represent a spoken sound in the language. The set of symbols used in the writing system of orthography are called as graphemes. In a language like English spelling and sound are not proportionate to each other. This is referred as the unphonetic character of English orthography.

## British Received Pronunciation

Standard British English has been semantically identified as Received Pronunciation (shortly called as RP). It is also often referred as 'BBC English' or 'the Queen's English' as this particular variety is spoken on British television and by members of the royal family in Britain. Though the term 'Received Pronunciation' was coined in 1869 by the linguist A.J. Ellis, it was popularized by the phonetician Daniel Jones. In the first edition of the *English Pronouncing Dictionary* (1917), he gave the name as 'Public School Pronunciation'.

The British Received Pronunciation has 44 speech sounds which includes, 12 pure vowels, 8 diphthongs and 24 consonants.





Go to page 1

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

# Aspect of Transformation in Woman's life : A Study in A.K.Ramanujan's " A Flowering Tree"

Dr.S.Sharmila

Assistant Professor, Department of English

Shrimathi Devkunvar Nanalal Bhatt College for Women

Chromepet, Chennai - 44

## Abstract

Attipate Krishnaswami Ramanujan (16 March 1929 – 13 July 1993) was an Indian poet and scholar of Indian literature who wrote in both English and Kannada. Ramanujan was a poet, scholar, professor, philologist, folklorist, translator, and playwright. His academic research ranged across five languages: English, Kannada, Tamil, Telugu, and Sanskrit. He published works on both classical and modern variants in Indian literature. This paper deals with transformation as an inevitable aspect in a woman's life. "Flowering Tree " is a Kannadian folklore story about a woman who undergoes transformation several times without her own will and emotion. The protagonist transformation is evidence which shows the status of woman's life in this patriarchy society.

Key Words : Transformation, Patriarchy, Folklore, Society

A.K. Ramanujan (or AKR) 16 March 1929 - 13 July 1993), who taught at the University of Chicago for 30 years, has remained an iconic figure for the Indian literary community for a long time. He was an Indian poet and scholar of Indian literature who wrote in both English and Kannada. Ramanujan was a poet, scholar, professor, philologist, folklorist, translator, and playwright. His academic research ranged across five languages: English, Kannada, Tamil, Telugu, and Sanskrit. He published works on both classical and modern variants in Indian literature. After making his mark first as an Indian English poet in the mid-1960s, he won enduring fame in India and abroad for his pioneering translations of classical Tamil poetry, and later, of Bhakti poetry in Tamil and Kannada. During the latter half of his career, AKR worked on anothologing and

Journal of Interdisciplinary Cycle Research ISSN NO: 0022-1945

# Exploitation of the Subaltern Women in Mahasweta Devi's " Kunti and the Nishadin"

Dr.S.Sharmila, Assistant Professor of English,
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women
Chromepet , Chennai-44

## Abstract

Mahasweta Devi (1926-2016), Indian writer in Bengali and an Activist. She worked for the rights and empowerment of the Tribal people. In her Writings she talks about the complex realities such as, Cultural Practices, Social Institutions, Identity Formation, Sexual roles which display the exploitation of difference in Caste, Class, Gender. This paper deals with the complex realities of " Exploitation" and "Aspect of Dharma". The exploitation of the Subaltern women " Nishadins" (Nishadha Tribe) in the story " Kunti and the Nishadin" from 'After Kurukshetra'.

Key Words - Subaltern, Complex Realities, Exploitation

**Mahasweta Devi** (14 January 1926 – 28 July 2016) was an Indian writer in Bengali and an activist. Her notable literary works include *Hajar Churashir Maa*, *Rudali*, and *Aranyer Adhikar*. She was a self-proclaimed leftist who worked for the rights and empowerment of the tribal people (*Lodha* and *Shabar*) of West Bengal, Bihar, Madhya Pradesh and Chhattisgarh states of India. She was honoured with various literary awards such as the Sahitya Akademi Award (in Bengali), Jnanpith Award and Ramon Magsaysay Award along with India's civilian awards Padma Shri and Padma Vibhushan.

Devi wrote over 100 novels and over 20 collections of short stories primarily written in Bengali but often translated to other languages. Her first novel, titled *Jhansir Rani*, based on a biography of the Rani of Jhansi was published in 1956. Mahasweta Devi's specialisation set down in the studies of Adivasi, Dalit and Marginalized citizens mainly with a focus on their women. They were related as protest in the face of the oppressive British rule, the Mahajanas and upper class corruption and injustice. She lived in the Adivasi villages in West Bengal, Bihar, Madhya Pradesh, Chattisgarh years after years, assisting and aiding them and learning from them. She has represented their struggles and sacrifices in her words and characters. Her stories are not just the creation of her, but the stories of the people of her own country. Such an example is her work " Chotti Mundi Ebong Tar Tir". Mahasweta Devi raised her voice several times against the discrimination suffered by tribal people in India.

The term ' Subaltern', was coined by ' Antonio Gramsci'( Italian Philosopher) : The Subaltern was subjected to an underclass to a society on whom the dominant power excerpts its hegemonic influence. Initially referred to people who have low rank in the Military, Later it referred to the people who are voiceless and being lowly placed in society. It is obvious that exploitation of such

European Journal of Molecular & Clinical Medicine
ISSN 2515-8260 Volume 07, Issue 02, 2020

# Exploring Literariness in Stephen King

S. Sivaranjani[1], E. Sugantha Ezhil Mary[2]

[1]*PhD Research Scholar, Department of English, School of Languages, Vels Institute of Science, Technology & Advanced Studies (VISTAS), Chennai, Tamil Nadu, India.*

[2]*Associate Professor, Department of English, School of Languages, Vels Institute of Science, Technology & Advanced Studies (VISTAS), Chennai, Tamil Nadu, India.*

[1]*shivamayil16@gmail.com*

[2]*suga80prince@gmail.com*

***Abstract:** This paper deals with recognition of popular literature and the "King of Horror", Stephen King under the context of a popular fiction writer. There are various disapprovals about considering a work of art (in writing) as a good piece of literature if it is entertaining the masses. A book that is recognized and acknowledged by any reader from the masses also retains literary values. A best selling popular fiction can also inculcate moral values. Genres like horror cannot be prejudiced for its unrealistic nature because the power of fear and imagination of horror literature can never match the earthly possible things as present in an average life of reality. Despite all these remarkable factors, popular writers like Stephen King face avid humiliation from the 'literary' critics because he never amused any of them with his intellectual language and subject. On the contrary King is one of the top selling authors of America, widely exalted by mass audiences but never by a literary critic.*

***Keywords:** Popular literature, Horror literature, Stephen King, Bestsellers, Criticism.*

## 1. INTRODUCTION

> Of course, if original ideas and writing style are a valid measure of success, then William Faulkner and Henry James should be on top of New York Times' best seller list instead of King. (Hoppenstand and Browne 1987).

Every work of art deserves a ray of recognition. Whether it is a classic poetry or folklore, every work of art has its own set of audiences who appreciate that work and support the corresponding author. There is no set pattern for a work of art to categorize it as essential or non-essential. But why is there always a debate in distinguishing literary and non-literary work. A literary work is always meant to be a 'culture' carrier. This culture is not about anthropological study. It's about the culture instigated with supremacy. A literary work is expected to be composed from literary scholars, intellectual historians are always in good eyes of an elitist critic (Radway 1984). The same work which enriches the culture is not read and sometimes not even known by the 'ordinary' people (Radway 1984), eventually makes the literary work not a bestselling, profitable work and always lying in the hands of academicians. The literature of the 'ordinary' people cannot amuse a literary critic and vice versa for the same ordinary people to accept a common popular fiction as 'worthless'.

Thus a popular fiction is always known for giving amusement and pleasure for a reader who is always meant to be in the class of 'ordinary' reader. According to any elitist literary circle, ordinary people may blindly praise a work of art which has no value but extremely popular. This ordinary class includes the entire mass who read popular literature are expected to get satiated for mere sake of entertainment and brand name of the author. Ordinary people's literature is always known for its value less, trash subject which does not inculcate

Drugs and Cell Therapies in Hematology (ISSN: 2281-4876)
Volume 10 Issue 1 (2021)

# Mathematical Model For The Effects Of Hpa Axis Pertaining To Sleep Loss By Applying Properties Of Certain Subclasses Of Analytic Univalent Functions

**S. Alamelu[1], V.G. Shanthi[2], S.Gunashree[3], L. Suganya[4]**

*1,2,3,4 : Department Of Mathematics*
*Shrimathi Devkunvar Nanalal Bhatt Vaishnav College For Women*
*Chromepet, Chennai 600 044.*

***Article History***

*Article Received: 9/04/2021*
*Article Revised 10/05/2021*
*Article Accepted: 15/06/2021*

***Abstract***

*Aim Of This Study Is To Observe The* ***Hpa Axis – Hypothalamic Pituitary Adrenal*** *Axis Response Of The System For Sleep Loss Over Time By Measuring Cortisol Level For Young Participants With Normal Sleep Schedule, Partial And Total Sleep Deprivation By Applying Degradation Hazard Function*

*$D(x,t) = G(x)Q(t)$, $Q(t)$ Non Negative Function Of Time And $G(x)$ Non-Negative Function Degradation Measure. It Is Very Interesting To Find The Mean Residual Life ( Mrl ) Which Gives The Expected Remaining Life With The Present Age t . Further We Develop Functions $f_1(z)$ , $f_2(z)$ And $f_3(z)$ By Using The Class Of Functions Of The Form*

*$f(z) = z + \sum_{n=2}^{\infty} a_n z^n$ Which Are Analytic Univalent In The Open Unit Disc $\mathcal{U} = \{z: z\epsilon \mathbb{C}$ and $|z| < 1\}$ Whose Coefficients $a_n$ Are Considered As Mean Residual Life Function Of Degradation Measure Distribution.*

*By Applying The Above Model We Find Cortisol Response Due To Sleep Loss For Young Participants And We Conclude That The Sleep Loss Results In An Elevation Of Cortisol Level. Our Results Coincide With The Medical Inferences.*

***Key Words***
*Univalent Functions, Analytic Functions, Cortisol , Hypothalamic Pituitary Adrenal Axis. Degradation Hazard Function, Mean Residual Life Function.*
*Ams Classification: 60e, 62e, 30c45, 30c50, 30c80*

## 1. Introduction

Degradation Is The Reduction In Life Span Of System. Elsayed **[ 4, 6 ]** For Accelerated Failure Data Models As Statistics Based Models.

In Reliability Modeling, Weibull Distribution Is Frequently Applied To Test Life And Also To Obtain Very Low Probabilities Of Failure **[2, 12]**. Some Familiar Relationship Between $f(t)$ The Probability Density Function, $F(t)$ The Cumulative Distribution Function, $h(t)$ The Failure Rate Function And $R(t)$ The Survival Function (Or) The Reliability Function Is

$$h(t) = \frac{f(t)}{1 - F(t)} = \frac{f(t)}{R(t)}$$

Malaya Journal of Matematik, Vol. 8, No. 3, 1306-1310, 2020

https://doi.org/10.26637/MJM0803/0101

# Mathematical model for abnormalities of HPA axis due to stress associated with analytic univalent functions

S. Alamelu [1]* V.G. Shanthi[2] and R. Remila Judit [3]

**Abstract**

The main interest of this study is to find the activity of Hypothalamic Pituitary Adrenal axis - HPA due to stress by measuring cortisol level. HPA axis is a major part of the system that controls reaction to stress and the main objective is to observe the response of the system over time due to stress by modeling degradation hazard function $d(x,t) = g(x)q(t), q(t)$ and $g(x)$ are non-negative functions of time and degradation measure and finding probability distribution to obtain results regarding Mean and Shape of Mean Residual Life for the above distribution- MRL. Obtaining Mean Residual Life is an important and interesting measure which gives the expected remaining life with the present age $t$ also comparing the effects of stress by applying Stochastic Dominance. Here we develop two functions $f_1(z)$ and $f_2(z)$ by using the class of functions of the form $f(z) = z + \sum_{n=2}^{\infty} a_n z^n$ which are analytic in the open unit disc $\mathscr{U} = \{z : z \in \mathrm{C} \text{ and } |z| < 1\}$ whose coefficients $a_n$ are considered as Probability density function of degradation measure distribution, for which the subordination property holds. The prominent Psychologist Selye's findings about human stress effects are adopted and the concept of Selye's theory is applied and we give a real application of stress induced cortisol response for women with High Waist to Hip Ratio ( central fat) and with Low Waist to Hip Ratio ( peripheral fat). The concluded results coincide with the medical findings.

**Keywords**

Hypothalamic Pituitary Adrenal (HPA), Waist to Hip Ratio (WHR), Cortisol, Degradation Hazard Function, Stochastic Dominance, Mean Residual Life-MRL, Analytic functions, Univalent functions and Subordination.

**AMS Subject Classification**

30C45, 30C50, 30C80, 60E, 62E.

[1,2,3] *Department of Mathematics, S.D.N.B. Vaishnav College for Women, Chromepet, Chennai- 600044, Tamil Nadu, India.*

***Corresponding author**: [1] alambalaji@yahoo.com; [2]vgshanthi23@gmail.com; [3] remilajudit2012@gmail.com

**Article History**: Received **02** April **2020**; Accepted **22** July **2020**



## Contents



## 1. Introduction

Degradation is the reduction in life span of system and reliability. System gets performance degradation as by age or deteriorates due to other factors. It is clear that the degradation measure is a stochastic process [ 6 ] . Elsayed [ 5 ] classifies the accelerated failure data models as statistics based models.

In the area of reliability modeling, Weibull distribution is widely used to test life and also to find very low probabilities of failure [1, 12, 16]. Some familiar relationship between Probability density function- $f(t)$, Cumulative Distribution

Malaya Journal of Matematik, Vol. 8, No. 3, 1306-1310, 2020

https://doi.org/10.26637/MJM0803/0101

# Mathematical model for abnormalities of HPA axis due to stress associated with analytic univalent functions

S. Alamelu [1*] V.G. Shanthi[2] and R. Remila Judit [3]

**Abstract**

The main interest of this study is to find the activity of Hypothalamic Pituitary Adrenal axis - HPA due to stress by measuring cortisol level. HPA axis is a major part of the system that controls reaction to stress and the main objective is to observe the response of the system over time due to stress by modeling degradation hazard function $d(x,t) = g(x)q(t), q(t)$ and $g(x)$ are non-negative functions of time and degradation measure and finding probability distribution to obtain results regarding Mean and Shape of Mean Residual Life for the above distribution- MRL. Obtaining Mean Residual Life is an important and interesting measure which gives the expected remaining life with the present age $t$ also comparing the effects of stress by applying Stochastic Dominance. Here we develop two functions $f_1(z)$ and $f_2(z)$ by using the class of functions of the form $f(z) = z + \sum_{n=2}^{\infty} a_n z^n$ which are analytic in the open unit disc $\mathcal{U} = \{z : z \in C \text{ and } |z| < 1\}$ whose coefficients $a_n$ are considered as Probability density function of degradation measure distribution, for which the subordination property holds. The prominent Psychologist Selye's findings about human stress effects are adopted and the concept of Selye's theory is applied and we give a real application of stress induced cortisol response for women with High Waist to Hip Ratio ( central fat) and with Low Waist to Hip Ratio ( peripheral fat). The concluded results coincide with the medical findings.

**Keywords**

Hypothalamic Pituitary Adrenal (HPA), Waist to Hip Ratio (WHR), Cortisol, Degradation Hazard Function, Stochastic Dominance, Mean Residual Life-MRL, Analytic functions, Univalent functions and Subordination.

**AMS Subject Classification**

30C45, 30C50, 30C80, 60E, 62E.

[1,2,3] *Department of Mathematics, S.D.N.B. Vaishnav College for Women, Chromepet, Chennai- 600044, Tamil Nadu, India.*

*Corresponding author: [1] alambalaji@yahoo.com; [2]vgshanthi23@gmail.com; [3] remilajudit2012@gmail.com

Article History: Received 02 April 2020; Accepted 22 July 2020



## Contents



## 1. Introduction

Degradation is the reduction in life span of system and reliability. System gets performance degradation as by age or deteriorates due to other factors. It is clear that the degradation measure is a stochastic process [ 6 ] . Elsayed [ 5 ] classifies the accelerated failure data models as statistics based models.

In the area of reliability modeling, Weibull distribution is widely used to test life and also to find very low probabilities of failure [1, 12, 16]. Some familiar relationship between Probability density function- $f(t)$, Cumulative Distribution

# PERFECT MATCHING OF BRIDGE GRAPH BASED ON GEOMETRIC AND ALGEBRAIC MULTIPLICITY

**Jini J[1*], Hemalatha S[2]**

[1]Department of Mathematics,
Kings Engineering College,
Sriperumbudur, Chennai – 602 117, Tamil Nadu.
*Research Scholar, S.D.N.B.Vaishnav College,
Affiliated to University of Madras

[2]Department of Mathematics,
S.D.N.B. Vaishnav College,
Chrompet, Chennai – 600 044, Tamil Nadu.

**Abstract**

One of the important concepts of Graph Theory is Matching Theory. Several Concepts on Matching Theory has been dealt in [1, 2, 4]. The technique of maximum matching on directed graphs have been studied in [4]. A cubic undirected bridge graph is perfectly matched if $n_i$ - Bridges (i=1, 2, 3,...., n) are connected in a single path. For an undirected cubic graph with zero bridge the perfect matching is based on Algebraic multiplicity and for $n_i$ - Bridges the perfect matching is based on Geometric multiplicity. In this paper an undirected cubic graph connected in a single path has been found up to 3 bridges and the concept is extended to $n_i$ - Bridges.

Keywords: Graph Theory, Matching, Maximum Matching, Geometric and Algebraic Multiplicity

AMS Classification Key: 05C, 05C70, 911368, 15A18

## 1. Introduction

It is known that Matching Theory is an important branch of Graph Theory in which Maximum Matching of an undirected graph is a well-known

Punjab University Journal of Mathematics
(ISSN 1016-2526)
Vol.52(11)2020 pp.11-18

# P Systems for Patterns of Sierpiński Square Snowflake Curve

P.S. Azeezun Nisha
Department of Mathematics,
J.B.A.S. College for Women, Chennai 600018 India

Research Scholar, University of Madras, Chennai, India
Email: hajma29112008@gmail.com

S. Hemalatha
Department of Mathematics,
S.D.N.B. Vaishnav College for Women, Chennai 600044 India
Email: hemrav2008@gmail.com

S. Sriram
Department of Mathematics, School of Arts, Science and Humanities,
SASTRA Deemed University, Tanjore, Tamil Nadu 613 401 India
Email: sriram.discrete@gmail.com

K.G. Subramanian**
Department of Mathematics, Computer Science and Engineering,
Liverpool Hope University, Liverpool L16 9JD U.K.

**Honorary Visiting Professor
Email: kgsmani1948@gmail.com

Received:23 December,2019 / Accepted:18 September,2020 / Published online:12 Novem-ber,2020

**Abstract.**: Syntactic models for generating the approximating polygon patterns of space-filling curves such as the well-known Peano and Hilbert curves have been studied in the recent past. Here we consider the polygon patterns of another space-filling curve, namely, Sierpiński square snowflake curve. For generating array representations of these patterns, we introduce a variant of a fairly recent and novel computing model, known as P system in the membrane computing field. We then develop a finite set of joining rules which on application, join the primitive patterns in the arrays, thereby yielding the polygon patterns of the Sierpiński square snowflake curve.

**AMS (MOS) Subject Classification Codes: 68Q07**
**Key Words:** Space-filling curve, Sierpinski curve, Membrane computing, P system.

Discrete Mathematics, Algorithms and Applications
(2020) 2050097 (10 pages)

DOI: 10.1142/S1793830920500974



# The stability of independent transversal domination in trees

P. Roushini Leely Pushpam*,‡ and K. Priya Bhanthavi†,§

*Department of Mathematics, D. B. Jain College
(Affiliated to University of Madras)
Chennai 600097, Tamil Nadu, India

†Department of Mathematics, S. D. N. B. Vaishnav College for Women
(Affiliated to University of Madras)
Chennai 600044, Tamil Nadu, India
‡roushinip@yahoo.com
§priyabhanthavi27@gmail.com

AQ: Please check througho
text for spelling errors, figur
and table
Please check title, auth
names, affiliations and email
Please check keywords/cod

Received 11 May 2020
Revised 5 July 2020
Accepted 12 July 2020
Published

A set $S \subseteq V$ of vertices in a graph $G = (V, E)$ is called a *dominating* set if every vertex in $V - S$ is adjacent to a vertex in $S$. An *independent transversal dominating* set in a graph $G$ is a dominating set which intersects every maximum independent set of $G$. The minimum cardinality of an independent transversal dominating set is called the *independent transversal domination number* of $G$ denoted by $\gamma_{it}(G)$. In this paper, we characterize those trees whose independent transversal domination number does not alter owing to the deletion of a vertex.

*Keywords*: Dominating set; independent transversal dominating set.

Mathematics Subject Classification: 05C69, 05C76

AQ: Please approve edit.

... Classification 2020:

## . Introduction

... y a graph $G = (V, E)$ with $|V| = n$, we mean a finite undirected and connected simple graph. For graph theoretic terminology, we refer to the book by Chartrand and Lesniak [3]. All graphs in this paper are assumed to be connected. A set $S \subseteq V$ is a *dominating* set if every vertex in $V - S$ is adjacent to a vertex of $S$ and the minimum cardinality of a dominating set is called the *domination number* of $G$ and it is denoted by $\gamma(G)$. A minimum dominating set of a graph $G$ is called a *$\gamma$-set* of $G$. For a comprehensive introduction to domination in graphs, one can refer to the book written by Haynes *et al.* [5]. A subset $S$ of $V$ is called an *independent set* of $G$ if no two vertices of $S$ are adjacent in $G$. The maximum cardinality of an independent set is called the *independence number* of $G$ denoted by $\beta(G)$. A maximum independent set is called a *$\beta$-set* of $G$.

Journal of Critical Reviews

ISSN- 2394-5125 Vol 7, Issue 11, 2020

# DUAL OF B-ALMOST DISTRIBUTIVE FUZZY LATTICE

Dr.Sg. Karpagavalli[1*], K. Rekhalakshmi[2]

[1*]Assistant Professor, Department of Mathematics, Vels Institute of Science, Technology & Advanced Studies. karpagavalli.sbs@velsuniv.ac.in

[2]Assistant Professor, Department of Mathematics, SDNB Vaishnav College for Women. rekhalakshmi.venki@gmail.com

*Received: 08.04.2020* *Revised: 15.05.2020* *Accepted: 06.06.2020*

**Abstract**

The paper introduces the concept of dual B-Almost distributive fuzzy latice (DBADFL) in terms of its principal ideal fuzzy lattice. Necessary and sufficient conditions for an ADFL to become a dual B-ADFL are investigated. We also prove the equivalency of dual B-algebra and dual B-fuzzy algebra. Different characterizations of B-ADL are obtained. In addition, we e tend dual PSADL to dual PSADFL and prove that dual B-ADFL implies PSADFL.

**AMS subject classification:** 06D72, 06D50, 06D75.

Keywords: Almost Distributive Lattice, Dual B-Almost Distributive Lattice, Birkh offcenter, Maximal element, Principal ideals of an Almost Distributive Lattice.



DOI: http://dx.doi.org/10.31838/jcr.07.11.100

## INTRODUCTION

U.M. Swamy and G.C. Rao in [9]introduced the concept of an Almost Distributive Lattice (ADL) as a common abstraction of existing lattice and ring theoretic generalization of a Boolean algebra and observed that the set PI(R) of all principal ideals of an ADL (R, ∨, ∧ 0, m) with a maximal element m, form a distributive lattice. The concept of Birkhoff center B(R) of an ADL with maximal elements was introduced by U.M. Swamy and S. Rameshin [8] and prove that B(R) is a relatively complemented Almost distributive lattice. The concept of a fuzzy set was first introduced by Zadeh in [10], and this concept was adapted by Goguen in [5]and Sanchez in [11] to define and study fuzzy relations. As a continuation of these studies, we define fuzzy relation, fuzzy poset and fuzzy lattice which enables us to define Birkhoff center of Almost distributive fuzzy lattice

In this paper, dual of B-Almost distributive fuzzy lattice (B-ADFL) is characterized by dual B-ADL in which the fuzzy lattice of all principal ideals of (L,A) is a dual B-fuzzy algebra. Mainly we obtain the equivalency of the dual in BADL to the dual in B-ADFL with the property of Almost distributive lattice and

Fuzzy partial order relation. Throughout this paper we consider only dual B-ADFLs which contain at least one maximal element. (L,A) denotes an dual B-ADFL.

## PRELIMINARIES

**Definition 2.1.**[7] An algebra (L, ∨, ∧, 0)of type (2, 2, 0)is said to bean Almost distributive lattice (ADL)with 0 if it satisfies the following condition:

1. $a \vee 0 = a$.
2. $0 \wedge a = 0$.
3. $(a \vee b) \wedge c = (a \wedge c) \vee (b \wedge c)$.
4. $a \wedge (b \vee c) = (a \wedge b) \vee (a \wedge c)$.
5. $a \vee (b \wedge c) = (a \vee b) \wedge (a \vee c)$.
6. $(a \vee b) \wedge b = b$ for all a, b, c ∈L.

**Lemma 2.1.** [7] For any a, b ∈ L we have

1. $a \wedge 0 = 0$ and $0 \vee a = a$
2. $a \wedge a = a$, $a \vee a = a$
3. $(a \wedge b) \vee b = b$, $a \vee (b \wedge a) = a$ and $a \wedge (a \vee b) = a$
4. $a \wedge b = b \Leftrightarrow a \vee b = a$
5. $a \wedge b = a \Leftrightarrow a \vee b = b$
6. $a \wedge b \leq b$ and $a \leq a \vee b$
7. $a \wedge b = b \wedge a$, whenever $a \leq b$
8. $a \vee (b \vee a) = a \vee b$

**Definition 2.2.** [7] Let L be a non-empty set. Fix $x_0 \in L$. For any x, y ∈L, define

$x \wedge y = y$, $x \vee y = x$ if $x \neq x_0$,

$x_0 \wedge y = x_0$ and $x_0 \vee y = y$ if $x = x_0$ Then

$(L, \vee, \wedge, x_0)$ is called an ADL with $x_0$ as its 0 and it is called a discrete ADL.

Alternatively, a discrete ADL is an ADL in which every non-zero element is maximal.

As in distributive lattices [7], a non empty subset I of an ADL L is called an ideal of L

If $a \vee b \in I$ and $a \wedge x \in I$ for any a, b ∈I and x ∈L.

The principal ideal of L generated by a is denoted by (a] and with this notation we have the following :

**Theorem 2.1.** [7] For any x, y ∈L,

(i) $(x] = \{x \wedge a : a \in L\}$.
(ii) $x \in (y] \Leftrightarrow y \wedge x = x \Leftrightarrow (x] \subseteq (y]$.
(iii) $(x \wedge y] = (y \wedge x]$.

an element m ∈L is called maximal if it is a maximal element in the partially ordered set (A,≤). That is, for any a ∈A, $m \leq a \Rightarrow m = a$.

**Theorem 2.2.** [7] Let m be a maximal element in an ADL L and x ∈L. Then the following are equivalent:

i) x is a maximal element of (L, ≤).
ii) $x \wedge m = m$.
iii) $x \wedge a = a$, for all a ∈L.
iv) $x \vee a = x$, for all a ∈L.
v) $a \vee x$ is maximal, for all a ∈L.
vi) $(x] = L$.

The set PI(L) of all principal ideals of L is a distributive Lattice under the operations ∨, ∧ defined by

$(x] \vee (y] = (x \vee y]$ and $(x] \wedge (y] = (x \wedge y]$ in which

(0] is the least element. If L has a maximal element m, then (m] is the greatest element of PI(A).

**Definition 2.3.** [7] Let L be an ADL. Then L is said to be Relatively complemented if for any a, b ∈L with $a \leq b$, there exists $x \in [a, b]$ such that $x \wedge y = a$ and $x \vee = b$, for some $y \in [a, b]$.

**Theorem 2.3.** [7] The following are equivalent for any ADL with 0:

1. L is relatively complemented.

ScienceDirect

Journal of Molecular Structure

Volume 1204, 15 March 2020, 127434

# Crystal structure analysis and quantum chemical study of two macrocyclic compounds

G. Maragatham [a], P. Prabhakaran [b], P. Rajakumar [b], S. Lakshmi [a]

Show more



https://doi.org/10.1016/j.molstruc.2019.127434

Get rights and content

## Abstract

The synthesis of new organic macrocyclic nonlinear optical materials with good performance has taken the prime focus of research due to the unlimited design possibilities. Two macrocyclic structures, confirmed by 1H, 13C NMR and FT-IR, namely spiro pyrrolidine grafted methyl macrocycle $C_{28}H_{26}N_2O_3$ and 1,2,3 triazole bridged pyrrolidine grafted chloro macrocycle $C_{29}H_{27}Cl_1N_4O_3 0.5(H_2O)$ are analysed by single crystal X-ray diffraction method. The UV–Vis spectra of the two compounds show that these crystals are transparent in the entire visible region. The global reactivity descriptors such as ionization potential, electron affinity, electronegativity, chemical hardness, chemical potential, chemical softness, electrophilicity index and nonlinear optical parameters such as dipole moment ($\mu$) and static second order hyperpolarizability ($\gamma$) are determined in gas phase at the molecular level by semiempirical quantum chemical method with the coordinates obtained from X-ray diffraction as the starting geometry. In addition, the bioactivity scores were calculated from the chemical skeleton.

## Introduction

Spiro cyclic compounds are of recent interest because of their conformational features and structural implications for biological systems. Spiro heterocycles like spiropyrrolidines possess pharmacological, therapeutical, anticancer, antitubercular, antiviral, anti-HIV, antibacterial and antifungal activities [1]. Some spiro compounds are used as pesticides [2] and laser dyes [3] They are also used as electroluminescent devices [4]. Spiro pyrrolidine derivatives possess potential antileukemic [5], anticonvulsant [6], antiviral [7] anti-inflammatory [8], antimicrobial and antifungal activities [9].

Triazole derivatives find increasing attention in the field of drug discovery due to their anti-inflammatory [10], antibacterial [11], antimicrobial [12] antitubercular, antioxidant [13], anticancer [14], analgesic, anti-fungal and antiviral [15] and antitrypanosomastid activities [16] and find application in diverse areas of medicine [17]. The ability of nonlinear optical (NLO) materials to transmit, process and store information forms the basis of emerging optoelectronic and photonic technologies [18]. Donor/acceptor substituted benzene derivatives are known to produce

ScienceDirect

Journal of Molecular Structure
Volume 1224, 15 January 2021, 129195

# An over review on recently developed techniques, mechanisms and intermediate involved in the advanced azo dye degradation for industrial applications

V. Selvaraj [a], T. Swarna Karthika [a], C. Mansiya [b], M. Alagar [c]

Show more



https://doi.org/10.1016/j.molstruc.2020.129195
Get rights and content

## Highlights

- The current article reviews about introduction to azo dyes, the various techniques involved for the bio-degradation and photocatalysis degradation of azo dyes including advantages and drawbacks of the each techniques.
- This review articles highlights necessity to develop eco-friendly and cost-effective technique that may address the drawbacks of existing waste water treatment process.
- High lights the mechanism of dye removal and confirmation techniques of nano-alloy catalysts.
- Gives general idea to young researcher about relation between band gab energy and photocatalysis.

## Abstract

The continuous growth of population and increasing industrial activities in the different sectors, viz., textiles, leather, plastics, cosmetics and food processing industries require the development of varying nature of novel dyes. Among the dyes used in different industries, azo dyes are considered to be the most widely consumed and play an important role in the dyeing of textiles, leather, and plastics, etc. Azo dyes and their degradation products are toxic toward aquatic life and mutagenic for humans. The textile industry is one of the major contributors of azo dye pollutants and discharges the large quantity of azo dye effluents, which causes an acute hazardous effect on environment and human health. The conventional physical and chemical methods adopted to degrade azo dye effluents are not always efficient, due to the factors such as pH, temperature, and concentration of dyes. The existence of drawbacks on physico-chemical methods on the degradation of azo-dyes has triggered an interest for the researchers around the world to develop cost effective, alternative and eco-friendly techniques. Even though, the recent available reports indicate that the nanoparticles based microbial enzyme conjugates is considered to be an efficient technique to remove the azo dye from textile effluents within a few minutes, however, they are very high cost and possess difficulties in scale-up. In the present work, an attempt has been made to bring the relevant detailed literature available with regard to effective and efficient method and mechanism of degradation of azo-dyes in order to benefit the researchers of both from academia and industry. Furthermore, the present article also provides degradation based on their chemical structure and the conditions, in addition to mechanism involved for the bio-degradation and photo-catalytic degradation of azo dyes including merits and demerits of the each method.

Previous

Next

## Keywords

Azo-dyes; Textile dye effluent; Waste water treatment; Degradation process; Photo-catalytic; Bio-degradation; Merits and demerits of photo-degradation

Journal of Molecular Structure 1219 (2020) 128564

Contents lists available at ScienceDirect

Journal of Molecular Structure

journal homepage: http://www.elsevier.com/locate/molstruc

# Synthesis, spectroscopic, thermal, structural investigations and biological activity studies of charge-transfer complexes of atorvastatin calcium with dihydroxy-*p*-benzoquinone, quinalizarin and picric acid

S. Niranjani [a], K. Venkatachalam [b, *]

[a] Department of Chemistry, SDNB Vaishnav College for Women, Chrompet, Chennai, 600044, Tamilnadu, India
[b] Department of Analytical Chemistry, University of Madras, Guindy Campus, Chennai, 600025, Tamilnadu, India

ARTICLE INFO

*Article history:*
Received 14 April 2020
Received in revised form
27 May 2020
Accepted 28 May 2020
Available online 5 June 2020

*Keywords:*
Atorvastatin calcium
DHBQ
Quinalizarin
Picric acid
Charge transfer complexes
Antibacterial activity

ABSTRACT

The charge-transfer interactions between n-electron donor, atorvastatin calcium (ATC) and the electron acceptors, 2,5-dihydroxy-1,4-benzoquinone (DHBQ), 1,2,5,8-tetrahydroxy-9,10-anthraquinone (quinalizarin, Quiz), and 2,4,6-trinitrophenol (picric acid, PA) as π-acceptors have been studied spectrophotometrically in methanol by giving highly colored charge transfer complexes. The isolated solid charge-transfer complexes were characterized by elemental, IR, NMR, mass and thermal analysis to elucidate the chemical structure of the obtained solid CT complexes. The stoichiometry of the complexes was found to be 1:2 in [ATC]:[reagent] at DHBQ, quinalizarin, picric acid. This ratio gave the formed charge-transfer complexes in the formulas $[(ATC)(DHBQ)_2]$, $[(ATC)(Quiz)_2]$, and $[(ATC)(PA)_2]$ which was also confirmed by elemental and mass analysis. Their biological activities were also screened against various bacterial organisms. The obtained results are suitable for the estimation of antihyperlipidemic drug, ATC in pharmaceutical dosage forms.



## 1. Introduction

The interaction between a donor and an acceptor involves a formation of weak bonds called charge-transfer complex (CTC) which was first introduced by Mulliken and coworkers [1,2]. These molecular interactions produce colored CTC, which usually absorbs in the visible region [3]. The charge-transfer complexation is the principal director of specificity, rate control and reversibility of many biochemical reactions [4]. It plays an important role in biomolecules [5]. The CT complexes show potent antimicrobial properties against Gram-positive and Gram-negative bacteria [6–12].

Atorvastatin calcium (ATC), chemically [R-(R*,R*)]-2(4-fluorophenyl)-β,δ-dihydroxy-5(1-methlyethyl)-3-phenyl-4 (phenylamino)]-1H-pyrrole-1-heptonoic acid, calcium salt (2:1) is a second generation synthetic 3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase inhibitor [13]. ATC, which is shown in Fig. 1 is the most efficient and potent antihyperlipidemic drug that is widely used for the treatment of hypercholesterolaemia [14]. The enzyme, HMG-CoA reductase is accountable for the rate-limiting step in the cholesterol synthesis mevalonate pathway [15]. The inhibition of HMG-CoA uses to reduce cholesterol in the blood and to increase the synthesis of low-density lipoprotein receptors. As a result, it increases LDL cholesterol from the bloodstream [16]. Statins have been investigated for their antibacterial action [17]. It is official in United States Pharmacopoeia 34, Indian Pharmacopoeia [18,19]. ATC shows some anti-bacterial activities [17,20].

The literature survey revealed several analytical methods were available for the determination of ATC. Wani et al. [21] used microwell-plate absorbance reader and prepared charge-transfer complex with 2,3-dichloro-5,6-dicyano-1,4-benzoquinone (DDQ) in the linear range of ATC in 10–150 μg/mL. Ergin et al. [22] prepared CTC of statins with 7,7,8,8-tetracyanoquinodimethane (TCNQ) in acetonitrile. A UV–visible spectrophotometric method was developed and validated for ATC with iodine in acetonitrile by Ramadan et al. [23]. Several works have been done for CTC with different acceptors such as iodine, chloranil, chloranilic acid, DDQ, TCNQ, 2,5-dihydroxy-1,4-benzoquinone, quinalizarin and picric acid [24–37].

To give the fundamental data that can be used to realize drug–receptor mechanism, the CT complexes of ATC as donor with

* Corresponding author.
*E-mail address:* venkatachalam@unom.ac.in (K. Venkatachalam).

https://doi.org/10.1016/j.molstruc.2020.128564
0022-2860/

Volume 10, Issue 1
February 2021

ITEE Journal
Information Technology & Electrical Engineering

ISSN: - 2306-708X



# Heavy-Vehicle Classification and Detection using Deep-Learning models featuring Transfer-Learning Techniques

[1] V. Sowmya and [2] Dr. R. Radha

[1]Research Scholar, Research Dept. of Computer Science, SDNBV College for Women, University of Madras, Chennai, India
[2]Associate Professor, Research Dept. of Computer Science, SDNBV College for Women, Chennai, India
E-mail: [1]v.sowmy81@yahoo.in, [2]radhasundar1993@gmail.com

## ABSTRACT

Vehicle Classification and Detection is one of the principal challenging tasks for autonomous vehicles as computational intelligence requires perpetually pioneering technology for the development of most advanced systems. The traditional vehicle classification and detection methods are inaccurate, time-intensive, and render low classification rates for diverse target models. With the focus on the aforementioned-shortcomings for developing an effective model utilizing the benefits of cutting-edge techniques of the deep learning models, this paper proposes an efficacious framework for real-time vehicle classification and detection based on Inceptionv3 and YOLOv3 algorithm. In this work, we have considered two classes of heavy vehicles such as buses, trucks for classification, and detection. Initially, a pre-trained inceptionv3 architecture is employed as a base network for vehicle classification. In the subsequent layers, Transfer learning and Data augmentation techniques are incorporated to avoid over-fitting besides augmenting the training speed. A classifier is built to identify the vehicle. Finally, a fine-tuning YOLOv3 algorithm is implemented for the detection of the vehicle. Experimental results on our custom dataset and CIFAR dataset demonstrate that the proposed algorithm has achieved greater detection accuracy of 95.14% mAP in comparison to other state-of-approaches.

**Keywords:** *Deep-Learning, Data Augmentation, Inceptionv3, Transfer-Learning, Vehicle Classification, Vehicle Detection, YOLOv3.*

## 1. INTRODUCTION

Over recent years, scholars in a growing trend commenced progressively research efforts for vehicle testing and the evolution of driving support technology. Vehicle detection using the machine vision framework is a focus area in the computer vision domain. Presently, many scholars have employed image processing, machine learning, and pattern recognition for vehicle detection and accomplished good results contributing to R&D and engineering efforts. [1] proposes a method for detecting obstacles in vehicle detection by application of vision and lidar point cloud fusion. In the following process, it is mapped to get a separate region of interest (ROI). Further, the YOLO algorithm is applied to ROI to detect vehicles. [7] uses a back-propagation algorithm in vehicle detection to enhance the various parts of vehicle characteristics based on a deep dual-vehicle deformable part model. [3] proposes an improved YOLOv1 network for detecting objects. In this work, margin style is replaced with proportion style and append the spatial pyramid pooling (SPP) layer. Then, the inceptionv3 module is added with a 64x1x1 kernel to reduce the weight parameters. [4] uses a YOLOv3 algorithm to detect objects and the results achieve 98.14 mAP which is higher than other algorithms [5] uses a YOLOv3 algorithm for multi-label classification to detect tiny objects and also proves that it is faster than other algorithms.[6] utilize Faster RCNN algorithm for detecting the vehicle. Two public datasets such as MIT and Caltech vehicle databases were used. The results show that the deep neural network method achieves high efficiency and effectiveness. [2] employ a distant-infrared image vehicle detection algorithm during night time based on deep learning. Initially, the non-vehicle pixels are removed with visual saliency computation. Then, a vehicle candidate is generated based on prior data such as vehicle size and camera parameters. Finally, a classifier is trained with deep neural networks to detect vehicles at night-time.

In this paper, real-time vehicle classification and detection are proposed based on deep-learning models. A pre-trained inceptionv3 model and fine-tuned YOLOv3 algorithm are employed for vehicle classification and detecting heavy vehicles. An OpenCV algorithm is applied for testing a model in a real-time environment. The experiment results demonstrate that the proposed method achieves significant accuracy.

The rest of the paper is formatted as follows – Section 2 explains the overall framework of the model. Section 3 details the proposed methodology. Section 4 discusses the experimental analysis and results, and Section 5 concludes the paper.

## 2. ARCHITECTURE MODEL

The overall framework of the model is shown in Figure 1. In this work, we have considered two types of vehicles such as bus and truck, which contain 1500 images each. A pre-trained inceptionv3 model is implemented as a base network for vehicle classification. In the subsequent layers, Transfer learning and Data augmentation techniques are incorporated to avoid over-fitting besides augmenting the training speed. Categorical cross-entropy is used as an optimizer for identifying a vehicle. Finally, a fine-tuned YOLOv3 algorithm is applied for detecting the vehicle. An OpenCV algorithm is used for testing a model in the form of images and videos in a real-time environment.

PAPER • OPEN ACCESS

# Heavy-Vehicle Detection Based on YOLOv4 featuring Data Augmentation and Transfer-Learning Techniques

V Sowmya[1] and R Radha[2]

Published under licence by IOP Publishing Ltd

Journal of Physics: Conference Series, Volume 1911, International Conference on Innovative Technology for Sustainable Development 2021 (ICITSD 2021) 27-29 January 2021, Chennai, India

**Citation** V Sowmya and R Radha 2021 *J. Phys.: Conf. Ser.* **1911** 012029

**DOI** 10.1088/1742-6596/1911/1/012029

v.sowmy81@yahoo.in

[1] Research Scholar, Research Dept. of Computer Science, SDNBV College for Women, University of Madras, Chennai, India

[2] Associate Professor, Research Dept. of Computer Science, SDNBV College for Women, Chennai, India



## Abstract

Real-time Vehicle detection is crucial in today's era for our complex interconnected transportation ecosystem built on an advanced technological network of intelligent systems encompassing a wide range of applications such as autonomous vehicles, traffic Surveillance, advanced driver assistance systems, and etcetera. The significance of its application to digital transportation infrastructure embarks upon a distinct framework for heavy-vehicle detection integrated with the YOLOv4 algorithm for real-time detection. In this proposed work, two entities of heavy vehicles such as buses, trucks are considered. The crux of the model, an algorithmic computational mechanism incorporates Mosaic Data augmentation and Transfer-learning techniques that are applied to avoid over-fitting and to improve the optimal speed during training. Subsequently, a fine-tuning YOLOv4

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 6, 2021, Pages. 1922 - 1927
Received 25 April 2021; Accepted 08 May 2021.

# Big Data Analytics Parameters, Domains and Techniques in a Nutshell

Selvakumar K[1], Nismon Rio Robert[2], Tina Sherin[3] and Niju P Joseph[4]

[1]Assistant Professor, Department of Computer Application, Government Arts College, Kulithalai-639104, Tamil Nadu, India
kselvakumark1984@gmail.com

[2]Assistant Professor, Department of Computer Science, CHRIST (Deemed to be University), Bangalore-560029, India.
nismon.rio@christuniversity.in

[3]Assistant Professor, Department of Computer Science, Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chennai-600044, India.
sherintina@gmail.com

[4]Assistant Professor, Department of Computer Science, CHRIST (Deemed to be University), Bangalore-560029, India.
nijup.joseph@christuniversity.in

***Abstract***

In the digital world, an increasing number of vital had been turning on hand to choice Alright. Perfects refer to the data sets no longer solely large, however additionally numerous and hastily changing, making them hard to manipulate with typical equipment and techniques. Because of the quick growth of such data, options for dealing with and extracting cost and understanding from these datasets have to be researched and provided. Moreover, choice makers ought to be in a position to derive precious insights from such various and swiftly altering data, which can vary from day-by-day transactions in order consumer spiritual as well as conversations data from community. Such a charge may be paid via the use of huge data, which is the utility of a statistical model.

**Keywords:** *large data, facts mining, analytics, choice-making, structured data, unstructured data*

## I. Introduction

The biggest phrases in the field of information technology, the new applied science of non-public communication, have records of great importance Day by day, new vogue and web population grew but by no means by 100 percent. The lack of massive statistics from large organisations, such as Facebook, Yahoo, Google, YouTube, etc., is the result of evaluating the enormous quantity of information that is un-structured or even structured [1]. A huge amount of information is included in Google. There is therefore the need for Big Data Analytics to process large, complex datasets [1].

The whole fact is remarkable in phrases with 5 parameters of structured statistics – variety, volume, value, veracity and speed are the great data challenges. Figure1 indicates the parameters of massive statistics are below:

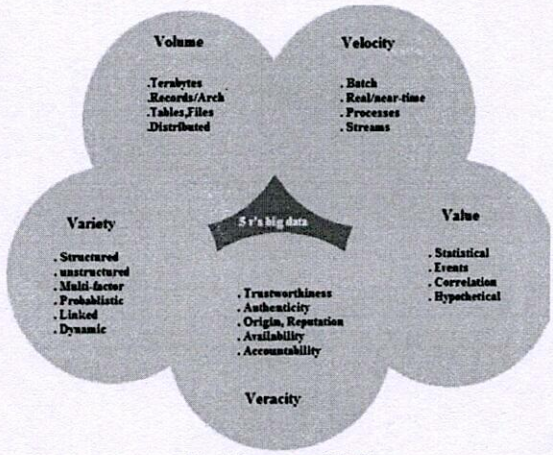


Fig. 1 Parameters of Big Data

a. **Volume for big data**: Data is the growing day for Kilobyte, Megabyte, Gigabyte, Terabyte, Pet byte, Exabyte, Zetta byte, Yotta byte, Bronto byte, Geop byte of information of all sorts. The statistics have large effects on files. The excessive amount of evidence is a major storage problem. This major

International Journal of Applied Engineering Research ISSN 0973-4562 Volume 15, Number 4 (2020) pp. 372-376


# Efficiency - Optimized Approach - Vehicle Classification Features Transfer Learning and Data Augmentation Utilizing Deep Convolutional Neural Networks

**V.Sowmya*[1], R. Radha[2]**

[1]*Research Scholar, Research Dept. of Computer Science, SDNBV College for Women, University of Madras, Chrompet, Chennai-600044, India*

[2]*Associate Professor, Research Dept. of Computer Science, SDNBV College for Women, Chrompet, Chennai-600044, India.*

**Corresponding Author (V.Sowmya)*

**Abstract**

Vehicle Classification represents an essential function in the Traffic Management System. In recent years, predominantly, the Deep Convolutional Neural Network algorithms are widely adopted for object classification and detection. Accordingly, in this paper, transfer learning-based vehicle classification exercising pre-trained Deep Convolutional models such as VGG16, InceptionV3 are proposed. To reduce the over-fitting problem of Deep Convolutional Neural Networks, on minimum-capacity datasets Transfer Learning and Data Augmentation methods are enabled in this proposed system. The performance of the model is tested, premised on the experiments on the custom dataset of vehicle images. In this study, the classification and detection algorithm seeks three classes of vehicles such as bus, truck, and motorcycle. Consequently, the experimental outcomes reveal that compared with the VGG16 model, the classification accuracy of the pre-trained model is higher by implementation of the InceptionV3 model. The InceptionV3 model with an optimized approach achieves classification accuracy of 99.33% for the training set and 98.87% for the validation set, which governs improvement in accuracy of detection.

**Keywords:** Vehicle Classification, Deep Convolutional Neural Network, Transfer Learning, Data Augmentation.

## 1. INTRODUCTION

Image Classification is the cynosure of the Image Processing technique; In real-time applications, Preponderantly, the Deep Learning models are successfully implemented. Nowadays, Deep Learning systems models a tremendous impact on the improvement of classification problems. In Deep Learning, Convolutional Neural Networks are inclined to the efficient analysis of images through the elimination of the manual technique of feature extraction, and directly extract features from raw data. This automatic feature extraction is an accurate learning model to classify the objects.

In much recent research, the deployment of Image Classification has the application of various techniques. In recent years, the Convolutional Neural Network (CNN)[1] evolved as the primary method of various Computer Vision tasks [2]. Mengying shu [3] proposes the system to pre-trained the deep model with proper modification and can be used to fit the model into small dataset without severe over fitting. The experiment results show that the classification of accuracy of 96% is achieved.

Haijian ye [4] et al. proposes a image recognition method on the pre-trained model optimizes the fully connected layer and replaces the softmax classifier and tested them on the self-expanding dataset of Vegetable Pest Images. The experiment proves that the test accuracy of 99.99%. K.S. Anand [5] et al. proposed a system on the Transfer Learning-Based Machine Learning classification system, they leverage the rich features in CNN and propagate into an artificial neural network using Transfer Learning. The experiment result determines that the accuracy of 72% mAP. Muthukrishnan Ramprasath [6] et al. proposes a model using the MNIST benchmark dataset for classifying images based on CNN. The experiment shows that the model has obtained 98% of accuracy. Sajja Tulasi Krishna [7] et al. provides a brief survey on the Deep Learning model. The proposed system is configured and analyzed with the most popular dataset. This survey concludes the dependency on the GPU of the system for the performance of the Deep Learning techniques. Srikanth Tammina [8] proposed a system that uses single pre-trained model VGG16 and compared this with basic CNN using Transfer Learning and Data Augmentation. The experiment shows that VGG16 as obtained 95.40% of accuracy. Manali Shaha [9] et al. proposes a system that make use of Transfer Learning to fine-tune the parameters of pre-trained VGG19 for Image Classification tasks, and the two databases GHIM10K and CalTech256 are used for robust feature extraction. Experiment results show that fine-tuned VGG19 architecture outperforms the other CNN, and Hybrid Learning approach for Image Classification tasks. Mahbub Hussain [10] et al. proposes a study on Image Classification using CNN. For the experiment, the two benchmarked datasets CIFAR-10 and CalTech are structured to train on the CNN framework, and the results are compared with state-of-the-art approaches.

This paper presents a Vehicle Classification method based on pre-trained Deep Models such as VGG16, InceptionV3. The principal objective of this proposed system is to Pre-Train the Deep Model with adequate modification of efficiency-oriented system parameters, and to enhance the probability of the utilization of the model into minimum-capacity datasets

# An Empirical Research on Vehicle Detection employing YOLOv2 features Transfer Learning and Data Augmentation

**V. Sowmya*[1] & R. Radha[2]**

[1]Research Scholar, Research Dept. of Computer Science, SDNBV College for Women, University of Madras, Chrompet, Chennai-600044, India.
[2]Associate Professor, Research Dept. of Computer Science, SDNBV College for Women, Chrompet, Chennai-600044, India.
v.sowmy81@yahoo.in[1],radhasundar1993@gmail.com[2]
Corresponding Author: V. Sowmya*

***Abstract:***

*Vehicle Detection and Classification are challenging in the surveillance control and traffic planning realm. In recent years, notably, the performance of Deep Convolutional Neural Networks models for image-based object classification and detection has been significant. From this perspective, in this paper, a study is conducted on Vehicle detection utilizing the YOLOv2 model, enabled with the TensorFlow Python method to enhance image recognition by incorporating the performance features. This model operates on a customized dataset configured with the fine-grained parameters for application in real-time traffic densities. The experiment result manifests the YOLOv2 system features Transfer Learning and Data Augmentation using a custom vehicle dataset achieves significant prediction accuracy, especially with a small object, while meeting with real-time requirements. As a corollary, with the comparison experiments, it demonstrates that the custom YOLOv2 optimized training parameters achieve greater accuracy, mAP of 78.9%, than the traditional and other Convolutional Neural Network models.*

***Keywords:****Classification, Deep Convolutional Neural Networks, DataAugmentation, TensorFlow, Traffic Surveillance, Transfer Learning, Vehicle detection, YOLOv2.*

## 1. Introduction

The magnitude of automobiles usage in urban roads has created many challenges to manage and control the traffic. Detection and Tracking of Vehicles applying the Traffic Surveillance system plays a vital role in the management and control of road traffic. The core of Image Processing is Classification, Localization, and Detection of Objects where accuracy, speed, cost, and complexity are key challenges. In the initial phase, the object detection pipeline is classified into three phases: Region Classification, Proposal Generation, and Feature Extraction. Support Vector Machine (SVM) [1] is ordinarily employed for object detection and classification as the model manifests remarkable performance in data-qualification. Additionally, some classification techniques are used in the classification phase such as AdaBoost, bagging, and cascade learning, which leads to further improvements in the accuracy of detection.

In recent years, Deep Convolutional Neural Networks for image-based object classification and detection have achieved remarkable success. Besides, Deep learning methods are commonly implemented in the area of computer vision. Deep neural networks produce hierarchical features in comparison with traditional feature descriptors and various scale information in different layers. Finally, it produces robust and selective features for classification. The object detection frameworks rely on deep learning that is primarily categorized into two families: R-CNN [13] and its variants, YOLO [5] and its variants.

YOLO (You Only Look Once) is an object detection system with real-time effects. Enzeng Dong [6] et al, proposed a system for developing an efficient network structure of YOLOv2 for vehicle data

INDIAN JOURNAL OF SCIENCE AND TECHNOLOGY

RESEARCH ARTICLE

# An effective approach to feature extraction for classification of plant diseases using machine learning

S Jeyalakshmi[1]*, R Radha[2]

**1** Research Scholar, Research Department of Computer Science, SDNB Vaishnav College for Women, Chromepet, Chennai, 600044, Tamil Nadu, India
**2** Associate Professor, Research Department of Computer Science, SDNB Vaishnav College for Women, Chromepet, Chennai, 600044, Tamil Nadu, India

OPEN ACCESS

**Received:** 04-06-2020
**Accepted:** 01-08-2020
**Published:** 01-09-2020

**Editor:** Dr Natarajan Gajendran

**Citation:** Jeyalakshmi S, Radha R (2020) An effective approach to feature extraction for classification of plant diseases using machine learning. Indian Journal of Science and Technology 13(32): 3295-3314. https://doi.org/10.17485/IJST/v13i32.827

***Corresponding author.**

bjeya27@gmail.com

**Funding:** None

**Competing Interests:** None



Published By Indian Society for Education and Environment (iSee)

**ISSN**
Print: 0974-6846
Electronic: 0974-5645

## Abstract

**Objectives**: To make automatic classification of diseased potato and grape leaf from normal potato and grape leaf. **Methods:** Experimental sample size of 3000 and 4270 Potato and Grape leaf images were used respectively. The diseased and healthy leaf image samples were taken from PlantVillage dataset. The color features viz., average Red, Green, Blue and Hue intensities of Lesion region were calculated. Features namely Contrast, Dissimilarity, Homogeneity, Energy, Correlation, ASM, and Entropy were extracted from hue lesion region. Also, histogram features such as mean and standard deviation were extracted from hue infected region. Then, data normalization was done on feature set to bring all features into a common scale. Finally, Naïve Bayes, K Nearest Neighbor and Support Vector Machine Classifiers were applied on the above said feature sets. **Findings:** The Dataset was split in the ratio of 80% and 20% for training and test sets. The classifiers NB, KNN and SVM classified Potato leaves with an accuracy of 88.67%, 94.00% and 96.83% respectively and Grape leaves with an accuracy of 81.87%, 93.10% and 96.02% respectively. For both the species, SVM classifier gave the highest accuracy. Also, it was found that the proposed method performs well as compared with the related works in the literature. **Novelty/Applications:** An effective feature extraction method to classify grape and potato diseases was proposed in this research work. Also, it was found that the proposed method performs well as compared with the related works in the literature.

**Keywords:** RGB color space; HSV color space; histogram; color features; grey-level co-occurrence matrix; texture features

## 1 Introduction

Early detection and management of these diseases are essential to prevent plants from being infected in large numbers, thereby avoiding yield loss and economic loss. In [(1)] had proposed a method to classify grape plant diseases such as Black Rot, Esca, Leaf Blight and healthy leaves. In this work, texture features such as Energy,

# Comparative Analysis of Various Feature Extracting Algorithms Using Satellite Images

G.B. Hema Malini and Dr.R. Radha

Abstract

Image Registration is the vital image processing techniques to find precise pixel-to-pixel matching of two different images taken using the similar sensor at different time or dissimilar sensors at the same time/different time. By registering two images we can find the difference between the two images and also we can fuse information from the images. In this paper, automatic image registration of satellite images is performed by various feature extracting algorithms. The key points of each image are extracted using various feature extracting algorithms such as Speed Up Robust Feature (SURF), Minimum Eigenvalue, Harris, and then matching points are developed using Random Sample Consensus algorithm. For completely removing the outlier from the image and fitting the transformation model RANSAC has been used and the Neighbor-Distance-Ratio have been utilized as the feature matching- strategy. Finally, the image is registered using the affine transformation and the steps in image registration are fully automatic. The results are discussed based on the keypoints selection, matching points, and the number of outliers removed. The evaluation metric is based on computation time, matching ratio, Repeatability and RMSE.

Volume 12 | 07-Special Issue

Pages: 545-552

DOI: 10.5373/JARDCS/V12SP7/20202138

Download PDF

International Journal of Recent Technology and Engineering (IJRTE)
ISSN: 2277-3878, Volume-8 Issue-4S5, December 2019

# A Greenhouse Monitoring and Crop Prediction System Implemented using IoT, Arduino Uno and Nodemcu

**M. Lavanya, R. Parameswari**

***Abstract:*** ***IoT plays a vital role in modern technologies by connecting objects to internet through which real time values can be . The system is developed using one such technology in greenhouse. The system developed for the purpose of crop prediction in greenhouse. Soil parameters such as pH and moisture, the environment parameters like temperature and humidity is acquired from the implemented system. The required nutrients such as N, P, K is fed to the crops manually is also considered as input for crop prediction. The system is developed with Arduino Uno, NodeMCU ESP8266(WIFI Module), Sensor like DHT Humidity and Temperature DHT11, pH Analogy, Soil Moisture sensor, 12V DC motor for triggering, 12V Relay and a few other components to complete the circuit. Web hosting is done using PHP. The sensors values get stored in data base using MYSQL for further analytics.***

***Keywords : Arduino Uno, Node MCU, DHT, DHT11, pH analogy, PHP & MYSQL.***

## I. INTRODUCTION

Agriculture is backbone of India. Many farmers in India were following the traditional method for crop selection. Crop rotation is practised [14] by farmers, if the crop rotation is implemented after the proper examination of soil nutrients and its pH value the farmers will get more and good yield than the usual. Nowadays,Greenhouse cultivation becoming popular for farming vegetables, greens and desired fruits. The yield in greenhouse can be maximized by providing the necessary environment such as humidity, temperature and required nutrients for that crop if so the end product from greenhouse always be in good quality, quantity and pesticide free. Greenhouse farming can be practised by anyone even in their roof top. The objective is to combine the available technology namely IoT, to sense soil nutrients, and environment parameter. Machine learning algorithm is used for analysing the values and to predict the suitable crop which suits the soil. The system is implemented with Arduino Uno, NodeMCU ESP8266(WIFI Module) which slightly differ from the proposed system with zigbee module. Zigbee in most cases used for remote monitoring and moreover it is meant for one particular location and the connection once made remains the same until the purpose get solved. The present implementation is made with Arduino Uno, NodeMCU ESP8266(WIFI Module) , deployed as a box kit which is portable in nature and can be used on any location soil sample, through which more and more soil sample data can be acquired from sensors. Unlike Zigbee which has to be fixed to one particular location. Implemented kit can be connected to internet with the help of mobile network and the data can be viewed in the URL whenever required. The rest of the paper is organized as follows: Section II deals with related works. Section III discusses the System Design. Section IV presents Implementation of the system. Section V gives the Results and Discussions. Section VI tells about the Conclusion and Future Enhancement.

## II. RELATED WORKS

Good quality and high production of crops can be made in greenhouse through proper maintenance of humidity,temperature and pH value.Developed a system with ZigBee, artificial intelligence and decision support system for real time monitoring of citrus soil moisture and nutrients. Wireless sensor node is used to predict fertilization and irrigation management. Result showed the increase of production of citrus [1]. Proposed a method only for monitoring crop with IoT, but as a future enhancement for automated irrigation and to secure the land using camera surveillance. Used ATmega WiFi Module and GSM Modem for system development [2]. Had an aim of developing a simple low cost Arduino based system for a greenhouse to monitor the environmental parameters and to be controlled to achieve optimum plant growth and yield. Sensors such as DHT11sensor, Soil Moisture sensor, LDR sensor and pH sensor were used. Values were sent to Anroid Mobile phone. A GSM modem is used to send SMS to user to know the current status of environment [3]. A model of smart greenhouse was created with soil moisture, temperature and humidity sensor, ultrasonic sensor, irrigation was managed with drip irrigation along with water management . Actuators such as fogger were constructed to control the humidity and lights are used to maintain temperature. Bee-hive boxes were used for pollination. Message sent with GSM Modem as sms to buyers when the honey was collected. Cloud was used to store the collected data. Author also concludes that this kind of system can even be installed as roof top gardening and farming can be practised by anyone with no previous knowledge. System was tested in Hibiscus plants to check its growth and increased productivity [4]. X For monitoring agriculture environment technology like WSN with Zigbee and raspberry pi were used. Authors pointed the usage of smart system as a revolution in agriculture, it is stated that remote monitoring and greenhouse cultivation is also possible through which any kind of plants can be given with necessary condition for growing. Cloud enabling and addition of more sensors was the scope of this system[5].

Revised Manuscript Received on December 4, 2019.
* Correspondence Author
**M. Lavanya,**Pursuing, P.hD, Computer Science, Vels Institute of Science, Technology and Advanced Studies, Chennai.
**Dr. R.Parameswari,** Associate professor, Department of Computer Science, Vels Institute of Science , Technology and Advanced Studies, Chennai.

*Retrieval Number: D10011284S519/2019©BEIESP*
*DOI:10.35940/ijrte.D1001.1284S519*



*Published By:*
*Blue Eyes Intelligence Engineering*
*& Sciences Publication*

# A Multiple Linear Regressions Model for Crop Prediction with Adam Optimizer and Neural Network Mlraonn

M. Lavanya[1]
Department of Computer Science
School of Computing Sciences
VISTAS, Chennai
India

Dr. R. Parameswari[2]
Department of Computer Science,
School of Computing Sciences
VISTAS, Chennai
India

***Abstract*—Due to the increase in population, demand for the food is increasing day by day. Crop prediction is necessary or need of the hour to fill the gap between the demand and the supply. Instead of following a traditional system for crop selection method, a successful crop selection for the given soil properties will help the farmers to get the expected crop yield. The objective of the proposed work is to develop one such system. The proposed system is developed using real data with various soil parameters acquired from soil laboratory located in Chennai. This system uses 16 parameters of soil which includes all the micro, macro nutrients along with that pH, EC, OM values and the recommended crop for the soil parameter. The proposed Mlraonn (Multiple Linear Regression with Adam Optimization in Neural Network) model is developed using Keras software mainly used for Deep Learning. A neural network approach is used to construct a regression model. The model is evaluated with Loss Metrics such as RMSE, MSE, and MAE. The proposed algorithm is compared with the existing standardized machine learning algorithms. It is found that the proposed algorithm gave very minimal error as output in all the above three categories of loss metrics than the standardized algorithm such as Random Forest Regression and Multiple Linear Regression.**

***Keywords*—Multiple Linear Regression; Adam Optimization; Neural Network; Keras; Machine learning algorithm; Root Mean Square Error (RMSE); Mean Square Error (MSE); Mean Absolute Error (MAE); presence of Hydrogen (pH); Electrical Conductivity (EC); Organic Matter (OM)***

## I. Introduction

First and foremost method in statistics is linear regression; the mathematical equation representation for the same is Y =m x + c; where y is the predicted output; x is the input variable; m is the slope and c is the bias. The above idea can be extended to multiple linear regression where more than one input features which produces single output feature. The mathematical representation of multiple linear regression is; Y = m1*x1+ m2*x2+m3*x3+.....+mn*xn + c. A neural network model can be created by calculating Weights and bias value at each and every node [23]. The layer consists of various nodes; layers are classified in to input; hidden and output layers. Inputs are multiplied with weights of the node to form a summation of the activation function. The activation is a transformation function that may be a linear or non-linear; applied to every input before it gets transferred to the next layer or to the output layer. Different types of activation function available some of those are Sigmoid; RELU; Leaky RELU and Tanh; all activation function has its own purpose [23]. Linear activation function is very simple than non-linear. RELU and Sigmoid is an example for linear and non-linear activation function respectively. Rectified Linear activation (RELU) requires no transformation and model can be easily trained mainly used for multiple linear regression. The performance of the neural network can be optimized with the optimization function one such is gradient descent. In order to adjust the weights; gradient descent algorithm is used; from which the relation between the error and a single weight can be obtained. This optimization step used to arrive at a conclusion that at which point of weight a very low error is generated. Minimizing the error value is the overall aim of developing any model. In the Feed forward step the weights for all the nodes are calculated with the activation function. Whereas in the back propagation step weights of the network is adjusted based generated error. The model can be trained quickly and its performance will be increased with optimization algorithm. There exists many optimization algorithm; some examples are Sgd; Rmsprop; Nestrov; Adagrad; Adadelta; Adam [26] and so on. Adam optimizer is used to update the node weights. This algorithm is a variation of gradient descent algorithm. It uses two momentum first order momentum is a mean value and second order momentum is variance value. Section II of this paper tells about the related works using various machine learning algorithms. Section III explains about data collection and pre-processing works carried with the dataset. Section IV gives the pseudo code for the proposed algorithm. Section V gives the comparison of the results. Section VI gives the conclusion part.

## II. Related Works

As a part of crop management for wheat crop its biomass was estimated using machine learning algorithm such as Random Forest Regression; SVC Regression and ANN. It is that Random Forest produced accurate estimation than other two algorithms. Experiment took place in southern China [12]. Data collected from weather department to predict most





Go to page 1

International Journal on Emerging Technologies 11(2): 205-212(2020)

ISSN No. (Print): 0975-8364
ISSN No. (Online): 2249-3255

# Perspective Study on Content Based Video Retrieval

*C. Victoria Priscilla[1] and D. Rajeshwari[2]*
[1]Associate Professor, Department of Computer Science,
S.D.N.B. Vaishnav College for Women, University of Madras, Chennai (TamilNadu), India.
[2]Research Scholar, Department of Computer Science,
S.D.N.B. Vaishnav College for Women, University of Madras, Chennai (TamilNadu), India.

(Corresponding author: C. Victoria Priscilla)
(Received 14 December 2019, Revised 08 February 2020, Accepted 15 February 2020)
(Published by Research Trend, Website: www.researchtrend.net)

**ABSTRACT: The Closed-Circuit Television (CCTV) footages plays a vital role in criminal investigations which helps to reduce cost, time and effort but still it has many challenges to face such as monitoring multiple cameras simultaneously, missing pre-eminent details or the object captured on video surveillance, excess storage of video data and spending huge time on watching the entire suspect video to collect the affirmation for investigations. The Motion Detection, Facial recognition, Automatic number plate recognition through CCTV streams a live report. From this, the identification of suspicious behaviour, like public inebriation or attaining thievery from the entire video content becomes very critical to deter the criminals. To meliorate all these situation, Content Based Video retrieval (CBVR) is efficiently used to analyze the video content of the CCTV Footages. The CBVR detects the shots and frames obtained from the CCTV Footages where it analyzes the Color, texture, shape and inter-frame relations to detect the similarity between the frames. Still CBVR lacks to analyze a huge storage of video data content, which is frustrating the person for long time extraction of particular crime scene detection. With this objective, the paper reveals the study on feature extraction methods of Shot Boundary Detection (SBD) and Key-frame extraction methods.**

**Keywords:** Closed-circuit television, Content Based Video Retrieval, Convolutional Neural Network, Key Frame Extraction, Recurrent Neural Network, Shot Boundary Detection.

**Abbreviations:** CBVR, Content Based Video Retrieval; CCTV, Closed-circuit Television; SBD, Shot Boundary Detection; CNN, Convolutional Neural Network; RNN, Recurrent Neural Network.

## I. INTRODUCTION

In recent trends, it has been predicted that the use of smart CCTV technology has been rapidly increased to judge the current circumstances and it is immediately informed to the administrator to take any action for security reasons. CCTV has been identified as a "situation of interest" [1] where it feeds all the records that have to be documented for further investigations. Nowadays CCTV has been installed in most of the public places where it records thousands of scenes, especially in crowded areas which become more peculiar to gather particular information from the very large video database [2]. For crime investigation, this CCTV footage is used to suspect a guilty scene, where the examiner have to view all the shots and scenes to spot the frames. In these cases they have to spend more time to view all the scenes without missing any evidences such as motion detection, facial identification and face detection. Also the obstacles arises with poor image resolution from the footages results more stress to detect the scenes. The survey on CCTV footage reveals that the stress and time management are very weird with low resolution video dataset. To avoid such distractions CBVR is one of the best of all the methods to analyze those video databases to recover the particular content from large collections through shots and scenes [3]. CBVR method is incorporated in two different ways: (a) Video segmentation. (b) Key Frame Selection:

Video segmentation: The video is fragmented into shots by the feature extraction method related to Color, texture, shape, and movement determines the Shot Boundary Detection

Key Frame Selection: The shot constitutes the frames in which the selection of frames using the frame extraction method is affiliated to Motion-based, Content-based, and reference-based to gather the beneficial frames referred to key-frame.

Then the implementations of retrieving the required video sequences are indexed [4] to produce the video summarization. The advantage of CBVR is to pre-process all the frames even in a low resolution pixel such as CCTV footages to sustain better results.

This paper is configured as follows. The following section II addresses about the CBVR Structure, section III describes about Shot Boundary Detection which depict the shots from the frames through Histogram Analysis of various methods, section IV explains the survive methods of Key Frame Extraction with its advantages and disadvantages, section V explains the subsist approach of deep learning techniques and its methods, section VI elaborates the various datasets used in key frame extraction to identify the meaningful key frames, section VII is concluded with the observations.

ScienceDirect

Journal of Molecular Structure
Volume 1224, 15 January 2021, 129195

# An over review on recently developed techniques, mechanisms and intermediate involved in the advanced azo dye degradation for industrial applications

V. Selvaraj [a], T. Swarna Karthika [a], C. Mansiya [b], M. Alagar [c]

Show more



https://doi.org/10.1016/j.molstruc.2020.129195
Get rights and content

## Abstract

The continuous growth of population and increasing industrial activities in the different sectors, viz., textiles, leather, plastics, cosmetics and food processing industries require the development of varying nature of novel dyes. Among the dyes used in different industries, azo dyes are considered to be the most widely consumed and play an important role in the dyeing of textiles, leather, and plastics, etc. Azo dyes and their degradation products are toxic toward aquatic life and mutagenic for humans. The textile industry is one of the major contributors of azo dye pollutants and discharges the large quantity of azo dye effluents, which causes an acute hazardous effect on environment and human health. The conventional physical and chemical methods adopted to degrade azo dye effluents are not always efficient, due to the factors such as pH, temperature, and concentration of dyes. The existence of drawbacks on physico-chemical methods on the degradation of azo-dyes has triggered an interest for the researchers around the world to develop cost effective, alternative and eco-friendly techniques. Even though, the recent available reports indicate that the nanoparticles based microbial enzyme conjugates is considered to be an efficient technique to remove the azo dye from textile effluents within a few minutes, however, they are very high cost and possess difficulties in scale-up. In the present work, an attempt has been made to bring the relevant detailed literature available with regard to effective and efficient method and mechanism of degradation of azo-dyes in order to benefit the researchers of both from academia and industry. Furthermore, the present article also provides degradation based on their chemical structure and the conditions, in addition to mechanism involved for the bio-degradation and photo-catalytic degradation of azo dyes including merits and demerits of the each method.

## Introduction

In an early 19th century, the dyes were initially obtained from natural sources for coloring the fabric materials. Dyes were also used before the nineteenth century, which were obtained from either of vegetable

# Formulation and Analysis of Cost Effective Homemade Enteral Feeds

Subhashini B[1], Subasshini V[2], Aruna M[3]

[1]*M.sc scholar, Department of Home science- Food science, Nutrition and Dietetics, S.D.N.B vaishnav college for Women, chromepet , Affiliated to University of Madras. (Tamil Nadu, India)*

[2]*Assistant Professor, Head in Charge- Department of Home science- Clinical Nutrition and Dietetics, S.D.N.B vaishnav college for Women, chromepet, Affiliated to University of Madras ( Tamil Nadu, India)*

[3]*Assistant Professor, Department of Home science- Clinical Nutrition and Dietetics, S.D.N.B vaishnav college for Women, chromepet Affiliated to University of Madras ( Tamil Nadu, India)*

[1]subhashinib98@gmail.com

[2]v.suba@rediffmail.com

[3]arunamuthuraman@gmail.com

***ABSTRACT:***

Enteral feeding is the process of providing nutrition directly into the stomach through an enteral tube. Blenderized feeding is the type of enteral feeding which can be made using homemade ingredients where the foods and liquids are blended together and provided via enteral tube. Hence in this study 3 homemade enteral feeds are developed using home based ingredients. Ingredients such as *pearl millet, foxtail millet, kodo millet, green gram, bengal gram dhal* were selected. The millets, pulses were germinated and roasted, ingredients like palm sugar, nut powder, milk, and water were also used. All the ingredients were blended to a mixture without residues. The organoleptic evaluation were carried out using 9 point hedonic scale the mean and standard deviation score was high for the feed made with kodo millet with over all acceptability score 8.27±0.09 , followed by pearl millet feed with overall acceptability score 7.04±0.11, and foxtail millet feed overall acceptability score was 6.7±0.12. The kodo millet feed contained 186.56±0.005 Kcal, 36.25±0.01g protein, 4.03±0.005 CHO, 2.84±0.005 fat, 4.01±0.005 mg iron, 58.37±0.005 mg ca, Viscosity of the feed was 42 centipoises, pH was 6.46 . The pearl millet feed contained 236.4±0.005 Kcal, 46.14±0.01g protein, 7.62±0.005 CHO, 2.37±0.005 fat, 0.46±0.005 mg iron, 66.26±0.005 mg ca. Viscosity of the feed was 18.0 centipoises, pH was 6.7. The Foxtail millet feed contained 234.6±0.005 Kcal, 34.86±0.01g protein, 14.37±0.005 CHO, 4.18±0.007 fat, 4.56±0.005 mg iron, 60.53±0.005 mg ca. Viscosity of the feed was 42 centipoises, pH was 6.46. The cost of the feed ranged from 30 to 70 rs/1000ml. Home based enteral nutrition therapy is a viable solution to customize and address the nutritional requirements based on the ailment in the patients.

**KEYWORDS:** Homemade enteral nutrition, organoleptic evaluation, physical properties

## I INTRODUCTION

Enteral nutrition is the process of supplying nutrition into the digestive tract through a tube in the stomach or small bowel. It is suggested for the patients who have normal gastric emptying or who has a normal functioning gut and also

# Formulation, sensory, texture and nutrient analysis of jowar waffle

**Ragasudha. V [a], R. Subaratinam [b*], Sangavi P [c*]**

*[a] M.Sc., Research scholar, Department of Home Science – Food science, Nutrition and Dietetics, Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women.*

*[b] Assistant professor, Department of Home Science – Food science, Nutrition and Dietetics, Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women.*

*[c] Assistant professor, Department of Home Science – Clinical Nutrition and Dietetics, Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women.*

**Abstract:**

Waffles are a sweet convenient product with a soft texture. The present study was conducted to develop a nutrient rich spicy waffle using jowar flour and wheat flour. Totally 24 different types of waffles (T1-70% Jowar flour, 20% Wheat flour and 10% spice bundle, T2-60% Jowar flour, 30% Wheat flour and 10% spice bundle, T3-50% Jowar flour, 40% Wheat flour and 10% spice bundle) were formulated and standardized with spice mixture of 8 different combinations were prepared and subjected to sensory evaluation. The waffles prepared using red chilli powder as the dominant spice in the mixture, was subjected for various examinations like nutrient, texture, microbial and shelf-life analysis. Sensory attributes of the formulated and standardized waffle were carried out using 9-point hedonic scale and T2 treatment had high acceptability score when compared to other treatments. T2 treatment was rich in protein (23.99g), carbohydrate (7.16g), Dietary fibre (1.49g), ash (1.89), iron (7.61mg), calcium (60.61mg) and B-complex vitamins such as Vitamin B1 (0.994 mg), B2 (1.78mg), B3 (10.33mg) and B6 (1.09 mg). The texture profile analyzes - firmness of T3 treatment was high when compared with T0 and T2 treatment. The shelf- life of the waffle was analyzed for T0, T2 and T3 treatments for 3 days and found to be one day with desirable characteristics. The microbial analysis such as yeast and mould count, total bacterial count of T0, T2 and T3 treatments were evaluated and it lies within safe limits.

**Keywords:** Jowar, texture analysis, Waffle.

*Corresponding author Email: subapgr@gmail.com, sangavi.paranthaman@gmail.com

Contact number: 9884144072

OPEN ACCESS American Journal of Biochemistry and Molecular Biology

ISSN 2150-4210
DOI: 10.3923/ajbmb.2020.19.22

CrossMark

Research Article

# Comparison of the Efficacy of Cinnamon Capsule over Cinnamon Infusion on Type 2 Diabetes Mellitus Subjects

[1]T. Sivapriya and [2]Sheila John

[1]Department of Clinical Nutrition, SDNB Vaishnav College, Chrompet, Chennai-44, India
[2]Department of Home Science, Women's Christian College, Nungambakkam, Chennai-6, India

## Abstract

**Background and Objectives:** Functional foods are commonly ingested orally. For efficient bioavailability, a product must be in a form that is easily digestible and thus able to enter the blood stream rapidly. The objective of the study was to compare the effectiveness of *Cinnamomum zeylanicum* infusion and *Cinnamomum zeylanicum* capsules on blood plasma level of type 2 diabetes mellitus subjects. **Materials and Methods:** One gram of *Cinnamomum zeylanicum* capsule and 75 mL of infusion were supplemented to 60 subjects with type 2 diabetes mellitus. The effectiveness of the supplements were investigated on serum blood glucose levels after a period of 45 days. The blood parameters assessed were fasting blood glucose, postprandial blood glucose, serum insulin and serum fructosamine. **Results:** Results indicated that there was no significant difference between the capsule ingested group and infusion ingested group indicating that consumption of both forms of cinnamon had the same effect. **Conclusion:** Hence, it was concluded that cinnamon powder when consumed regularly at effective levels has a good impact on blood glucose levels of type 2 diabetes subjects.

Key words: Cinnamon, infusion, capsule, blood glucose, type 2 diabetes, significant, fasting

Citation: T. Sivapriya and Sheila John, 2020. Comparison of the efficacy of cinnamon capsule over cinnamon infusion on type 2 diabetes mellitus subjects. Am. J. Biochem. Mol. Biol., 10: 19-22.

Corresponding Author: T. Sivapriya, Department of Clinical Nutrition, SDNB Vaishnav College, Chrompet, Chennai-44, India



Competing Interest: The authors have declared that no competing interest exists.

Data Availability: All relevant data are within the paper and its supporting information files.

# Formulation of Kattuyanam Rice Cupcake and its Quality Assessment

**Akshaya R.**
Department of Home Science - Nutrition, FSM and Dietetics, S.D.N.B. Vaishnav College for Women, Chennai

**Vijaya Vahini R.**
Department of Home Science - Nutrition, FSM and Dietetics, S.D.N.B. Vaishnav College for Women, Chennai

**Vijaya Vahini R.**
Department of Home Science - Nutrition, FSM and Dietetics, S.D.N.B. Vaishnav College for Women, Chennai

**Lakshmi T. S.**
Department of Home Science - Nutrition, FSM and Dietetics, S.D.N.B. Vaishnav College for Women, Chennai

**DOI:** https://doi.org/10.21048/IJND.2021.58.S2.28002

**Keywords:** Kattuyanam Rice, Cupcake, Vegan, Gluten-Free, Novel Snacks.

**ABSTRACT** Cereal and pulse combination is considered as the staple food in the diet pattern, whereas refined or processed food consumption plays an important role in the occurrence of chronic lifestyle-related diseases. Cake is a sweet baked food made from refined flour and sugar, egg and fat. Consumers are gaining awareness about the importance of consuming healthy and wholesome foods. Hence, there is a felt need to develop plant-based, gluten-free and lactose-free cupcakes incorporating indigenous kattuyanam rice by completely replacing refined flour. Brown rice (Oryza sativa L.), also recognized as Kattuyanam rice is one of the traditional coloured rice variety which has immense nutrient potentials and improves human health. The present study was intended to formulate a plant-based cupcake that is rich in protein, fibre and calcium. The study also aimed at evaluating its nutritional composition, calculate its cost, and to assess the level of acceptability by subjecting to organoleptic evaluation. The plant-based cupcakes were formulated in three different ratios using each pulse variety and with kattuyanam rice. The two varied pulses used were horse gram dhal [A KHC (50:10), B KHC (40:20), C KHC (30:30)] and green gram dhal [D KGC (50:10), E KGC (40:20), F KGC (30:30)], the cakes were formulated and standardized without the addition of any artificial preservatives. Sensory evaluation of the cupcakes was carried out by a panel comprising of twenty members and the nine-point hedonic scale was used. The results of the

*Studies in Indian Place Names*
*UGC Care Listed Journal*

*ISSN: 2394-3114*
*Vol-40-Issue 20-2020*

# ASSESSMENT OF EATING BEHAVIOUR AMONG ADULTS RESIDING IN CHENNAI, INDIA - A CROSS SECTIONAL STUDY

**Sarah Priscilla. S**
Assistant Professor, Dept of Nutrition, FSM and Dietetics,
S.D.N.B Vaishnav College for Women, Chromepet, Chennai -44.
sarah.priscy@gmail.com

## Abstract

Eating habits plays an important role in our health and well being. Eating disorders, overweight, obesity are manifested through a disturbed and distorted eating habits often exhibited by an individual. Food reliably alter mood and emotional predisposition, reduces arousal and irritability. By making better food choices, one might be able to control compulsive eating behaviours and weight gain. This cross sectional survey is to study the eating behaviour of adults residing in Chennai. Convenient sampling technique was used to select 150 young and middle ages adults from Chennai. To understand the eating behaviour of adults, adult eating behaviour questionnaire was adopted from 'Adult Eating Behaviour Questionnaire' designed by Hunot et al, 2016 was used in my study and eight factors such EF-Enjoyment of Food, EOE-Emotional Over Eating, EUE-Emotional Under Eating, FF-Food Fussiness, FR-Food Responsiveness, SE-Slowness in Eating, H-Hunger and SR-Satiety Responsiveness were associated with demographic characteristics, dietary habits and anthropometric parameters of the participants. Results revealed that body mass index was significantly associated with the age and the dietary habits of the participants. Surprisingly, In the present study population, there were no significant differences in the eating behaviour of adults with different body composition. However, Age did have impact on the eating behaviour trait like food fussiness, slowness in eating, satiety responsiveness ($p<0.05$). It could be concluded that younger adult had more food fussiness and slowness in eating compared to that of middle aged adults. Good nutrition and healthy habits develop over age and people become more health conscious over age to prevent chronic disease.

**Keywords:** *Food Choice, Eating Disorders, Healthy Lifestyle, Nutrition and Health, Chronic Diseases.*

## INTRODUCTION

Food is an essential part of life and adequate nutrients must be provided through diet to survive and sustain a healthy life. (Becker EM, Nissen LR & Skibsted LH, 2004). Food provides nutrients and

# ARCHIVES

## Comparative Analysis of Various Feature Extracting Algorithms Using Satellite Images

G.B. Hema Malini and Dr.R. Radha

Abstract

Image Registration is the vital image processing techniques to find precise pixel-to-pixel matching of two different images taken using the similar sensor at different time or dissimilar sensors at the same time/different time. By registering two images we can find the difference between the two images and also we can fuse information from the images. In this paper, automatic image registration of satellite images is performed by various feature extracting algorithms. The key points of each image are extracted using various feature extracting algorithms such as Speed Up Robust Feature (SURF), Minimum Eigenvalue, Harris, and then matching points are developed using Random Sample Consensus algorithm. For completely removing the outlier from the image and fitting the transformation model RANSAC has been used and the Neighbor-Distance-Ratio have been utilized as the feature matching- strategy. Finally, the image is registered using the affine transformation and the steps in image registration are fully automatic. The results are discussed based on the keypoints selection, matching points, and the number of outliers removed. The evaluation metric is based on computation time, matching ratio, Repeatability and RMSE.

Volume 12 | 07-Special Issue

Pages: 545-552

DOI: 10.5373/JARDCS/V12SP7/20202138 (http://doi.org/10.5373/JARDCS/V12SP7/20202138)

Download PDF

← Back to Archives (archives.php)

Login (login.php)

*Tathapi*
**(UGC Care Journal)**
**ISSN:2320-0693**
**Vol-19-Issue-39-June-2020**

# A Study on The Impact of Social Media on Chennai Youth

**Ms. G. SAKUNTHLA DEVI**
Research Scholar, Department of Business Administration, Govt. Arts College, Nandanam, University of Madras, Chennai.Email id: sagu_mba@yahoo.co.in
**Dr. G. RAJESH KUMAR**
Assistant Professor, Department of Business Administration, Govt. Arts College, Nandanam, University of Madras, Chennai. Email id: profrajesh702@gmail.com

## ABSTRACT

Today social media is playing vital role. The technology has been growing rapidly from day to day. The young generation is ready to move with the current changes in digital world. No one can separate present youngster from social media. It became part of their life. Almost they are addicted to social media applications for various reasons. Their lifestylehas changed personally as well as officially because of social media. Information technology makes the world a global village and connects with overall the world.There are many advantages and disadvantages in using social media.This study aims to assess the impact of social media on youths who are living in and around Chennai city. The survey conducted by structured questionnaire and collected 150 samples.

**Keywords:** Impact of social media; Behavioural changes, Attitude changes and Emotional experience.

## INTRODUCTION

The meaning for social media is interactive computer -mediated technologies that facilitate the creation or sharing of information, ideas, career interests and other forms of expressing name communities and networks. Research conducted by Global web index social media users are spending an average of 2hours and 24 minutes per day. Multinet working across an average of 8 social networks a messaging app. Tiktok was introduced before 5 years now it is in 10th place in popular social network. J. Clement has told that 4.57 billion people were active internet users as of April 2020, encompassing 59 percent of global population. china, India and the united states rank ahead all other countries in internet usage.

Sambodhi
(UGC Care Journal)
ISSN: 2249-6661
Vol-44 No.-01 (XXII) January-March (2021)

# CONSUMER BUYING BEHAVIOUR TOWARDS HOME-MADE CHOCOLATES - A STUDY WITH SPECIAL REFERENCE TO CHENNAI CITY

**R. Srividhya**
Assistant Professor & Part time Ph.D. Research Scholar, Department of Commerce
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet,Chennai -44

**Dr. R. Savithri**
Associate Professor & Head, Department of Commerce
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet,Chennai-44

## ABSTRACT

Consumer behaviour is the study of individuals, groups or organizations and all the activities associated with the purchase, use and disposal of goods and services, and how the consumer's emotions, attitudes and preferences affect buying behaviour. Home-made chocolates are prepared in homes in an eco- friendly manner. The main aim of this study is to understand the consumer buying behaviour towards home-made chocolates. Data had been collected with the help of structured questionnaire which comprised of two parts. Part I dealt with demographic profile of the respondents and part II dealt with the perception of consumer behaviour. Convenient sampling method was adopted and questionnaire was circulated among 150 respondents in Chennai city. Percentage analysis was used to find out the demographic profile of the respondents. Chi-Square test was used to find out the relationship between the family monthly income and the amount spent by the respondents to buy the home-made chocolates and the result revealed that there was no significant relationship between the family monthly income and the amount spent by the respondents to buy the product. Factor analysis was applied to analyse the consumer perception as regards home-made chocolates and the study revealed four factors namely packaging, environment friendly, quality and content.

**Keywords:** *Consumer Behaviour, Home-made chocolates, consumer perception*

## INTRODUCTION

Consumer behaviour is the study of individuals, groups or organizations and all the activities associated with the purchase, use and disposal of goods and services, and how the consumer's emotions, attitudes and preferences affect buying behaviour. It refers to the movement of the consumers in the market place and the underlying purpose for those movements. The center or focusing point of the marketing is Consumer rather than the product. Chocolate is a sweet generally brown in color which is made from cocoa beans in the forms of candy, block and bar. It's a part of celebrations and festivals which gives immense happiness while eating them. Home-made chocolates are prepared in homes in an eco- friendly manner.

## IMPORTANCE OF THE STUDY

Today's marketing concept has changed from product oriented to consumer oriented. Products are produced based on consumers preferences and attitudes. Every producer need to understand the consumers likes and dislikes. Hence the study of consumer behaviour gains importance.

## SCOPE OF THE STUDY

Even though consumers are aware of various branded chocolates available in the market, they are very particular in quality and cleanliness. Now consumers are conscious of their health and hygiene. Consumers are moving towards eco-friendly

Sambodhi
(UGC Care Journal)
Vol-44 No-01 (XXII), January - March (2021)

# A STUDY ON THE FACTORS INFLUENCING CONSUMER ATTITUDE IN BUILDING AFFINITY TOWARDS PURCHASE OF HANDLOOM PRODUCTS

**T.Metilda Devakirubai**
Part-Time Ph.D. Research Scholar, Department of Commerce &
Assistant Professor & Head, Department of B. Com (A&F)
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet, Chennai-600 044

**Dr.R.Savithri**
Associate Professor & Head, Department of Commerce
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet, Chennai-600 044

## ABSTRACT

Building affinity in the minds of consumers becomes the focus of every business. Affinity towards a product or service depends upon the attitude of the consumers. The handloom industry in India has a plethora of handloom products which have an impact on the economic growth. At present, consumer attitude is changing and are diversified in nature due to changes in the purchasing pattern of handloom products. The purchasing decision of the handloom product consumers is influenced by various factors like the awareness level, knowledge, attitude, trust and loyalty, price, quality, product preference, etc. The purpose of this study is to understand the variables affecting the consumers while purchasing the handloom products and to identify whether the purchase of handloom products creates delight (positive/ favourable) or disappointment (negative/ unfavourable) leading to affinity towards handloom products. Data were collected from 200 handloom product customers in Chennai through a questionnaire and collected data is analysed with the help of Percentage analysis and factor analysis. The attitude of the consumers towards handloom products was highly influenced by the attributes of convenience, attention, expectation and awareness.

Keywords: *Consumer attitude, affinity, handloom products.*

## INTRODUCTION

While considering the purchase behaviour, one of the most important drivers is the customer attitude. Attitudes usually reflects the mindset of the consumers whether there is a favourable/ delight or unfavourable / disappointment ultimately inducing consumers either to purchase or not to purchase the particular products or brands. Attitude may be considered as a learning process by way of personal experience, perceived behaviour. Attitude stimulates awareness, loyalty, expectations and convenience leading to purchasing decision. Attitude may transform low-involvement products into high involvement products.

In the world of fabrics, the Handloom products play a predominant role in the Indian heritage. Tribal handloom sarees like Ashavali, Patola from Gujarat, Baluchari, Batik, Garad, Jamdhani, Tant from West Bengal, Banarasi and Chikan from Uttar Pradesh, Bhandhani, Lehariya, Kota from Rajasthan, Bomkai, Sambhalpuri from Odhisha, Chanderi from Madhya Pradesh, Dharmavaram, Kanchipuram from Tamil Nadu, Eri Silk from Assam, Kalamkari, Mangalagiri, Uppada, Venkatagiri, Guntur sarees from Andhra Pradesh, Ilkal from Karnataka, Kasava from Kerala, Narayanpet sarees from Telengana, Paithani from Maharashtra, speaks about the remarkable weaving skills, culture and tradition of India. The natural dying of these handloom sarees creates credibility and loyalty towards the other handloom products like dhotis, dress materials, lungies, towels, shirtings, bedsheets, carpets and rugs, mosquito nets, bathroom/bedding linen, etc., thereby creating a strong mental bondage resulting in affinity.

Sambodhi
(UGC Care Journal)
ISSN: 2249-6661
Vol-44 No.-01 (XXII) January-March (2021)

# BUYER BEHAVIOUR OF GOVERNMENT SCHOOL STUDENTS AS REGARDS USAGE OF SANITARY NAPKINS -A STUDY WITH SPECIAL REFERENCE TO NANMANGALAM GOVERNMENT SCHOOL, CHENNAI

**R.Harini**
Part-Time Ph.D. Research Scholar, Department of Commerce &
Assistant Professor, P.G, Department of Corporate Secretaryship,
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chennai 600 044.
harinir.krishnan@gmail.com

**Dr.R.Savithri**
Associate Professor & Head, Department of Commerce
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chennai 600 044.

## ABSTRACT

Menstrual hygiene continues to be a challenging issue even today. Deep-rooted myths, illusion, taboos associated with menstruation continue to occupy the minds of young students and women especially in rural and semi-urban areas of India. This creates the need to understand the buying behavior of sanitary napkins among adolescent girls. The present study is based on the perception of the usage of sanitary napkins among 8th, 9th & 10th standard students of Government school, Nanmangalam, Chennai. The sample size of the study is 150. Percentage analysis and Chi-square test are used. The objective of the study is to understand the buying behavior of napkins and satisfaction in using napkins by school students.

**Keywords** – *buyer behavior, perception, adolescent, menstrual hygiene*

## INTRODUCTION

Consumer behavior refers to the decision-making process by which consumers interact with their environment and the actions they take in the market place. Consumers are the king of the market and studying the underlying motives of purchasing behavior is very important.

Sanitary napkins are used during menstrual cycle by students/women to undergo smooth and comfortable periods. After attaining puberty, students are being introduced to napkins. Sanitary napkins are very commonly used product in urban areas. "Sanitary Protection: Every Woman's Health Right", a study by AC Nielsen concluded that out of India's female population (355 million),only 12 % use sanitary napkins. In case of semi-urban and rural areas, many students/women still prefer using clothes and other absorbents. This creates a need to examine the purchasing behavior of sanitary napkins by students and women and to study the satisfaction in using napkins.

## REVIEW OF LITERATURE

S. Deepa et. al. (2018) studied on menstrual health and hygienic sanitation among 319 adolescent students and women between the age group of 13-23 students and 23-49 women belonging to rural and urban areas. Percentage analysis revealed that awareness about menstruation was high among 67% students and women of urban areas and 33% are aware in rural areas. Sanitation practice among rural students and women were found to be unacceptable and there is a need to community education on menstrual hygiene.

Pooja et.al. (2017) analysed the perception of use of napkins among 497 students in Khammam locality, Telangana between the groups of 11-20 and 21-30. Percentage analysis shows that 57.29% were not aware of chemicals used in making napkins, 46.7% respondents change napkins between 4-8 hours. For 37.75% of respondents, buying motives like comfort,







Go to page 1

Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5706-5800

Research Article

# Consumers' willingness to pay more for organic food products-A study with reference to the Chennai city

**Dr. Shrimathy Ramalingam, M.com. M.Phil., PhD[1], R.Neela Anuradha M.com. M.Phil. SET[2]**

[1]The principal, Research Supervisor&Guide, Associate Professor& Head, Department of Commerce, Pachaiyyappa's college for women,Kancheepuram-631 503

[2]Assistant Professor,Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet, Chennai- 600 044

**Article History**: Received: 11 January 2021; Revised: 12 February 2021; Accepted: 27 March 2021; Published online: 10 May 2021

**ABSTRACT:**

In the present era, consumers are becoming more health conscious due to the increasing health hazards. So consumption of organic food products have increased to a greater extent than ever before. This study aims to research about the key factors influencing consumers' willingness to pay more for organic food products. The results showed that education and quality attribute of organic food products are the motivating factors to pay a premium price for organic food products.

**Key words:** organic food products, willingness to pay

## Introduction

The Consumers' purchase behaviour for food products is undergoing significant changes across the world .The increased challenges on health issues and changing lifestyles, coupled with environmental pollution have created a major impact on consumer's purchasing decisions. Alarming increase in the growth of cancer due to the increased usage of pesticides in farming, has created a major health impact in the society. Even a small amount of pesticides and fertilizers can create major health hazards for children, younger generation.

Organic farming is closely related to the Indian agricultural practices. Growing responsiveness towards environment, health and society has created an urge among Indian consumers and agriculturalists to choose organic food as the best alternative.

## Significance of the study:

This study attempts to evaluate the consumer's willingness to pay the price premium for organic food products. It also attempts to identify the factors affecting the willingness to pay for organic food products in India. The demand for organic food products in India among various demographics have also been analysed in this study.

## Statement of the problem:

Nowadays Indian consumers have become more conscious about food safety and quality due to the increasing ailments like obesity, high cholesterol, cancer, and other similar common health problems. As a result, the Indian organic food market has grown drastically in recent years. Also the increase in disposable monthly income and awareness also influences the organic food market. There is a change in mindset of Indian consumers is observed these days. Though organic foods are more expensive than regular food products, consumersexpress more willingness to purchase. Thus, this research study is conducted in Chennai city to analyse the consumers' willingness to pay for organic food products.

## REVIEW OF LITERATURE:

1. **Aryal et al. (2009)** revealed in their research that consumers expressed a positive attitude towards pricing of organic food products. Majority of the consumers felt that organic food pricing is reasonable only when compared to conventional foods. Based on the availability, consumers were ready to shed an extra premium pricing for organic foods.

2. **Diaz (2012)** analysed that the level of knowledge about organic food products and their level of consumption significantly found to influence the willingness to pay for organic food. Those who were less aware of organic food benefits felt that pricing is too high.so it was suggested to create more awareness among the Spanish consumers regarding organic food products.

3. **Sriwaranun, Gan, Lee, and Cohen (2015)** highlighted that food quality attributes like freshness, appearance, and nutritious for health and the pesticides-free attribute were the major factors influencing the purchase of organic foods. Ethical concerns towards animal welfare and the fear of GMOs in conventional food production also increased consumers' willingness to pay for organic food products.

*Turkish Journal of Computer and Mathematics Education* *Vol.12 No.4 (2021), 1285-1307*
*Research Article*

# WORK FROM HOME AT IT COMPANIES– THE NEW NORMAL

**Dr. S. Seethalakshmi [a], Dr. K. Shyamala [b]**

*[a]Associate Professor, Department of Commerce (Self Finance)ShrimathiDevkunvarNanalal Bhatt Vaishnav College for Women,Chromepet, Chennai –600 04*
*[b]Assistant Professor, Department of B.COM Corporate Secretaryship (Self Finance) ShrimathiDevkunvarNanalal Bhatt Vaishnav College for Women,Chromepet, Chennai - 600 044*

**Article History**: Received: 11 January 2021; Accepted: 27 February 2021; Published online: 5 April 2021

**Abstract:** *Work from Home" has become the new normal during theCovid'19 pandemic. The Information Technology giants companies are considering 'Work from home' as a permanent solution to the increasing rental costs and overhead costs. Work from home has not affected the productivity of the employees in most cases. IT Employees also stand to benefit in many ways in terms of flexible working, reduced travel, home atmosphere, less pollution etc.*
*This study was taken up through a survey of 103 IT employees to understand their perception on 'Work from Home'. The study intends to identify Factors influencing their perception and the Challenges faced by them during work from home.*

## 1. Introduction

It is a long-cherished dream of several employees across the Globe- 'To work from Home". Employees cherish working from home for several reasons like they save lot of time spent on travel, less fatigue, more flexibility, less of unnecessary interaction, comfort of doing all office work in a relaxed, convenient and comfortable home atmosphere. The young mothers and employees who have health issues regard WFH as a boon, as they can continue to earn while being at home.

Today, the advancements in Information Technology, the Internet connectivity and the Cloud storage have made it possible for companies to offer work from home advantage to their employees.

All though the Work from Home(WFH) option was in cards for several years, it was never put into practice by any of the corporate, fearing the difficulties in co-ordination and control of employees in remote locations.

The outbreak of the pandemic Covid-19 necessitated the use of Technology to support'Work from Home'. The spread of the pandemic, Lack of facility to commute to work place during the lock down, non availability of several essential services nailed the box.

Almost all the IT companies offered Work from Home option to all its Employees. Chennai being a IT hub of India, next only to Bangalore, houses several Giant IT companies like the TCS, Wipro, HCL, HP, Infosys, CTS and many other companies. All companies have given WFH option to all the employees.

The companies save huge expenses on Overheads incurred on their employees and continue to produce results. In fact the IT industry has effectively supported several other industries and services during the Pandemic.

The paper attempts to through light on Chennai's IT employee's perception and reaction to the sudden work from home option, imposed on them. WFH was the most desired option by most employees. But their reaction to this forced reality is assessed in this paper.

If the WFH system is mutually beneficial to both the employer and the employee several companies may start virtual operations.

Cost incurred on Buildings, Infrastructure, Overheads, Services, Maintenance, Transportation etc could be saved.

There corporate can avail service of diverse group of employees stationed at different corners of the country.

Employees stand to benefit in terms of time saved, family time, less fatigue, less human intervention, technology exploitation.

Society will also stand to benefit through lesser noise and air pollution, Lesser petrol consumption, More space for better projects etc.

Thus the WFH sounds beneficial to all stake holders. The Effectiveness, Employee's productivity, Psychological and Physiological impact on the employees have to assess before WFH can be implemented in the long run.

This paper takes a one single dimensional view of the subject, focusing on the employee's perception of WFH based on their experience during this pandemic.

### Review of Literature

**Reshma, P. S. Aithal, Shailashree V. T. and P. Sridhar Acharya (2015) studied** "Working from Home" e-business model is analysed using 'ABCD Analysis Technique'. Based on various factors which decides the Working from Home system, a model of various factors affecting under organizational objectives, employers point of view, employees point of view, customers/students point of view, environmental/societal point of view and system requirements are derived by a qualitative data collection instrument namely focus group method.



Go to page 1

Sambodhi
(UGC Care Journal)
ISSN: 2249-6661
Vol-44 No.-01 (XXII) January-March (2021)

# CONSUMER BUYING BEHAVIOUR TOWARDS HOME-MADE CHOCOLATES - A STUDY WITH SPECIAL REFERENCE TO CHENNAI CITY

**R. Srividhya**
Assistant Professor & Part time Ph.D. Research Scholar, Department of Commerce
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet,Chennai -44

**Dr. R. Savithri**
Associate Professor & Head, Department of Commerce
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet,Chennai-44

## ABSTRACT

Consumer behaviour is the study of individuals, groups or organizations and all the activities associated with the purchase, use and disposal of goods and services, and how the consumer's emotions, attitudes and preferences affect buying behaviour. Home-made chocolates are prepared in homes in an eco- friendly manner. The main aim of this study is to understand the consumer buying behaviour towards home-made chocolates. Data had been collected with the help of structured questionnaire which comprised of two parts. Part I dealt with demographic profile of the respondents and part II dealt with the perception of consumer behaviour. Convenient sampling method was adopted and questionnaire was circulated among 150 respondents in Chennai city. Percentage analysis was used to find out the demographic profile of the respondents. Chi-Square test was used to find out the relationship between the family monthly income and the amount spent by the respondents to buy the home-made chocolates and the result revealed that there was no significant relationship between the family monthly income and the amount spent by the respondents to buy the product. Factor analysis was applied to analyse the consumer perception as regards home-made chocolates and the study revealed four factors namely packaging, environment friendly, quality and content.

**Keywords:** *Consumer Behaviour, Home-made chocolates, consumer perception*

## INTRODUCTION

Consumer behaviour is the study of individuals, groups or organizations and all the activities associated with the purchase, use and disposal of goods and services, and how the consumer's emotions, attitudes and preferences affect buying behaviour. It refers to the movement of the consumers in the market place and the underlying purpose for those movements. The center or focusing point of the marketing is Consumer rather than the product. Chocolate is a sweet generally brown in color which is made from cocoa beans in the forms of candy, block and bar. It's a part of celebrations and festivals which gives immense happiness while eating them. Home-made chocolates are prepared in homes in an eco- friendly manner.

## IMPORTANCE OF THE STUDY

Today's marketing concept has changed from product oriented to consumer oriented. Products are produced based on consumers preferences and attitudes. Every producer need to understand the consumers likes and dislikes. Hence the study of consumer behaviour gains importance.

## SCOPE OF THE STUDY

Even though consumers are aware of various branded chocolates available in the market, they are very particular in quality and cleanliness. Now consumers are conscious of their health and hygiene. Consumers are moving towards eco-friendly





Go to page 1

Dogo Rangsang Research Journal
ISSN : 2347-7180

UGC Care Group I Journal
Vol-10 Issue-07 No. 9 July 2020

# DIGITAL BANKING – AN EMPIRICAL STUDY

FathimaFarhana S.I
Assistant Professor, Department of B.Com (G)
S.D.N.B.Vaishnavcollege for women, Chrompet, Chennai – 44
(Affiliated to University of Madras)
Mail id: syedfathimafarhana931@gmail.com

## ABSTRACT

The people towards the digital banking services comparing to traditional banking methods. This paper helps in understanding customer's attitude towards such modern services provided by banks. The Digital Banking is an application that has been developed for a well-established regional bank operating primarily in south India. This article aimed to the demographic profile of the digital banking customers, the Challenges of Digital Banking Transaction and Remedial measures to adopt digital transaction.

**Key words: Digital Banking, modern services, challenges, Transaction, Remedial measures**

## INTRODUCTION

The Indian Banking industry plays an important role in the economic development of the country .It is the most dominant segment of the financial sector. Money occupies an important role for the economic growth of the country. Banking forms the main pillar of the financial sector which offers a safe place to the individuals or group of individuals to deposit their wealth , keep it secure, implements monetary policy and ensures financial stability in the country. Banking industry in India has achieved a new height with the changing times.

The use of Technology has brought a revolution in the working style of the banks. The fast increasing internet users in India can be very big opportunity and banking industry should encash this opportunity to attract more internet users to adopt internet Banking services. The internet has revolutionized the way we live ,shop, entertain ,interact and also the way we save and invest.

Digital Banking also called Internet banking or Online banking which represents a virtual process that includes online banking and beyond. Digital Banking is a generic term for development of banking services and delivering product is through

'Akshar Wangmay' UGC Care Listed, International Research Journal, ISSN: 2229-4929, January 2021
Special Issue, Volume-IV *"Interdisciplinary View on Socio-Economic, Educational, Management, Environmental, Research, Language and Sustainable Development in Covid-19 Pandemic Situation"*

# Paradigm Towards New Digital Education – Triangular Approach

**Dr.Subhasri R[1], Dr.Shyamala K[2]**

[1]Assistant Professor, Department of B.Com (PA), ShrimathiDevkunwarNanalal Bhatt Vaishnav College for Women,Chennai, (TN)

[2]Assistant Professor, Department of BCom (CS), ShrimathiDevkunwarNanalal Bhatt Vaishnav College for Women,Chennai, (TN)

**Abstract**

According to Organisation for Economic cooperation and Development and United Nations, 39 countries across the three continents have closed all the educational institutions because of this corona virus outbreak. In this circumstances, Online education methodology synchronies both teachers and students to connect, lead and facilitate without any face to face interaction. Teaching profession is the profession who always enhance themselves and also enhance the young precious human resources. Before this pandemic, their teaching style was chalk and talk but now this pandemic changed to gadget and talk. This pandemic situation forced the teaching fraternity to develop the skills required to adopt the online environment and to impart their knowledge in the online platform. The present scenario put on everyone to adopt this tactics. Hence, the researchers aim to analyse the teaching fraternity' students' and parents' perspective towards this new education methodology. Convenience sampling technique has been used to collect the data from 326 teaching fraternity, 385 students, and 317 parents through well structured questionnaire.

**Key words:** Teaching Fraternity, Students, Parents, Technology, Corona virus.

**Introduction**

On 11th March, Novel Corona virus disease (COVID 19) declared as pandemic and reiterated all the countries to take immediate action to reduce the transmission of disease and to saves the people lives. In India, the first trial lock down was announced by our Honourable Prime Minister ShriNarendraModi on 20th March 2020, to safeguard the people from this infectious disease. In that time every part of the world was in pandemic condition, all the sectors get confused and stands still. In this condition one mass and energetic group of people – Academicians who indirectly contributing their valuable time and efforts in creating a future generation in the right way also get puzzled. All the education institution are in the end of semester and board examination, some of them completed their examination and some of them yet to finish their syllabus for their semester examination. This situation makes the education institution and faculty members to seek for good platforms to impart their knowledge to the future generation. Before this pandemic, this online teaching is only an optional but in this situation, online teaching methodology becomes compulsory. This study aims to explore the teachers', students' and parents' perspective towards the new digital online education.

**Review Of Literature**

Kemp N and Grieve R (2014) analysed the undergraduates opinion towards face-to-face and online learning education in Australia and identified that both online and face-to-face activities leads to similar level of academic performance. Students are interested to do written activities in online and discussion in person.S. Bali and M.C.Liu( 2018) analysed the Higher education students' perception towards online learning and the face- to-face learning based on social presence, social interaction and satisfaction in Indonesia open University, Taiwan. The result reveals that face-to-face learning environment is the best based on the above three factors and also found that there is no significant between learning preference and the level of students.

**Research Gap**

This shows that many researchers have studied the teachers' and students' perception towards the online education and triangular approach is not analyzed and that has been considered as a research gap.

**Objectives Of The Study**

- To study the Demographic Profile of the students, Faculties and Parents
- To identify the usage pattern ofonline platforms
- To find the most preferable platform for the online education
- To identify the factors of online education

**Methodology:** Research Methodology is a systematic process used to collect information and data for the purpose of making decisions. The methodology may include surveys, interviews, publication research and other techniques comprising the present as well as past information.

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 6, 2021, Pages. 13092 - 13101
Received 25 April 2021; Accepted 08 May 2021.

# Contemporary Banking Scenario: Bankers' Perspective on Green Banking

**Dr.R.Subhasri[1] & Dr.K.Shyamala[2]**

[1]*Assistant professor, Department of B.Com (Professional Accounting), Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet, subhasri.r@sdnbvc.edu.in.*

[2]*Assistant Professor, Department of B.Com (Corporate Secretaryship), Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet. shyamala.k@sdnbvc.edu.in*

## Abstract

Banking sector plays a vital role in Economic Development and Growth. Nowadays they are very much cautious in our environmental sustainability and trying their best to protect the globe from the Green House effort. The present study aims to identify the initiatives taken by the Bank to safeguard the environment from the Greenhouse Effect, Opportunities & challenges available in green banking implementation and the bank employees' perception towards Green Banking. The statistical tools used for the study are Simple percentage analysis, Ranking analysis, One sample t-test, Factor analysis and One way ANOVA.

Keywords: Economic Development, Green Banking, Environment sustainability, Opportunities and challenges

## INTRODUCTION

The United Nation submits the 2030 agenda for sustainable development. It is a plan of action for 3P's – People, Planet and Prosperity. All countries are acting in collaborative partnership to implement this plan. In this new Universal Agenda, 17 sustainable goals and 169 targets were announced to take care of the critical importance for humanity and the planet. Sustainable development has emerged as a new paradigm of development to protect the planet from degradation. While compared to all sectors, the banking sector is one of the major sources of financing investment for commercial projects which is most important for economic activities and economic growth. Like economic contribution, the Banking sector is also concentrating in the Environment Management to safeguards the environment. Nowadays, Banking sectors have given more priority to the Industries which have already become green and those businesses or Industries making serious attempts to shift their tactics to Green. Banking sectors give more importance to make the industries grow green and in the process to restore the natural environment. A new name, coined for this activity is called Green banking. Green Banking is a new initiative taken by the Bank for promoting the environment-friendly practices for sustainable growth and reducing the carbon footprint from the banking industry. In this study, researchers try to identify the opportunities and challenges of the bankers while implementing this new method of technology.

## REVIEW OF LITERATURE

**Dr.Gobinda Deka (2018),** analyzed the customers' perspectives on the adoption and usage of Green banking practices in State Bank of India, Assam Branch. By using various statistical tools, it is found that Green Banking practices have a positive impact on the environment and customers also greatly benefited by saving their energy, fuel, paper, water, time as well as

*Turkish Journal of Computer and Mathematics Education* *Vol.12 No.4 (2021), 1285-1307*
*Research Article*

# WORK FROM HOME AT IT COMPANIES– THE NEW NORMAL

**Dr. S. Seethalakshmi [a], Dr. K. Shyamala [b]**

*[a]Associate Professor, Department of Commerce (Self Finance)ShrimathiDevkunvarNanalal Bhatt Vaishnav College for Women,Chromepet, Chennai –600 04*
*[b]Assistant Professor, Department of B.COM Corporate Secretaryship (Self Finance) ShrimathiDevkunvarNanalal Bhatt Vaishnav College for Women,Chromepet, Chennai - 600 044*

**Article History:** Received: 11 January 2021; Accepted: 27 February 2021; Published online: 5 April 2021

**Abstract:** *Work from Home" has become the new normal during theCovid'19 pandemic. The Information Technology giants companies are considering 'Work from home' as a permanent solution to the increasing rental costs and overhead costs. Work from home has not affected the productivity of the employees in most cases. IT Employees also stand to benefit in many ways in terms of flexible working, reduced travel, home atmosphere, less pollution etc.*
*This study was taken up through a survey of 103 IT employees to understand their perception on 'Work from Home'. The study intends to identify Factors influencing their perception and the Challenges faced by them during work from home.*

## 1. Introduction

It is a long-cherished dream of several employees across the Globe- 'To work from Home". Employees cherish working from home for several reasons like they save lot of time spent on travel, less fatigue, more flexibility, less of unnecessary interaction, comfort of doing all office work in a relaxed, convenient and comfortable home atmosphere. The young mothers and employees who have health issues regard WFH as a boon, as they can continue to earn while being at home.

Today, the advancements in Information Technology, the Internet connectivity and the Cloud storage have made it possible for companies to offer work from home advantage to their employees.

All though the Work from Home(WFH) option was in cards for several years, it was never put into practice by any of the corporate, fearing the difficulties in co-ordination and control of employees in remote locations.

The outbreak of the pandemic Covid-19 necessitated the use of Technology to support'Work from Home'. The spread of the pandemic, Lack of facility to commute to work place during the lock down, non availability of several essential services nailed the box.

Almost all the IT companies offered Work from Home option to all its Employees. Chennai being a IT hub of India, next only to Bangalore, houses several Giant IT companies like the TCS, Wipro, HCL, HP, Infosys, CTS and many other companies. All companies have given WFH option to all the employees.

The companies save huge expenses on Overheads incurred on their employees and continue to produce results. In fact the IT industry has effectively supported several other industries and services during the Pandemic.

The paper attempts to through light on Chennai's IT employee's perception and reaction to the sudden work from home option, imposed on them. WFH was the most desired option by most employees. But their reaction to this forced reality is assessed in this paper.

If the WFH system is mutually beneficial to both the employer and the employee several companies may start virtual operations.

Cost incurred on Buildings, Infrastructure, Overheads, Services, Maintenance, Transportation etc could be saved.

There corporate can avail service of diverse group of employees stationed at different corners of the country.

Employees stand to benefit in terms of time saved, family time, less fatigue, less human intervention, technology exploitation.

Society will also stand to benefit through lesser noise and air pollution, Lesser petrol consumption, More space for better projects etc.

Thus the WFH sounds beneficial to all stake holders. The Effectiveness, Employee's productivity, Psychological and Physiological impact on the employees have to assess before WFH can be implemented in the long run.

This paper takes a one single dimensional view of the subject, focusing on the employee's perception of WFH based on their experience during this pandemic.

### Review of Literature

**Reshma, P. S. Aithal, Shailashree V. T. and P. Sridhar Acharya (2015) studied** "Working from Home" e-business model is analysed using 'ABCD Analysis Technique'. Based on various factors which decides the Working from Home system, a model of various factors affecting under organizational objectives, employers point of view, employees point of view, customers/students point of view, environmental/societal point of view and system requirements are derived by a qualitative data collection instrument namely focus group method.



Go to page 1

Sambodhi
(UGC Care Journal)

# A STUDY ON THE FACTORS INFLUENCING CONSUMER ATTITUDE IN BUILDING AFFINITY TOWARDS PURCHASE OF HANDLOOM PRODUCTS

**T.Metilda Devakirubai**

Part-Time Ph.D. Research Scholar, Department of Commerce &
Assistant Professor & Head, Department of B. Com (A&F)
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet, Chennai-600 044

**Dr.R.Savithri**

Associate Professor & Head, Department of Commerce
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet, Chennai-600 044

## ABSTRACT

Building affinity in the minds of consumers becomes the focus of every business. Affinity towards a product or service depends upon the attitude of the consumers. The handloom industry in India has a plethora of handloom products which have an impact on the economic growth. At present, consumer attitude is changing and are diversified in nature due to change in the purchasing pattern of handloom products. The purchasing decision of the handloom product consumers is influenced by various factors like the awareness level, knowledge, attitude, trust and loyalty, price, quality, product preference, etc. The purpose of this study is to understand the variables affecting the consumers while purchasing the handloom products and to identify whether the purchase of handloom products creates delight (positive/ favourable) or disappointment (negative/ unfavourable) leading to affinity towards handloom products. Data were collected from 200 handloom product customers in Chennai through a questionnaire and collected data is analysed with the help of Percentage analysis and Factor analysis. The attitude of the consumers towards handloom products was highly influenced by the attributes of convenience, attraction, expectation and awareness.

Keywords: *Consumer attitude, affinity, handloom products.*

## INTRODUCTION

While considering the purchase behaviour, one of the most important drivers is the customer attitude. Attitudes clearly reflects the mindset of the consumers whether there is a favourable/ delight or unfavourable / disappointment ultimately inducing consumers either to purchase or not to purchase the particular products or brands. Attitude may be considered as a learning process by way of personal experience, perceived behaviour. Attitude stimulates awareness, loyalty, expectations and convenience leading to purchasing decision. Attitude may transform low-involvement products into high involvement products.

In the world of fabrics, the Handloom products play a predominant role in the Indian heritage. Tribal handloom sarees like Ashavali, Patola from Gujarat, Baluchari, Batik, Garad, Jamdhani, Tant from West Bengal, Banaras and Chikan from Uttar Pradesh, Bhandhani, Lehariya, Kota from Rajasthan, Bomkai, Sambhalpuri from Odhisha, Chanderi from Madhya Pradesh, Dharmavaram, Kanchipuram from Tamil Nadu, Eri Silk from Assam, Kalamkari, Mangalagiri, Uppada, Venkatagiri, Guntur sarees from Andhra Pradesh, Ilkal from Karnataka, Kasava from Kerala, Narayanpet sarees from Telengana, Paithani from Maharashtra, speaks about the remarkable weaving skills, culture and tradition of India. The natural liking of these handloom sarees creates credibility and loyalty towards the other handloom products like dhotis, dress materials, lungies, towels, shirtings, bedsheets, carpets and rugs, mosquito nets, bathroom/bedding linen, etc., thereby creating a strong mental bondage resulting in affinity.

Studies in Indian Place Names
UGC Care Listed Journal

ISSN: 2394-3114
Vol-40-Issue 59-(2020)

# A STUDY ON WORK LIFE BALANCE OF EMPLOYEES IN IT SECTOR

**T. Rakshana**
*Final Year, Department of Accounting and Finance*
**Dr. Y. Kalaivani**
*M.Com.,M.Phil.,P.G.D.C.A.,Ph.D., Associate Professor*
*Department of Accounting and Finance*
**Shrimathi Devkunvar Nanalal Bhatt**
*Vaishnav College for Women, Chromepet*

## ABSTRACT

Today with increasing demands at workplace, the interface between work life and personal life is of great significance. Work life balance issue appears to affect the life of employees which in turn creates stress in their minds. As a result of it they are neither able to concentrate in their work not at their home place. They are in a pressure to handle their work life balance which is the need of the hour.

The purpose of the study is to highlight the issues relating to work life balance in IT sector. The study is conducted in and around Chennai through a structured questionnaire from a sample size of 100. Tools such as Chi-square, Friedman test, Factor and percentage analysis were used for the study to identify the factors relating to work life balance of employees working in IT sector.

The findings revealed that work life balance requires co-operation and co-ordination among the employees working in IT sector and their family members. Further the employers should also ensure that proper work life balance policies is ensured in their organisation for the betterment of employees.

## INTRODUCTION

HRM is the process of managing people of an organisation with a human approach. Human resources approach to manpower enables the manager to view the people as an important resource. It is the approach through which organisation can utilize the manpower not only for the benefits of the organisation but for the growth, development and self-satisfaction of the concerned people. Thus, HRM is a system that focuses on human resources development on one hand and effective management of people on the other hand so that people will enjoy human dignity in their employment.

## WORK LIFE BALANCE

Work-life balance issues appear to affect some groups of people more than others those working long hours, those whose work spills over into the home as a result of modern technology, those in non-standard employment such as shift work, those on low incomes, those trying to juggle parenting and paid work, and those with cultural obligations beyond the family and paid work.

'Akshar Wangmay' UGC Care Listed, International Research Journal, ISSN: 2229-4929, January 2021
Special Issue, Volume-IV *"Interdisciplinary View on Socio-Economic, Educational, Management, Environmental, Research, Language and Sustainable Development in Covid-19 Pandemic Situation"*

# Paradigm Towards New Digital Education – Triangular Approach

**Dr.Subhasri R[1], Dr.Shyamala K[2]**

[1]Assistant Professor, Department of B.Com (PA), ShrimathiDevkunwarNanalal Bhatt Vaishnav College for Women,Chennai, (TN)

[2]Assistant Professor, Department of BCom (CS), ShrimathiDevkunwarNanalal Bhatt Vaishnav College for Women,Chennai, (TN)

**Abstract**

According to Organisation for Economic cooperation and Development and United Nations, 39 countries across the three continents have closed all the educational institutions because of this corona virus outbreak. In this circumstances, Online education methodology synchronies both teachers and students to connect, lead and facilitate without any face to face interaction. Teaching profession is the profession who always enhance themselves and also enhance the young precious human resources. Before this pandemic, their teaching style was chalk and talk but now this pandemic changed to gadget and talk. This pandemic situation forced the teaching fraternity to develop the skills required to adopt the online environment and to impart their knowledge in the online platform. The present scenario put on everyone to adopt this tactics. Hence, the researchers aim to analyse the teaching fraternity' students' and parents' perspective towards this new education methodology. Convenience sampling technique has been used to collect the data from 326 teaching fraternity, 385 students, and 317 parents through well structured questionnaire.

**Key words:** Teaching Fraternity, Students, Parents, Technology, Corona virus.

**Introduction**

On 11th March, Novel Corona virus disease (COVID 19) declared as pandemic and reiterated all the countries to take immediate action to reduce the transmission of disease and to saves the people lives. In India, the first trial lock down was announced by our Honourable Prime Minister ShriNarendraModi on 20th March 2020, to safeguard the people from this infectious disease. In that time every part of the world was in pandemic condition, all the sectors get confused and stands still. In this condition one mass and energetic group of people – Academicians who indirectly contributing their valuable time and efforts in creating a future generation in the right way also get puzzled. All the education institution are in the end of semester and board examination, some of them completed their examination and some of them yet to finish their syllabus for their semester examination. This situation makes the education institution and faculty members to seek for good platforms to impart their knowledge to the future generation. Before this pandemic, this online teaching is only an optional but in this situation, online teaching methodology becomes compulsory. This study aims to explore the teachers', students' and parents' perspective towards the new digital online education.

**Review Of Literature**

Kemp N and Grieve R (2014) analysed the undergraduates opinion towards face-to-face and online learning education in Australia and identified that both online and face-to-face activities leads to similar level of academic performance. Students are interested to do written activities in online and discussion in person.S. Bali and M.C.Liu( 2018) analysed the Higher education students' perception towards online learning and the face- to- face learning based on social presence, social interaction and satisfaction in Indonesia open University, Taiwan. The result reveals that face-to-face learning environment is the best based on the above three factors and also found that there is no significant between learning preference and the level of students.

**Research Gap**

This shows that many researchers have studied the teachers' and students' perception towards the online education and triangular approach is not analyzed and that has been considered as a research gap.

**Objectives Of The Study**

- To study the Demographic Profile of the students, Faculties and Parents
- To identify the usage pattern ofonline platforms
- To find the most preferable platform for the online education
- To identify the factors of online education

**Methodology:** Research Methodology is a systematic process used to collect information and data for the purpose of making decisions. The methodology may include surveys, interviews, publication research and other techniques comprising the present as well as past information.

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 6, 2021, Pages. 13092 - 13101
Received 25 April 2021; Accepted 08 May 2021.

# Contemporary Banking Scenario: Bankers' Perspective on Green Banking

**Dr.R.Subhasri[1] & Dr.K.Shyamala[2]**

[1]*Assistant professor, Department of B.Com (Professional Accounting), Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet, subhasri.r@sdnbvc.edu.in.*

[2]*Assistant Professor, Department of B.Com (Corporate Secretaryship), Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chromepet. shyamala.k@sdnbvc.edu.in*

## Abstract

Banking sector plays a vital role in Economic Development and Growth. Nowadays they are very much cautious in our environmental sustainability and trying their best to protect the globe from the Green House effort. The present study aims to identify the initiatives taken by the Bank to safeguard the environment from the Greenhouse Effect, Opportunities & challenges available in green banking implementation and the bank employees' perception towards Green Banking. The statistical tools used for the study are Simple percentage analysis, Ranking analysis, One sample t-test, Factor analysis and One way ANOVA.

Keywords: Economic Development, Green Banking, Environment sustainability, Opportunities and challenges

## INTRODUCTION

The United Nation submits the 2030 agenda for sustainable development. It is a plan of action for 3P's – People, Planet and Prosperity. All countries are acting in collaborative partnership to implement this plan. In this new Universal Agenda, 17 sustainable goals and 169 targets were announced to take care of the critical importance for humanity and the planet. Sustainable development has emerged as a new paradigm of development to protect the planet from degradation. While compared to all sectors, the banking sector is one of the major sources of financing investment for commercial projects which is most important for economic activities and economic growth. Like economic contribution, the Banking sector is also concentrating in the Environment Management to safeguards the environment. Nowadays, Banking sectors have given more priority to the Industries which have already become green and those businesses or Industries making serious attempts to shift their tactics to Green. Banking sectors give more importance to make the industries grow green and in the process to restore the natural environment. A new name, coined for this activity is called Green banking. Green Banking is a new initiative taken by the Bank for promoting the environment-friendly practices for sustainable growth and reducing the carbon footprint from the banking industry. In this study, researchers try to identify the opportunities and challenges of the bankers while implementing this new method of technology.

## REVIEW OF LITERATURE

**Dr.Gobinda Deka (2018),** analyzed the customers' perspectives on the adoption and usage of Green banking practices in State Bank of India, Assam Branch. By using various statistical tools, it is found that Green Banking practices have a positive impact on the environment and customers also greatly benefited by saving their energy, fuel, paper, water, time as well as

Kala : The Journal of Indian Art History Congress
ISSN : 0975-7945

# PATTERNS OF ANTHROPOCENTRICISM AND COLONIALISM IN SHERRI S. TEPPER'S *GRASS* AND ITS MANIFESTATION IN THE PRESENT COVID 19 SCENARIO- A STUDY

**Ms. R. Archana** Assistant Professor & Head Incharge, Post Graduate Department of English Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women ( Autonomous), Affiliated to the University of Madras, Chrompet, Chennai- 600 044

**Dr. Fathima Banu (Research Supervisor)** Head & Associate Professor, Department of English, Justice Basheer Ahmed Sayeed College for Women (Autonomous), Affiliated to the University of Madras, Teynampet, Chennai- 600 018

**Abstract**

The aim of this paper is to analyse the present pandemic that shakes the world with panic and uncertainty, with the added problems of unemployment, financial crisis and mental breakdown. The challenge faced by the medics and health care workers to treat the affected, as well as measures the countries and its respective governments have undertaken to bring the spread of the pandemic under control is Herculean. The reality of the present day crisis is analysed by a parallel reading of the American novelist Sherri. S. Tepper's Science fiction titled *Grass*, which is about the spread of a mysterious plague caused by a virus all over the Universe and in other Stars as well. Mankind on Earth unable to cope with the disease and the death rates tries to unravel the mystery behind the planet Grass which alone remains unaffected by the virus. Given the present Covid 19 scenario, an analysis and parallel reading of Grass helps to rethink the possibilities of sustenance, co-ordinated effort, cause, effect and spread of the virus and the means to control the virus. Though the text is a fictionalised account of the virus and its spread in the distant future, it offers various speculations and reflections on the avarice of mankind, who keeps hunting new territories after exhausting the one that has already been inhabited and colonised.

**Keywords:** anthropocentrism, colonisation, pandemic, plague, virus and science fiction.

Literature has been deemed as the mirror of the society, and since time immemorial has recorded various social, political, cultural, aesthetic changes at the local, regional and global level. Literature is a testimony to the various activisms and has rendered foresight into the future of the various global activities. The role of literature is just not to register the events of the contemporary society but think, create, as well as produce works by analysing the contemporary events and foresee their impact in the future and even predict. Philip Sidney refers to the poets as Vates in his *Apologie for Poetry*, and thereby extolls the futuristic thought and the prophetic eye of the poet creator. The artist's creation as a vehicle of forethought and freedom is expressed in Percy Bysshe Shelley's *The Defence of Poetry* in which he upholds the poets as "unacknowledged legislators of the world". Therefore, a good body of art and literature have always proved to have a prophetic value, warning the generations of audience and readers to realise the catastrophic scenarios waiting to be witnessed. Science fiction has a great sense of relevance to the present COVID 19 pandemic, as many science fiction writers have already speculated on the existence of other possible living planets, the transformation of the world into a bubble due to various human activities like pollution, environmental hazard, population explosion, poverty and emergence of hi-tech world aided by science and technology etc. The inventive robotic technology is derived from various science fictions which dealt with a world painted with the dominance of man- made intelligence.

*Grass* is a science fiction by the late American novelist Sherri. S. Tepper, published in 1989, with the sequel novels titled *Raising the Stones* and *Sideshow* published in 1990 and 1992 respectively. These three sequels make up the Arbai Trilogy. Tepper, is an author renowned for the depiction of social and environmental issues through her novels. Known for her stint as a science fiction writer, her novels are portraiture of a distant future world placed in a different era of human evolution with its contemporary challenges. The exploitation of the earth and its resources followed

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 04, 2020
ISSN: 1475-7192



# Psychographic Impact on Preference and Satisfaction onInvestment Products

[1]Dr. D.Ravindran, [2]Dr.M.Nagamalar

***ABSTRACT--****In current global economic situation, financial stability is not only expected for business people but also for the general people including salaried, business and retired ones. Savings and investments are mostly confused and sometimes considered as a synonym. Investment in specific aims at expected multiplication of the amount of money in some period of years with the currently available excess money in hand.This research paper attempts to identify the investment preference and satisfaction on the various avenues with respect to psychographic factors in Chennai city.*

***Keywords:*** *Customer preference, satisfaction, investments*

## I. INTRODUCTION

At present,every aspect has many varieties of options presented for us whether it might be a case of buying a product or investing your own hard-earned money. For an Investor a wide range of financial products are present to choose from that is one or more depending on the investor's goals As an investormost want to balance these benefits and shortcomings by making a portfolio with combination out of these. The different investors have different views of investing. Some invest in regular income, tax benefits,Wealthmaximization, capital appreciation,etc

***Options Available For Investing:***

The various investment options available in the market are:

a) Bank savings
b) Post Office
c) Fixed Deposits
d) Commodities
e) Health and term insurance
f) Mutual funds
g) Sip
h) Shares and debentures

*stuJayanti School of Management,Kristu Jayanti College (Autonomous), Bangalore, rtkob@yahoo.co.in*
*MA HRM Department,SDNB Vaishnav College for women, Chennai, mnagamalar@gmail.com*

**R/V24I4/PR201084**
**2019 | Revised: 30 Sep 2019 | Accepted: 15 Jan 2020**

ISSN : 0019-5006
October-December 2020
Indian Journal of Adult Education
Vol. 81, No. 4(II)

# A RUMINATION ON LAND, ENVIRONMENT AND HUMAN DISPLACEMENT IN ATIA ABAWI'S A LAND OF PERMANENT GOODBYES FROM THE PURVIEW OF ECOFEMINISM

**Ms. R. Archana** Assistant Professor & Head Incharge, Post Graduate Department of English, Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women(Autonomous), Affiliated to the University of Madras, Chrompet, Chennai- 600 044

**Dr. Fathima Banu** (Research Supervisor), Head & Associate Professor, Department of English, Justice Basheer Ahmed Sayeed College for Women (Autonomous), Affiliated to the University of Madras, Teynampet, Chennai- 600 018

**Abstract**

*The Land of Permanent Goodbyes* by the Afghan writer Atia Abbawi is a moving tale of the displaced refugees in the background of the Syrian war. The novelist focusses on the politics behind the displacement and the war that was waged as a result of climate change, famine and drought in Syria and the eventual migration of people from their homelands to the lands of exile. Anthropocentric-Capitalist tendencies with their focus on capital accumulation or consolidation of power and wars are the by- products of such greed of the leaders, dividing the human population as well as the countries as the First worlds and Third worlds. The aim of this paper is to analyse *The Land of Permanent Goodbyes* from the purview of Ecofeminism by locating the anthropocentric models of suppression in the society, politics and culture which eventually have a greater bearing on the common man. Meanwhile such practices also have an adverse as well as irreversible effect on nature. The argument of the paper sets to establish that the politics is the mainstream cause for the war rather than climate change or the poor developmental phase in Syria as blamed by the rebel forces. Climate change is a reason bearing only a miniscule weightage towards the initiation of the war, wherein lies huge capitalist- anthropocentric interests motivated by the greed for power and occupation of territories. The fury and unpredictability of Nature is used to advantage by the patriarchs and leaders to materialise their political ambitions and a Marxist Ecofeminist analysis of the novel serves to study the exploitation of the people, nature as well as usurpation of nations by the hegemonic patriarchs.

**Keywords:** Anthropocentrism, capitalism, nation-states, homelands, exiles, refugees, human displacement, climate change. Human civilization began its course depending on land and its ecology and the early man lived and modelled himself on it, satiating his requirements with the resources available as the local biota. Civilizations thrived alongside waterbodies and wherever resources were available in abundance, nomadic man began to settle in permanent settlements. cultivating food and rearing the cattle, as the community required it to survive. The evolution of mankind can be traced from his beginnings as huntsmen to a nomad, a nomad to a settler or a peasant, and this led the transformation of the peasant to a modern city dweller. These evolutionary changes have transformed men from being nomadic to settlers and the latter started the ownership of land. The occupation of the land and other geological resources has become the modern priority of mankind and wars are the resultant of such conflicts to possess the land and mark its boundaries. Wars are hugely capitalist and anthropocentric in their intention and reflect the common greed of mankind.

Ecofeminism is a branch of philosophy and theory that aims to study the conflicts between

Man and woman
Technology and Nature
White and Black
and
First world and Third world.

The anthropocentrism and capitalist tendencies in the feminist studies and ecological studies are conglomerated to evolve a novel approach which is both environmental as well as humanist in its



Go to page 1

Drugs and Cell Therapies in Hematology (ISSN: 2281-4876)
Volume 10 Issue 1 (2021)

# Mathematical Model For The Effects Of Hpa Axis Pertaining To Sleep Loss By Applying Properties Of Certain Subclasses Of Analytic Univalent Functions

**S. Alamelu[1], V.G. Shanthi[2], S.Gunashree[3], L. Suganya[4]**

*1,2,3,4 : Department Of Mathematics*
*Shrimathi Devkunvar Nanalal Bhatt Vaishnav College For Women*
*Chromepet, Chennai 600 044.*

20-21

***Article History***

*Article Received: 9/04/2021*
*Article Revised 10/05/2021*
*Article Accepted: 15/06/2021*

***Abstract***

*Aim Of This Study Is To Observe The* ***Hpa Axis – Hypothalamic Pituitary Adrenal*** *Axis Response Of The System For Sleep Loss Over Time By Measuring Cortisol Level For Young Participants With Normal Sleep Schedule, Partial And Total Sleep Deprivation By Applying Degradation Hazard Function*

*$D(x,t) = G(x)Q(t)$, $Q(t)$ Non Negative Function Of Time And $G(x)$ Non-Negative Function Degradation Measure. It Is Very Interesting To Find The Mean Residual Life ( Mrl ) Which Gives The Expected Remaining Life With The Present Age $t$. Further We Develop Functions $f_1(z)$ , $f_2(z)$ And $f_3(z)$ By Using The Class Of Functions Of The Form*

*$f(z) = z + \sum_{n=2}^{\infty} a_n z^n$ Which Are Analytic Univalent In The Open Unit Disc $\mathcal{U} = \{z: z\epsilon \mathbb{C} \text{ and } |z| < 1\}$ Whose Coefficients $a_n$ Are Considered As Mean Residual Life Function Of Degradation Measure Distribution.*

*By Applying The Above Model We Find Cortisol Response Due To Sleep Loss For Young Participants And We Conclude That The Sleep Loss Results In An Elevation Of Cortisol Level. Our Results Coincide With The Medical Inferences.*

***Key Words***

*Univalent Functions, Analytic Functions, Cortisol , Hypothalamic Pituitary Adrenal Axis, Degradation Hazard Function, Mean Residual Life Function.*

*Ams Classification: 60e, 62e, 30c45, 30c50, 30c80*

## 1. Introduction

Degradation Is The Reduction In Life Span Of System. Elsayed **[ 4, 6 ]** For Accelerated Failure Data Models As Statistics Based Models.

In Reliability Modeling, Weibull Distribution Is Frequently Applied To Test Life And Also To Obtain Very Low Probabilities Of Failure **[2, 12]**. Some Familiar Relationship Between $f(t)$ The Probability Density Function, $F(t)$ The Cumulative Distribution Function, $h(t)$ The Failure Rate Function And $R(t)$ The Survival Function (Or) The Reliability Function Is

$$h(t) = \frac{f(t)}{1 - F(t)} = \frac{f(t)}{R(t)}$$

Malaya Journal of Matematik, Vol. 8, No. 3, 1306-1310, 2020

https://doi.org/10.26637/MJM0803/0101

# Mathematical model for abnormalities of HPA axis due to stress associated with analytic univalent functions

S. Alamelu [1]* V.G. Shanthi[2] and R. Remila Judit [3]

**Abstract**

The main interest of this study is to find the activity of Hypothalamic Pituitary Adrenal axis - HPA due to stress by measuring cortisol level. HPA axis is a major part of the system that controls reaction to stress and the main objective is to observe the response of the system over time due to stress by modeling degradation hazard function $d(x,t) = g(x)q(t), q(t)$ and $g(x)$ are non-negative functions of time and degradation measure and finding probability distribution to obtain results regarding Mean and Shape of Mean Residual Life for the above distribution- MRL. Obtaining Mean Residual Life is an important and interesting measure which gives the expected remaining life with the present age $t$ also comparing the effects of stress by applying Stochastic Dominance. Here we develop two functions $f_1(z)$ and $f_2(z)$ by using the class of functions of the form $f(z) = z + \sum_{n=2}^{\infty} a_n z^n$ which are analytic in the open unit disc $\mathcal{U} = \{z : z \in \mathbb{C} \text{ and } |z| < 1\}$ whose coefficients $a_n$ are considered as Probability density function of degradation measure distribution, for which the subordination property holds. The prominent Psychologist Selye's findings about human stress effects are adopted and the concept of Selye's theory is applied and we give a real application of stress induced cortisol response for women with High Waist to Hip Ratio ( central fat) and with Low Waist to Hip Ratio ( peripheral fat). The concluded results coincide with the medical findings.

**Keywords**

Hypothalamic Pituitary Adrenal (HPA), Waist to Hip Ratio (WHR), Cortisol, Degradation Hazard Function, Stochastic Dominance, Mean Residual Life-MRL, Analytic functions, Univalent functions and Subordination.

**AMS Subject Classification**

30C45, 30C50, 30C80, 60E, 62E.

[1,2,3] *Department of Mathematics, S.D.N.B. Vaishnav College for Women, Chromepet, Chennai- 600044, Tamil Nadu, India.*

***Corresponding author**: [1] alambalaji@yahoo.com; [2]vgshanthi23@gmail.com; [3] remilajudit2012@gmail.com

**Article History**: Received **02** April **2020**; Accepted **22** July **2020**



## Contents



## 1. Introduction

Degradation is the reduction in life span of system and reliability. System gets performance degradation as by age or deteriorates due to other factors. It is clear that the degradation measure is a stochastic process [ 6 ] . Elsayed [ 5 ] classifies the accelerated failure data models as statistics based models.

In the area of reliability modeling, Weibull distribution is widely used to test life and also to find very low probabilities of failure [1, 12, 16]. Some familiar relationship between Probability density function- $f(t)$, Cumulative Distribution

ScienceDirect

Computational Biology and Chemistry
Volume 88, October 2020, 107330

Research Article

# Spectroscopic elucidation (FT-IR, FT-Raman and UV-visible) with NBO, NLO, ELF, LOL, drug likeness and molecular docking analysis on 1-(2-ethylsulfonylethyl)-2-methyl-5-nitro-imidazole: An antiprotozoal agent

P. Manjusha [a b c], Johanan Christian Prasana [b], S. Muthu [d e], B. Fathima Rizwana [b]

Show more



https://doi.org/10.1016/j.compbiolchem.2020.107330
Get rights and content

## Abstract

1-(2-ethylsulfonylethyl)-2-methyl-5-nitro-imidazole (1EMI) $C_8H_{13}N_3O_4S$ also known as Tinidazole, selected for its antiprotozoal property is extensively used for spectroscopic elucidations and computational aspects using density functional methods. Along with spectral conclusions, further investigations on fundamental reactive properties such as electrical, optical, nonlinear combined with DFT simulations were performed. Molecular docking procedure supports the results of chosen appropriate antiprotozoal agent based on ligand-protein interactions. Experimental and simulated (B3LYP/6-311++G (d,p)) IR and Raman spectra showed concurrence. NLO analysis through first order hyperpolarizability parameter helps in finding the potential of 1EMI as a good NLO candidate. Charge delocalization and the stability of the compound were discussed using natural bond orbital (NBO) analysis. Furthermore, Electron localization function (ELF), local orbital locator (LOL), and Frontier molecular orbitals (FMO) were studied. Besides, Mulliken population analysis on atomic charges, Energy gap, chemical potential, global hardness, softness, ionization potential, electronegativity, electrophilicity index along thermodynamic parameters (enthalpy, entropy and heat capacity) have been calculated. Drug likeness parameters and molecular docking approach enabled to check pharmaceutical potential and biological activity of 1EMI. The biological activity of 1EMI through ligand and protein interactions have been confirmed theoretically for the treatment of Malaria, Invasive aspergillosis and *Mycobacterium tuberculosis* with respect to chosen proteins. Three different activity targets and protein interactions are quite successful revealing the bond distances, intermolecular energy, binding energy and inhibition constant. 2D interaction profile image of the two maximum interacted proteins and also Ramachandran plot used to show stereochemistry of selected protein. The activities of 1EMI were studied in accordance with literature survey and the results were presented.

ISSN 1027-5495. Functional Materials, 28, No.3 (2021), p. 469-474.
doi:https://doi.org/10.15407/fm28.03.469 

# Preparation of polyaniline/manganese dioxide nanocomposites by *in situ* polymerization method and their conductivity properties

*S.C.Vella Durai*[1], *R.Indira*[2], *E.Kumar*[3]

[1]Department of Physics, JP College of Arts and Science, Agarakattu, Tenkasi, Tamilnadu, India
[2]PG Department of Chemistry, SDNB Vaishnav College for Women, Chromepet, Chennai. Tamilnadu, India
[3]School of Science, Department of Physics, Tamil Nadu Open University, Chennai. Tamilnadu, India

*Received December 25, 2020*

The polyaniline /manganese dioxide nanocomposite (PANI/$MnO_2$) was prepared by *in situ* polymerization. The structural, electrical conductivity, complex electric modulus, dielectric and optical properties of the nanocomposites were analyzed using powder XRD, impedance and optical spectra. After heating of PANI/$MnO_2$ nanocomposites, XRD shows structure changes to an extremely less crystalline state due to the melting of $MnO_2$, which is inside the PANI chain. The AC conductivity of nanocomposites was analyzed in the range from 298 K to 423 K. The AC conductivity of nanocomposites varies with frequency. The highest conductivity is 5.798 Ohm/cm at a temperature of 373 K. The dielectric permittivity is constant in the region of higher frequencies and differs in the region of lower frequencies. Studies of FTIR spectra have shown that there is a very strong interaction between $MnO_2$ and the PANI chain.

**Keywords**: conductivity, dielectric, modulus, optical, structural.

**Отримання нанокомпозитів поліанілін/діоксид марганцю методом полімеризації *in situ* і їх характеристики провідності.** *S.C.Vella Durai, R.Indira, E.Kumar*

Нанокомпозит поліанілін/діоксид марганцю (PANI/$MnO_2$) отримано методом полімеризації *in situ*. Структуру, електропровідність, комплексний електричний модуль, діелектричні і оптичні властивості нанокомпозитів проаналізовано за допомогою порошкового XRD, імпедансу і оптичних спектрів. XRD після нагрівання нанокомпозитів PANI/$MnO_2$ показує, що структура змінюється на виключно менш кристалічну через плавлення $MnO_2$, який знаходиться всередині ланцюга PANI. Провідність нанокомпозитів за змінним струмом проаналізовано у діапазоні від 298 K до 423 K. Показано, що вона змінюється в залежності від частоти. Найбільша провідність становить 5,798 Ом/см при температурі 373 K. Діелектрична проникність постійна в області більш високих частот і розрізнялася в області більш низьких частот. Дослідження інфрачервоних спектрів з перетворенням Фур'є показали, що існує дуже сильна взаємодія між $MnO_2$ і ланцюжком PANI.

Нанокомпозит полианилин/диоксид марганца (PANI/$MnO_2$) получен методом полимеризации *in situ*. Структура, электропроводность, комплексный электрический модуль, диэлектрические и оптические свойства нанокомпозитов проанализированы с помощью порошковой XRD, импеданса и оптических спектров. XRD после нагрева нанокомпозитов PANI/$MnO_2$ показывает, что структура меняется на менее кристаллическую из-за плавления $MnO_2$, который находится внутри цепи PANI. Проводимость

Journal of Ovonic Research Vol. 16, No. 6, November - December 2020, p. 345 - 353

# PREPARATION AND INVESTIGATIONS OF STRUCTURAL, OPTICAL AND CONDUCTIVITY PROPERTIES OF POLYANILINE/TITANIUM DIOXIDE NANOCOMPOSITES

S. C. VELLA DURAI[a,*], E. KUMAR[b], R. INDIRA[c], D. MUTHURAJ[d]
[a*]*Department of Physics, JP College of Arts and Science, Agarakattu, Tenkasi, Tamilnadu, India*
[b]*School of Science, Department of Physics, Tamil Nadu Open University, Chennai. Tamilnadu, India*
[c]*Department of Chemistry, SDNB Vaishnav College for Women, Chromepet, Chennai. Tamilnadu, India*
[d]*PG and Research Department of Physics, The M.D.T Hindu College, Tirunelveli. Tamilnadu, India*

Nanocomposites of polyaniline (PANI) encapsulating titanium dioxide ($TiO_2$) nanoparticles (NPs) were prepared by in-situ polymerization method in the presence of $TiO_2$ NPs. The prepared nanocomposites were analyzed by powder X-ray diffraction (P-XRD), uv-visible absorption spectroscopy (UV), Fourier-transform infrared spectra (FTIR) and high resolution transmission electron microscope (HRTEM). An AC conductivity study of PANI/$TiO_2$ nanocomposites was analyzing in between 1 Hz to 8 MHz and a particular temperature $50^0$C. The P-XRD was explaining amorphous nature in PANI/$TiO_2$ nanocomposites respectively. The particle size was observed and confirmed using HRTEM, which shows the formation of nanocomposites at around near in spherical shape in the nanoscale range. An FTIR study confirms the bonding and formation of the prepared samples. FTIR spectral obtained shows that $TiO_2$ and PANI NPs are not simply encapsulated and a strong interaction obtain at the interface of PANI and $TiO_2$ NPs. A UV- vis spectra was used to analysis the confined polymerization process of PANI doped $TiO_2$. The UV absorption spectrum showed a blue shift as compared to the pure $TiO_2$ NPs. AC conductivity measured indicates that the conductivity of PANI/$TiO_2$ nanocomposites is decreased with $TiO_2$ NPs. The AC conductivity of PANI/$TiO_2$ nanocomposites has measured at a 146 S $cm^{-1}$. The AC conductivity property is obtained to be changed due to the combine of $TiO_2$ NPs, which induced the formation of a coherent for charging transport in the base PANI chain.

(Received August 3, 2020; Accepted November 2, 2020)

*Keywords:* Absorbance, Band gap, Conductivity, Crystalline, Nanocomposites

## 1. Introduction

A nanocomposite is a notable type of new materials having individual properties of physical, chemical concepts and many high potential applications in new devices. Good applications of nanocomposites materials can be change by the mixed the properties of bulk parent materials into nano size material [1]. Doping of semiconducting NPs inside to the high conducting PANI chain, have a very interesting concept of nanocomposites preparation [2]. When different metal oxide NPs has been doped to the chain of good conducting polymers, it's converted to nanocomposite materials [3]. This nanocomposites material is different from the pure semiconductor and polymer in chemical and physical properties [4, 5]. The polymer is insoluble in common solvents, and in fusible. Therefore, preparation method has to be searched and analyzed, and confirms to combine with the semiconductor NPs and polymers [6].

Semiconducting nano materials can be combining with polymers by some special chemical technique incorporation method. Entire conducting polymers, PANI have individual properties due to the presence of –NH– groups in a polymer chain edge, on both sides by

* Corresponding author: duraipree@gmail.com



Go to page 1

Original Paper | Published: 05 September 2020

# Facile green route sol–gel synthesis of nano-titania using bio-waste materials as templates

M. K. Shreya, C. Indhumathi, G. R. Rajarajeswari, Veeramuthu Ashokkumar & T. Preethi

*Clean Technologies and Environmental Policy* **23**, 163–171 (2021)

Abstract

Titania semiconductor is being used in a wide range of fields; however, the poor surface properties and meagre visible light absorption capacity of it stand as barriers for being used as an effective visible light active photocatalyst. To overcome these limitations, various strategies have been adopted, among which the usage of templates has been the topic of research for the past 10 years. Usage of the template during the synthesis of titania increases the surface area by reducing the agglomeration of nanoparticles and also shifts the absorption edge to the visible range. Nowadays, green synthesis has gained substantial attention as an effective, safe and environmentally friendly practice for the synthesis of nano-titania. Bio-waste pista shells,

International Journal on Emerging Technologies 11(2): 205-212(2020)

ISSN No. (Print): 0975-8364
ISSN No. (Online): 2249-3255

# Perspective Study on Content Based Video Retrieval

**C. Victoria Priscilla[1] and D. Rajeshwari[2]**

[1]Associate Professor, Department of Computer Science,
S.D.N.B. Vaishnav College for Women, University of Madras, Chennai (TamilNadu), India.
[2]Research Scholar, Department of Computer Science,
S.D.N.B. Vaishnav College for Women, University of Madras, Chennai (TamilNadu), India.

(Corresponding author: C. Victoria Priscilla)
(Received 14 December 2019, Revised 08 February 2020, Accepted 15 February 2020)
(Published by Research Trend, Website: www.researchtrend.net)

**ABSTRACT: The Closed-Circuit Television (CCTV) footages plays a vital role in criminal investigations which helps to reduce cost, time and effort but still it has many challenges to face such as monitoring multiple cameras simultaneously, missing pre-eminent details or the object captured on video surveillance, excess storage of video data and spending huge time on watching the entire suspect video to collect the affirmation for investigations. The Motion Detection, Facial recognition, Automatic number plate recognition through CCTV streams a live report. From this, the identification of suspicious behaviour, like public inebriation or attaining thievery from the entire video content becomes very critical to deter the criminals. To meliorate all these situation, Content Based Video retrieval (CBVR) is efficiently used to analyze the video content of the CCTV Footages. The CBVR detects the shots and frames obtained from the CCTV Footages where it analyzes the Color, texture, shape and inter-frame relations to detect the similarity between the frames. Still CBVR lacks to analyze a huge storage of video data content, which is frustrating the person for long time extraction of particular crime scene detection. With this objective, the paper reveals the study on feature extraction methods of Shot Boundary Detection (SBD) and Key-frame extraction methods.**

**Keywords:** Closed-circuit television, Content Based Video Retrieval, Convolutional Neural Network, Key Frame Extraction, Recurrent Neural Network, Shot Boundary Detection.

**Abbreviations:** CBVR, Content Based Video Retrieval; CCTV, Closed-circuit Television; SBD, Shot Boundary Detection; CNN, Convolutional Neural Network; RNN, Recurrent Neural Network.

## I. INTRODUCTION

In recent trends, it has been predicted that the use of smart CCTV technology has been rapidly increased to judge the current circumstances and it is immediately informed to the administrator to take any action for security reasons. CCTV has been identified as a "situation of interest" [1] where it feeds all the records that have to be documented for further investigations. Nowadays CCTV has been installed in most of the public places where it records thousands of scenes, especially in crowded areas which become more peculiar to gather particular information from the very large video database [2]. For crime investigation, this CCTV footage is used to suspect a guilty scene, where the examiner have to view all the shots and scenes to spot the frames. In these cases they have to spend more time to view all the scenes without missing any evidences such as motion detection, facial identification and face detection. Also the obstacles arises with poor image resolution from the footages results more stress to detect the scenes. The survey on CCTV footage reveals that the stress and time management are very weird with low resolution video dataset. To avoid such distractions CBVR is one of the best of all the methods to analyze those video databases to recover the particular content from large collections through shots and scenes [3]. CBVR method is incorporated in two different ways: (a) Video segmentation. (b) Key Frame Selection:

Video segmentation: The video is fragmented into shots by the feature extraction method related to Color, texture, shape, and movement determines the Shot Boundary Detection

Key Frame Selection: The shot constitutes the frames in which the selection of frames using the frame extraction method is affiliated to Motion-based, Content-based, and reference-based to gather the beneficial frames referred to key-frame.

Then the implementations of retrieving the required video sequences are indexed [4] to produce the video summarization. The advantage of CBVR is to pre-process all the frames even in a low resolution pixel such as CCTV footages to sustain better results.

This paper is configured as follows. The following section II addresses about the CBVR Structure, section III describes about Shot Boundary Detection which depict the shots from the frames through Histogram Analysis of various methods, section IV explains the survive methods of Key Frame Extraction with its advantages and disadvantages, section V explains the subsist approach of deep learning techniques and its methods, section VI elaborates the various datasets used in key frame extraction to identify the meaningful key frames, section VII is concluded with the observations.

2020 International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE)

# Potential Breast Cancer Drug Prediction using Machine Learning Models

Dr. N. Priya
*Associate Professor*
*PG Department of Computer Science*
*SDNB Vaishnav College for Women*
*Affiliated to University of Madras*
Chennai
Email: drnpriya2015@gmail.com

G. Shobana
*Assistant Professor*
*Department of Computer Applications*
*Madras Christian College*
*Affiliated to University of Madras*
Chennai
Email: shobana@mcc.edu.in

***Abstract*— In recent years, researchers are working to produce best medication for Breast cancer, which has become a common disease among women. Several new drugs are synthesized and tested against the cell lines of the affected tissues. When different types of cell lines have to tested for its response to numerous drugs, the experimental costs are relatively high. Machine learning models helps in selecting highly potential and relevant drugs. Whenever a new compound is synthesized, it can be examined for its use as a breast cancer drug. Recent research classifies the cancer as benign or malignant type using machine learning techniques which employs numerical or medical images as input data. We propose the use of machine learning models in classifying the drug as a potent breast cancer drug. This paper investigates the application of feature reduction technique in further improving the prediction accuracy of the machine learning models. The performance of Logistic Regression, Support Vector Machine and Decision Tree models were evaluated and SVM provided optimal prediction accuracy in the process of breast cancer drug classification.**

***Keywords*— machine learning, logistic regression, Support Vector Machine, decision tree***

## I. INTRODUCTION

Cancer is a disease that is characterized by the unprecedented growth of abnormal cells. They do not have any limit and invade other adjoining parts of the body. They are generally divided in to malignant and neoplasms. It can affect almost any part of the body and eventually spreads to other organs. Cancer is causing several deaths across the globe. Cancer related deaths in the year 2018 was estimated to be around 9.6 million. Lung, colorectal, prostate, stomach, liver, breast, cervix and thyroid are some of the common cancer types [1]. In 2018, two million were affected due to breast cancer and 6,27,000 deaths were reported [2].

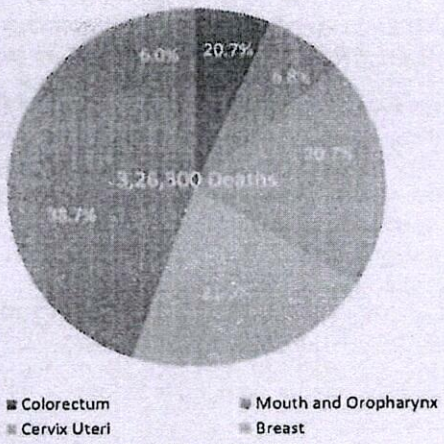


Fig. 1. Cancer country profiles, 2014 (WHO) [1]

Fig. 1 shows the pie chart of cancer country (India) profiles issued by the World Health Organization. Among 3,26,300 deaths, Breast Cancer accounts to 21.5%. Fig. 2 shows a chart indicating cancer incidence in India (2014) and Breast cancer cases are the highest among other types of Cancer. Breast cancer affects the ducts or lobules of human breast and there are several types.

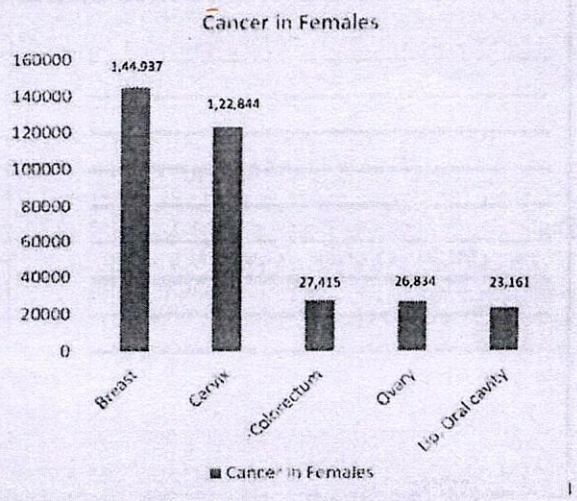


Fig. 2. Cancer incidence in India, 2014(WHO) [1]

Derived cell lines from Breast cancers are tested for in-vitro studies. Some of the cell lines are MCF-7, MDA-MB-231, HS 578T, T-47D, BT-549, MDA-MB-468 etc. Drugs like Cyclophosphamide, Doxorubicin, Docetaxel, Methotrexate and Fluorouracil are administered to Breast Cancer patients [2]. Determining the biological activities of any newly synthesized drug candidate involves several days of lab research and the experimental cost is also relatively high. New drugs are synthesized every day and among several drugs, identification of the most potent drug plays a crucial role in the pipeline of drug discovery. A few hundreds of potent drugs can be selected for lab research among several

978-1-7281-4141-1/$31.00 ©2020 IEEE

JOURNAL OF CRITICAL REVIEWS

ISSN- 2394-5125 VOL 7, ISSUE 3, 2020

# EDUBOT: AUTOMATION OF PYTHON TUTORIAL WITH VOICE INPUT AND OUTPUT

**Dr. M. Mahadevi[1], Ms. E. Nandhini[2]**

[1]Assistant Professor, P.G.Department of Computer Science, S.D.N.B Vaishnav College for Women, Chennai, India,

[2]Student, E.Nandhini, P.G.Department of Computer Science, S.D.N.B Vaishnav College for Women, Chennai, India,

maxsaran@gmail.com, nandhiniraj46@gmail.com

**ABSTRACT:** Now a day so many activities are done by chat bots and it is helpful to minimize the users work load. Chat bots are one of the most well-known examples of artificial intelligence. A chat bot is used for chatting purpose and it is a computer program that is used to interact with humans to answer their queries and full fill their needs. The development of chat bot has become popular as many traditional chat bots are one of the most replaced with conversational chat bot. There are less chat bots based on educational field and less chat bot based on the programming language. There are so many people who want to know or learn about programming language and it is very helpful to gain knowledge to learners. The aim of this paper is to develop educational chat bot which helps users to learn python programming language and it has all the information about python and its coding. It is helpful for all types of learners and increases the educational standards and it is very effective to interact with any field of the technology. This educational Chat-bot named Edubot could effectively answer study related queries to the learners with an added advantage that it is voice to voice chatbot. Since it is a voice to voice chatbot, it is very useful for visually challenged people to learn the python programming language by interacting with this Edubot. The speciality of this process is using Speech to Text to capture the user's voice, and lastly Text to Speech is used to playback the chat bot's response to the user in voice. The striking feature of this Edubot is that, it particularly concentrates on the python programming language that the user can raise their queries by their voice and it will give the answer both by voice and as text. In this chat bot Natural Language Tool Kit (NLTK) is used to train the data and Natural Language Processing (NLP) is used to recognize the human language.

**KEYWORDS: Artificial intelligence, python programming language, Natural Language Processing (NLP), Natural Language Tool Kit(NLTK), Deep Learning.**

## I. INTRODUCTION

Generally, chat bots are used for chatting purpose and gives needed information to user's questions and the AI chat bots is a computer program and it is used to interact with humans to give instant response to the user queries. Artificial intelligence (AI) is a technology that simulates human intelligence in machines that are programmed to think like humans and mimic their actions. The term may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving [1]. AI Chat bots either use text messages, voice commands, or both to response user queries. And it is a piece of technology that allows a computer program to communicate with people. Chat bots are intelligent when it becomes mindful of user needs and by Artificial Intelligence the chat bots have ability to handle any scenario of a conversation with simplicity. The chat bots give answer to the user query and execute the tasks also. Early stages of the chat bots are very difficult to develop but the recent chat bots are easy to develop because of the wide availability of the development platforms and the libraries. A chat bot can be developed by the Natural Language Processing (NLP) or Deep Learning in AI. The traditional chat bots are difficult when compare to recent chat bot because it has large amount of data to train. But recent chat bots are created using NLP and Natural Language Tool Kit (NLTK) which are much easier to train. Generally, there are lot of AI chat bots available in different fields for different purpose but based on educational field it is less and there are less chat bots available for particular subjects or programming language. The main advantage of this paper is, it overcomes the existing problems like speech recognition and incorrect query results etc. This paper will be the initial step of artificial intelligence which will chat with the user about the python programming language and the NLTK is a platform for building python programs that work with human language data for applying in statistical Natural Language Processing (NLP) and the NLP is to deal with the interaction between machine and human languages. Python is a user friendly programming language that it allows you to type directly into the interactive interpreter—the program that will be running your Python programs [2]. The objective of this paper is to develop educational chat bot which helps normal and visually challenged users to learn python programming language by posting queries to

JOURNAL OF CRITICAL REVIEWS

ISSN- 2394-5125 VOL 7, ISSUE 3, 2020

# DRIVER DROWSINESS DETECTION USING CIRCULAR HOUGH TRANSFORM (CHT)

**Dr. S. Rajeswari[1], Dr.C.Victoria Priscilla[2], Rukmini. R[3]**

[1]Assistant Professor, P.G Department of Computer Science, S.D.N.B Vaishnav College for Women, India

[2]Associate Professor, P.G Department of Computer Science, S.D.N.B Vaishnav College for Women, India

[2]Student, P.G Department of Computer Science, S.D.N.B Vaishnav College for Women, India

**ABSTRACT:** Drowsiness is a human characteristic that is not taken seriously by any individual. But this particular human feature can have grave and fatal consequences if not considered and acted upon especially on roads while driving. Distracted driving is considered as main reason for road accidents. Monitoring the driver's activities constitutes the safety of the automobile that reduce the number of accidents. The aim of this system is to help in analyzing the factors associated with driver's behavior for the development of Drivers Drowsiness Detection systems. This article employs Image Acquisition toolbox to capture live video and Snapshot function is to frame conversion. Computer Vision Tool is used to recognize the feature in the face. Finally, Circular Hough Transform algorithm is applied to detect the eyeball to find the drowsiness. An alert will be given to the driver after the drowsiness detection. The algorithm provides 99% of accuracy rate in eye closure detection. The experimental results show that the methodology outperforms efficiently.

**KEYWORDS**: Drowsiness, Face Detection, Circular Hough Transform, Eyeball Detection.

## I. INTRODUCTION

Drowsiness is a major factor that causes vehicle accidents nowadays. Most of these accidents occur due to distracted driving and this should be brought into control to safeguard the people. There are various factors that causes accidents but 90% of accidents occur due to drowsiness and distracted driving. In case of drowsiness or distracted driving, the driver cannot focus on driving which may lead to serious crash or accidents. A driver drowsiness system is to be developed to overcome these situations that lead to major accidents. Drowsiness is sleepy state. Generally, a normal human being needs 6-7 hours of sleep per day which helps the human body to function properly to carry out their daily activities. If this sleep is ignored, it leads to drowsiness that causes dangerous accidents when the person is driving any vehicle. Hence all humans must have a proper sleep, to avoid these kind of situations [1]. In other words, drowsiness is also called as micro sleep, where the individual has a sleep that is temporary, but it leads to lose of awareness while driving for few seconds that leads to severe accidents [2]. Previous studies have proposed a different number of techniques to overcome the driver distraction that is caused due to drowsiness or some other issues like alcohol consumption, distracted driving, rash driving etc., Several accidence avoidance systems have been deployed to reduce the road accidents. Eyes play a major role in determining the attentiveness of a person. A person loses his attentiveness when he is fatigue due to lack of sleep or rest or physical work. If this continues and the person drives a vehicle with this lack of sleep or rest, it leads to accidents that cause severe damage to humans [3].

When a person's attention goes away from the driving task, driver distraction occurs which also becomes a major reason for road accidents. Driver drowsiness is due to lack of sleep or rest which also plays a major role in accidents. When comparing, the driver distraction and driver drowsiness, both has the same serious effect like increase in risk of crash, decrease in driving performance etc. [4]. Therefore, Image processing plays a vital role in finding the detection of features from the video streams and images. This article uses image processing algorithms and implemented using MATLAB code to produce the best result in drowsiness detection. At first, face is detected and the features of face (i.e eye) is extracted and concentrated to eyeball, which denotes the drowsiness and alert is given to the driver.

## II. LITERATURE REVIEW

Several studies were taken over in the field of face and its feature detection. In [5] the author proposed a Method of Driver's Eyes Closure and Yawning Detection using Paul Viola Jones with Haar_like feature. Finally, SVM is used to classify, analyse and produce the result. When the mouth is wide open, this method cannot detect the yawning so, it does not give accurate result. Malvika Tula [2], the author developed a Driver Drowsiness Detection system using Viola-Jones algorithm with threshold values to detect and crop the features from different frames and it is implemented in MATLAB tool. This threshold is decided to 70% according to eye closure and open. But the model performs lower in poor lighting

Jour of Adv Research in Dynamical & Control Systems, Vol. 12, 03-Special Issue, 2020

# Analysis of Performance on Classification Algorithms for Credit Card Fraud Detection

*Dr.C. Victoria Priscilla, PG Department of Computer Science, SDNB Vaishnav College for Women, University of Madras, Chennai, India. E-mail: aprofvictoria@gmail.com*

*D. Padma Prabha, Department of Computer Applications, Madras Christian College, University of Madras, Chennai, India. E-mail: padmaprabha@mcc.edu.in*

**Abstract---** The evolution of credit card in financial transactions are massive throughout the world by generating millions of transactional records that have been maintained. These records have different patterns of genuine and fraudulent behaviour, the dataset is highly imbalanced with less fraudulent samples when compared with genuine. Machine learning trains the classifier based on the previous behavioural pattern and predicts the category of incoming transaction. In this study, we examined and compared the performance of four traditional supervised classifiers by applying raw data after removing few repeated features from the dataset. As the dataset is highly imbalanced, accuracy cannot be considered as a good metric. Therefore balanced classification rate was used to find the model accuracy. The efficiency of the classifiers was found by using different performance metrics. The results revealed that the fraud catching rate can be increased only when the dataset is balanced.

**Keywords---** Classification Algorithms, Credit Card Fraud Detection, Imbalanced Data, Performance Metrics.

## I. Introduction

As we are progressing towards digitalization, every domain has new innovations to make the work easier as well as secured. Among the payment method, Credit card is widely used through online and offline purchases hence the fraudulent rate tends to increase[1]. The banking system needs prompt authentication to verify whether the transaction is legitimate or suspicious. There are several techniques used for fraud detection to increase the accuracy of detection rate at the same time reducing false positive rate. The challenges earlier reported [2] are non-availability of real time dataset, imbalance in the dataset, increased transaction rate, appropriate evaluation measures, changing behavioural pattern of fraudsters. Machine learning helps to identify these fraudulent transactions through various classification techniques by training the model using historical patterns and to identify the incoming new transaction as fraud or genuine [3]. Credit Card Fraud Detection is a Binary classification problem where the fraud transaction ratio is very less when compared with genuine. The data set is highly skewed due to class-imbalance and hence accuracy cannot be a deciding measure for correctness of the model instead Balanced Classification Rate (BCR) or balanced accuracy is appropriate for this type of classification. Researchers have proposed new algorithms and compared the efficiency with the existing traditional techniques. Seeja and Zareapoor proposed frequent itemset mining algorithm, to find the genuine and fraud patterns of the past transactions to solve the data imbalance problem[4]. Van Vlasselaer et al. created a network based model and achieved AUC greater than 0.98 [5]. de Sá et al. presented Fraud-BNC a Bayesian Classifier algorithm with a good trade-off to increase economic efficiency [6]. Dai et al. implemented four layer detection model for real time fraud detection [7]. Hassan investigated cost sensitive learning developed by Bayes minimum risk and studied the effects on false negative cost of the model [8]. Most of these studies were based on supervised learning as the features are labeled before applying to the classifier. In this work, we have analysed the performance of four classification algorithms Binary Logistic regression (LR), Gaussian Naïve Bayes(GNB), k-Nearest Neighbor(KNN) and Decision Tree (DT). The results are interpreted based on Precision, Recall, F1 score, ROC, AUC, PPV, NPV, accuracy and BCR for greater clarity.

The rest of this paper is systemized as follows: Section II explains the four supervised classification methods used in credit card fraud detection, Section III describes the experimental approach comprising the data pre-processing and parameters used in each method, Section IV interprets the experimental results on comparative analysis using the performance metrics and Section V concludes with future approach.

## II. Methods

For any kind of fraud detection supervised learning performs well in predicting the fraudulent behaviour. This section elaborates on the four conventional supervised classifiers namely Binary Logistic regression (LR), Gaussian

DOI: 10.5373/JARDCS/V12SP3/20201391
ISSN 1943-023X
**Received: 20 Jan 2020/Accepted: 22 Feb 2020**

# Influence of Optimizing XGBoost to handle Class Imbalance in Credit Card Fraud Detection

**Publisher: IEEE**



C. Victoria Priscilla ; D. Padma Prabha All Authors



**Abstract:**XGBoost is one of the popular machine learning models used in the domains like fraud detection as well as to tackle the class imbalance that creates overfitting if not ha... **View more**

**Metadata**

**Abstract:**

XGBoost is one of the popular machine learning models used in the domains like fraud detection as well as to tackle the class imbalance that creates overfitting if not handled properly. Digital transactions are encouraged by financial institutions to maintain data integrity. Credit card payment is one of the prevalent means of transactions carried out in both online and offline purchases. Consequently, the risk of fraudulent activities are increased during these financial transactions. This creates awareness among the researchers about the need for an efficient method to detect fraud accomplishments. This paper proposes an optimized XGBoost (OXGBoost) approach to handle class imbalance in the datasets without using resampling techniques. In this proposed approach, RandomizedSearchCV hyperparameter optimization technique is applied to find the optimal parameters of XGBoost. The data sampling techniques are integrated with XGBoost to increase the efficiency of the model. The experiment was performed based on the two realworld credit card datasets. The findings of the experiment proved that the integration of data sampling does not have an impact on the efficiency of XGBoost. Based on the comparison, the proposed approach has outperformed the higher accuracy.

**Published in:** 2020 Third International Conference on Smart Systems and Inventive Technology (ICSSIT)

JOURNAL OF CRITICAL REVIEWS

ISSN- 2394-5125 VOL 7, ISSUE 11, 2020

# Machine Learning Approaches to Predict the Abiotic and Biotic Stress Tolerance Genes in Plants-A Survey

**Dr.N. Priya[1], A. Amuthavalli[2]**

[1]Associate Professor PG Department of Computer ScienceS.D.N.B. Vaishnav College for WomenUniversity of MadrasChennai, Tamil Nadu, India

[2]Assistant Professor Department of Computer ScienceHindustan College of Arts & Science University of MadrasChennai, Tamil Nadu, India

drnpriya2015@gmail.com[1], amuthavalli@yahoo.com[2]

Received: 05 May 2020 Revised: and Accepted: 15 July 2020

**ABSTRACT:** Abiotic and biotic stresses, as a part of the normal ecology, seriously impact crop productivity. Environmental pollution, climate change and global warming increase the impact of biotic and abiotic stresses on plant growth and productivity worldwide. The intensification in life-threatening climate change, continuous exposure of pesticides and pathogens warrants developing crop varieties that can tolerate multiple stresses. Thus, finding genes involved in resisting stress conditions is an agronomic importance to improve crop production and supply. With the vast genomic sequence data available from public data base and huge amount of data on expressed genes from various plants, computational approaches to find genes associated with the stress tolerance has become indispensable. Traditional databases are not designed to identification and retrieval of genes especially triggered when plants exposed to various stress factors. Recently, several machine learning approaches have been developed to identify and predict genes with agronomic traits. Different Clustering and classification methods and tools were used to predict the abiotic and biotic stress tolerance genes for plants. The objective of the paper is to discuss currently developed machine learning methods applied in plant biological data, particularly for predicting abiotic and biotic stress related genes to improve crop production and supplying food to an ever-increasing population.

**KEYWORDS:** Machine Learning, Abiotic Stress, Biotic Stress, Prediction, SVM, Bayesian, Random forest.

## I. INTRODUCTION

Plants as sessile organisms are exposed continuously a several types of stress conditions. Stress factors can be divided into abiotic stress triggered by drought, salinity, UV radiation, cold, wounding and biotic stress caused by nematodes, fungi, bacteria and insects [1]. The existence of both abiotic and biotic stresses has a vast impact in crop yield and economic losses experienced by agriculture worldwide. Development of new varieties of crop plants tolerance to specific abiotic or biotic stress is the need of the moment to compact ever growing world population and rising food needs.

Plants have evolved with unique defence mechanisms at molecular and cellular level to combat various biotic and abiotic stress conditions. Under stress conditions, plant's immune system is get activated through various molecular level processes such as increase or decrease in gene expression related to transcription factors, signal transduction and kinase cascade pathways, hormone signalling and heat shock proteins provides immunity to plants [2]. Identification of differential expression pattern of genes under biotic and abiotic condition leads to improved knowledge on plant stress mechanisms [3]. Recent advancements in high throughput technologies and availability of large plant sequence data provide an opportunity to identify genes within different stress conditions.

Bioinformatics tools are effectively used in plants for the analysis and classification of genes [4]. Several bioinformatics studies have analysed microarray samples of gene expression under different conditions for the same species however these methods are not suitable for identifying homologous genes from tropical plants

International Journal of Advanced Science and Technology
Vol. 29, No. 7, (2020), pp. 9060-9068

# Performance Analysis of Various Bully Leader Election Algorithms in Multiple Perspectives

Dr. S. Rajeswari[1]*, Dr. S. Gokila[2], Dr.B.Sundaravadivazhagan[3]

[1]*Assistant Professor, PG Department of Computer Science, SDNB Vaishnav College for Women,TamilNadu, INDIA.*
[2]*Assistant Professor, Department of Computer Applications, Mohamed Sathak College of Arts and Science,TamilNadu, INDIA.*

[3]*Professor, Department of information technology, AL Musanna College of Technology, Musanna , Sultanate of Oman.*

[1]vrajee2008@gmail.com, [2]sgokilas@gmail.com, [3]bsundaravadivazhagan@gmail.com

***Abstract***

*In distributed system, electing a node as a leader for the various coordination activities is an important issue. The significant activity of coordination is to manage the use of a shared resource in an optimal manner. Therefore, the goal of a leader election in distributed system of autonomous processes is to select one of the currently alive processes as a leader so as to manage the coordination activities of the other processes in the system. Several Leader Election algorithms are used in the distributed network among them; the Bully Algorithm (BA) is the one which used widely. There are many versions of BA were proposed each of which implemented to enhance its performance. The review discussion of this paper gives the comparative analysis in different aspect like priority allocation, Information maintenance, Simultaneous detection of failure, Bandwidth reduction, Leader recovery, Split of node Architecture, Co-Coordinator hierarchy.*

***Keywords:*** *Distributed, Leader, Message, Proxy, Priority Allocation*

## 1. Introduction

Distributed Systems are growing rapidly, therefore managing and controlling the systems becomes a challenging issue. A distributed system is a collection of several autonomous computational nodes each has its own local memory and other peripherals. They are interconnected by a communication network and the communication between them is held by message passing over the network. A distributed system can also be defined as synchronous if some criteria's are predefined; there is a declared time limit to execute processes of a node. It should had the bounded time to transmit a message from one node to another node over communication network and each node contains a local clock whose drift rate has a known bound [1]. In distributed systems, each node must effectively and accurately cooperate with each other nodes to perform a specific job. In such circumstances, a unique node has been selected to take over the responsibility of leadership and coordination. Examples of theses nodes are file servers, time servers and central node coordinators. Algorithms through which leaders are elected called leader election algorithm [3].

* (Corresponding Author)

This implies that a leader election algorithm is also a deterministic procedure that can be achieved by a number of communications among the nodes. A leader election algorithm is one of the fundamental activities of distributed systems, as it acts as basis for more complex and high level algorithms and applications. These algorithms require some special capabilities such as leader longevity, low message complexity and time complexity and providing uniqueness to the elected

JOURNAL OF CRITICAL REVIEWS

ISSN- 2394-5125 VOL 7, ISSUE 3, 2020

# DRIVER DROWSINESS DETECTION USING CIRCULAR HOUGH TRANSFORM (CHT)

**Dr. S. Rajeswari[1], Dr.C.Victoria Priscilla[2], Rukmini. R[3]**

[1]Assistant Professor, P.G Department of Computer Science, S.D.N.B Vaishnav College for Women, India

[2]Associate Professor, P.G Department of Computer Science, S.D.N.B Vaishnav College for Women, India

[2]Student, P.G Department of Computer Science, S.D.N.B Vaishnav College for Women, India

**ABSTRACT:** Drowsiness is a human characteristic that is not taken seriously by any individual. But this particular human feature can have grave and fatal consequences if not considered and acted upon especially on roads while driving. Distracted driving is considered as main reason for road accidents. Monitoring the driver's activities constitutes the safety of the automobile that reduce the number of accidents. The aim of this system is to help in analyzing the factors associated with driver's behavior for the development of Drivers Drowsiness Detection systems. This article employs Image Acquisition toolbox to capture live video and Snapshot function is to frame conversion. Computer Vision Tool is used to recognize the feature in the face. Finally, Circular Hough Transform algorithm is applied to detect the eyeball to find the drowsiness. An alert will be given to the driver after the drowsiness detection. The algorithm provides 99% of accuracy rate in eye closure detection. The experimental results show that the methodology outperforms efficiently.

**KEYWORDS**: Drowsiness, Face Detection, Circular Hough Transform, Eyeball Detection.

## I. INTRODUCTION

Drowsiness is a major factor that causes vehicle accidents nowadays. Most of these accidents occur due to distracted driving and this should be brought into control to safeguard the people. There are various factors that causes accidents but 90% of accidents occur due to drowsiness and distracted driving. In case of drowsiness or distracted driving, the driver cannot focus on driving which may lead to serious crash or accidents. A driver drowsiness system is to be developed to overcome these situations that lead to major accidents. Drowsiness is sleepy state. Generally, a normal human being needs 6-7 hours of sleep per day which helps the human body to function properly to carry out their daily activities. If this sleep is ignored, it leads to drowsiness that causes dangerous accidents when the person is driving any vehicle. Hence all humans must have a proper sleep, to avoid these kind of situations [1]. In other words, drowsiness is also called as micro sleep, where the individual has a sleep that is temporary, but it leads to lose of awareness while driving for few seconds that leads to severe accidents [2]. Previous studies have proposed a different number of techniques to overcome the driver distraction that is caused due to drowsiness or some other issues like alcohol consumption, distracted driving, rash driving etc., Several accidence avoidance systems have been deployed to reduce the road accidents. Eyes play a major role in determining the attentiveness of a person. A person loses his attentiveness when he is fatigue due to lack of sleep or rest or physical work. If this continues and the person drives a vehicle with this lack of sleep or rest, it leads to accidents that cause severe damage to humans [3].

When a person's attention goes away from the driving task, driver distraction occurs which also becomes a major reason for road accidents. Driver drowsiness is due to lack of sleep or rest which also plays a major role in accidents. When comparing, the driver distraction and driver drowsiness, both has the same serious effect like increase in risk of crash, decrease in driving performance etc. [4]. Therefore, Image processing plays a vital role in finding the detection of features from the video streams and images. This article uses image processing algorithms and implemented using MATLAB code to produce the best result in drowsiness detection. At first, face is detected and the features of face (i.e eye) is extracted and concentrated to eyeball, which denotes the drowsiness and alert is given to the driver.

## II. LITERATURE REVIEW

Several studies were taken over in the field of face and its feature detection. In [5] the author proposed a Method of Driver's Eyes Closure and Yawning Detection using Paul Viola Jones with Haar_like feature. Finally, SVM is used to classify, analyse and produce the result. When the mouth is wide open, this method cannot detect the yawning so, it does not give accurate result. Malvika Tula [2], the author developed a Driver Drowsiness Detection system using Viola-Jones algorithm with threshold values to detect and crop the features from different frames and it is implemented in MATLAB tool. This threshold is decided to 70% according to eye closure and open. But the model performs lower in poor lighting

# Formulation of Kattuyanam Rice Cupcake and its Quality Assessment

Akshaya R.
Department of Home Science - Nutrition, FSM and Dietetics, S.D.N.B. Vaishnav College for Women, Chennai

Vijaya Vahini R.
Department of Home Science - Nutrition, FSM and Dietetics, S.D.N.B. Vaishnav College for Women, Chennai

Vijaya Vahini R.
Department of Home Science - Nutrition, FSM and Dietetics, S.D.N.B. Vaishnav College for Women, Chennai

Lakshmi T. S.
Department of Home Science - Nutrition, FSM and Dietetics, S.D.N.B. Vaishnav College for Women, Chennai

**DOI:** https://doi.org/10.21048/IJND.2021.58.S2.28002

**Keywords:** Kattuyanam Rice, Cupcake, Vegan, Gluten-Free, Novel Snacks.

**ABSTRACT** Cereal and pulse combination is considered as the staple food in the diet pattern, whereas refined or processed food consumption plays an important role in the occurrence of chronic lifestyle-related diseases. Cake is a sweet baked food made from refined flour and sugar, egg and fat. Consumers are gaining awareness about the importance of consuming healthy and wholesome foods. Hence, there is a felt need to develop plant-based, gluten-free and lactose-free cupcakes incorporating indigenous kattuyanam rice by completely replacing refined flour. Brown rice (Oryza sativa L.), also recognized as Kattuyanam rice is one of the traditional coloured rice variety which has immense nutrient potentials and improves human health. The present study was intended to formulate a plant-based cupcake that is rich in protein, fibre and calcium. The study also aimed at evaluating its nutritional composition, calculate its cost, and to assess the level of acceptability by subjecting to organoleptic evaluation. The plant-based cupcakes were formulated in three different ratios using each pulse variety and with kattuyanam rice. The two varied pulses used were horse gram dhal [A KHC (50:10), B KHC (40:20), C KHC (30:30)] and green gram dhal [D KGC (50:10), E KGC (40:20), F KGC (30:30)], the cakes were formulated and standardized without the addition of any artificial preservatives. Sensory evaluation of the cupcakes was carried out by a panel comprising of twenty members and the nine-point hedonic scale was used. The results of the

# Formulation, sensory, texture and nutrient analysis of jowar waffle

**Ragasudha. V [a], R. Subaratinam [b*], Sangavi P [c*]**

*[a] M.Sc., Research scholar, Department of Home Science – Food science, Nutrition and Dietetics, Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women.*

*[b] Assistant professor, Department of Home Science – Food science, Nutrition and Dietetics, Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women.*

*[c] Assistant professor, Department of Home Science – Clinical Nutrition and Dietetics, Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women.*

**Abstract:**

Waffles are a sweet convenient product with a soft texture. The present study was conducted to develop a nutrient rich spicy waffle using jowar flour and wheat flour. Totally 24 different types of waffles (T1-70% Jowar flour, 20% Wheat flour and 10% spice bundle, T2-60% Jowar flour, 30% Wheat flour and 10% spice bundle, T3-50% Jowar flour, 40% Wheat flour and 10% spice bundle) were formulated and standardized with spice mixture of 8 different combinations were prepared and subjected to sensory evaluation. The waffles prepared using red chilli powder as the dominant spice in the mixture, was subjected for various examinations like nutrient, texture, microbial and shelf-life analysis. Sensory attributes of the formulated and standardized waffle were carried out using 9-point hedonic scale and T2 treatment had high acceptability score when compared to other treatments. T2 treatment was rich in protein (23.99g), carbohydrate (7.16g), Dietary fibre (1.49g), ash (1.89), iron (7.61mg), calcium (60.61mg) and B-complex vitamins such as Vitamin B1 (0.994 mg), B2 (1.78mg), B3 (10.33mg) and B6 (1.09 mg). The texture profile analyzes - firmness of T3 treatment was high when compared with T0 and T2 treatment. The shelf- life of the waffle was analyzed for T0, T2 and T3 treatments for 3 days and found to be one day with desirable characteristics. The microbial analysis such as yeast and mould count, total bacterial count of T0, T2 and T3 treatments were evaluated and it lies within safe limits.

**Keywords:** Jowar, texture analysis, Waffle.

*Corresponding author Email: subapgr@gmail.com, sangavi.paranthaman@gmail.com

Contact number: 9884144072

# COVID-19 Lockdown in South-India: Observational Study on Lifestyle Modifications, Dietary Habits and Elevation in BMI

Keerthana P. G.
Department of Home Science (Food Science, Nutrition and Dietetics), Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chennai - 600 044

Subaratinam R.
Department of Home Science (Food Science, Nutrition and Dietetics), Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chennai - 600 044

DOI: https://doi.org/10.21048/IJND.2021.58.S3.28430
Keywords: COVID-19 lockdown, lifestyle modifications, South-Indian population

## ABSTRACT

*To investigate the lifestyle modifications caused due to the impact of the COVID-19 lockdown in the South-Indian population. Corona Virus disease became prevalent all over the world due to its wide-outbreak at the end of 2019 in Wuhan, China. In order to repress the prevailing infection, lockdown was established all over the world. In India, the lockdown was initiated on March 22 by the Government that posed a shutdown to major community services. A standard questionnaire was formulated based on the samples' anthropometric measurements, dietary habits, physical activity, sleep duration and screen time. Random samples (n=300) were involved in this study with no exclusion criteria. This observational study was conducted online, where Google Forms was used as a platform to collect the data. Paired t test was used as means of statistical analysis in order to obtain the difference in weight and BMI before and during lockdown. For other parameters, standard deviation and diagrammatical representations such as Bar Diagrams and Pie Charts were used. Compelling evidence showed that there was an elevation in the weight and BMI among the samples. There was an escalation in the snacking frequency, screen time and sleep duration whereas there was depreciation in the physical activity which thus promoted a sedentary lifestyle during lockdown. Distinct lifestyle modifications were*

# Formulation and Analysis of Cost Effective Homemade Enteral Feeds

Subhashini B[1], Subasshini V[2], Aruna M[3]

[1]*M.sc scholar, Department of Home science- Food science, Nutrition and Dietetics, S.D.N.B vaishnav college for Women, chromepet , Affiliated to University of Madras. (Tamil Nadu, India)*

[2]*Assistant Professor, Head in Charge- Department of Home science- Clinical Nutrition and Dietetics, S.D.N.B vaishnav college for Women, chromepet, Affiliated to University of Madras ( Tamil Nadu, India)*

[3]*Assistant Professor, Department of Home science- Clinical Nutrition and Dietetics, S.D.N.B vaishnav college for Women, chromepet Affiliated to University of Madras ( Tamil Nadu, India)*

[1]subhashinib98@gmail.com

[2]v.suba@rediffmail.com

[3]arunamuthuraman@gmail.com

*ABSTRACT:*

Enteral feeding is the process of providing nutrition directly into the stomach through an enteral tube. Blenderized feeding is the type of enteral feeding which can be made using homemade ingredients where the foods and liquids are blended together and provided via enteral tube. Hence in this study 3 homemade enteral feeds are developed using home based ingredients. Ingredients such as *pearl millet, foxtail millet, kodo millet, green gram, bengal gram dhal* were selected. The millets, pulses were germinated and roasted, ingredients like palm sugar, nut powder, milk, and water were also used. All the ingredients were blended to a mixture without residues. The organoleptic evaluation were carried out using 9 point hedonic scale the mean and standard deviation score was high for the feed made with kodo millet with over all acceptability score 8.27±0.09 , followed by pearl millet feed with overall acceptability score 7.04±0.11, and foxtail millet feed overall acceptability score was 6.7±0.12. The kodo millet feed contained 186.56±0.005 Kcal, 36.25±0.01g protein, 4.03±0.005 CHO, 2.84±0.005 fat, 4.01±0.005 mg iron, 58.37±0.005 mg ca, Viscosity of the feed was 42 centipoises, pH was 6.46 . The pearl millet feed contained 236.4±0.005 Kcal, 46.14±0.01g protein, 7.62±0.005 CHO, 2.37±0.005 fat, 0.46±0.005 mg iron, 66.26±0.005 mg ca. Viscosity of the feed was 18.0 centipoises, pH was 6.7. The Foxtail millet feed contained 234.6±0.005 Kcal, 34.86±0.01g protein, 14.37±0.005 CHO, 4.18±0.007 fat, 4.56±0.005 mg iron, 60.53±0.005 mg ca. Viscosity of the feed was 42 centipoises, pH was 6.46. The cost of the feed ranged from 30 to 70 rs/1000ml Home based enteral nutrition therapy is a viable solution to customize and address the nutritional requirements based on the ailment in the patients.

**KEYWORDS:** Homemade enteral nutrition, organoleptic evaluation, physical properties

## I INTRODUCTION

Enteral nutrition is the process of supplying nutrition into the digestive tract through a tube in the stomach or small bowel. It is suggested for the patients who have normal gastric emptying or who has a normal functioning gut and also

# FORMULUATION AND EVALUATION OF GUAVA FLAVOURED COTTONSEED MILK

M. PRAVEENA[1], SUBARATINAM.R[2]

[1] M,Sc., research Scholar, Department of Home Science-food science nutrition and dietetics, S.B.N.B vaishnav college for women.

[2] Assistant professor, Department of Home Science-Food science Nutrition and Dietetics, S.D.N.B Vaishnav College for women.

**ABSTRACT:** The research was undertaken with the object to develop the flavoured milk using cottonseed milk blended with guava. Flavoured milk is a ready to drink food product which is made from unfermented milk. Cottonseed milk is an exclusive product that has not been dispirited widely as a food product. Cottonseed milk is an extract of cottonseeds which contains lipid and protein. As it is rich in protein it can be given to the protein energy malnourished population in the world. It also helps to flush out bad cholesterol, helps in maintaining blood pressure, helps in healing, prevents cancer and improves blood circulation and digestion. The guava (Psidium Guajava L.) is a tropical fruit, which is widely grown throughout South America, Africa and Asia. It belongs to phylum mangnoliophyta, class magnoliopsida and myrtaceae family. The flavoured milk was done using cottonseed milk and guava pulp in the concentration 90:10(T1), 80:20(T2) and 70:30(T3). The sensory evaluation was done using 9 point hedonic scale. The overall acceptability of the flavoured cottonseed milk of treatment T1, T2 and T3 was 7.26, 7.69 and 8.69 respectively. The most accepted was further taken for nutrient analysis, physico-chemical property and microbial analysis.

**KEYWORDS**: Cottonseed milk, protein energy malnutrition, guava, flavoured milk, sensory analysis, nutrient analysis.

## INTRODUCTION:

Cottonseed (Gossypium) is from the malvaceae family (mallow family). Cottonseed is cultivated in many countries in both temperate and tropical climates. Cottonseed is rich in protein which as the capability in meeting the needs of the worlds rising population and

The Indian Journal of Nutrition and Dietetics
ISSN: 0022-3174; eISSN: 2348-621X
www.ijndonline.org

DOI:10.21048/IJND.2021.58.S3.28424

# Formulation and Quality Evaluation of Sesame Seed Based Non-Dairy Milk Alternative

**Vijaya Vahini, R[1]. and Nirmala Josephine Mary[2]**

*(1. Department of Home Science - Food Science, Nutrition and Dietetics, SDNB Vaishnav College for Women, Chromepet - 600 044,*
*2. Bharadhidhasan Govt. College for Women, Puducherry - 605 001)*

*e-mail: bavi2vahi@gmail.com*

## Abstract

*Non - dairy milk alternatives are defined as dissolved and disintegrated plant extracts of cereals, millets, pseudo cereals, legumes, nuts and oil seeds that resemble bovines' milk in appearance and consistency. In recent years, consumers opting for non-dairy milk alternative are gradually increasing due to medical and ethical reasons. Sesame seeds are the most underutilized and low maintenance crop with abundant health benefits and functional properties. In spite of its superior nutritional quality and high calcium content (1174 mg), the diversification and commercialization of novel sesame seed-based food products is still insufficient and certainly needs research focus. The present study was aimed to formulate sesame seed based non-dairy milk alternatives and quality evaluation of the same. Decorticated sesame seeds were purchased from local market, Chennai and subjected to simple household processing techniques such as soaking, grinding and filtration. Soaked sesame seeds were subjected to grinding process in domestic blender and filtered using triple layer muslin cloth to remove the slurry. The obtained sesame seed extracts were pasteurized and stored in pre sterilized glass bottles at 4°C and subjected to physiochemical, proximate, sensory and cost analysis. The results of quality analysis of sesame seed extract revealed that the extract possessed appreciable nutritional composition with desirable sensory attributes and also found to be low cost. The study implied that formulation of novel and acceptable non-dairy product from indigenous low-cost ingredients such as sesame seeds was feasible and suits well to population seeking non - dairy milk alternatives.*

**Keywords:** *Non-dairy milk alternatives, sesame seed, quality evaluation, pasteurization*

# Formulation and Quality Assessment of Black Rice Milk Assimilated Paneer

Aysha Thaseen J. A.
Department of Home Science, Clinical Nutrition and Dietetics, SDNB Vaishnav College for Women, Chennai - 600 044

Subasshini V.
Department of Home Science, Clinical Nutrition and Dietetics, SDNB Vaishnav College for Women, Chennai - 600 044

DOI: https://doi.org/10.21048/IJND.2021.58.S2.28014

## ABSTRACT .



## DOWNLOADS

Download data is not yet available.

## METRICS

No metrics found.

*International Journal of Business and Management Invention (IJBMI)*
*ISSN (Online): 2319-8028, ISSN (Print):2319-801X*
*www.ijbmi.org || Volume 9 Issue 6 Ser. I || June 2020 || PP 18-23*

# Students' Perception and Involvement in Volunteering Services

[1.] Dr. D. Lalitha, [2.] Mrs. B SUBASRI

[1.] *Associate professor , PG Department of Commerce SDNB Vaishnav College for Women, Chromepet*
[2.] *Research Scholar, Post Graduate Department of Commerce, SDNB Vaishnav College for Women, Chromepet*

***ABSTRACT:*** *Volunteering is a distinct human characteristic. It is a socio-psychological bridge connecting the self and the individual consciousness to the collective consciousness of the community. On the one hand, it is an expression of free will of an individual, while on the other; it is an expression of a certain set of values imbibed from society values that enable an individual to locate her or himself in relation to others. By* ***volunteering, students*** *develop life skills and become well-rounded individuals. They develop life skills as they get immersed in activities that are outside of their comfort zones.* ***Volunteering helps students*** *become competent, employable, and* ***better*** *meet their learning objectives. Many challenges are presented by the COVID-19 pandemic and a show of solidarity exhibited through volunteering is heartening. In early April, over 7, 50,000 have enlisted and started undertaking volunteering work at global level. Over 18,000 volunteers from private sector have registered with health department in Chennai. A review of 33 articles on volunteering during emergencies, exploring motives, suggested that being connected with a cause can be a key driver, alongside regarding it as emotionally cathartic when affected personally and finding solace from collaborating with other towards the same goal. The purpose of this study is to know the students' involvement and perception towards volunteer services, The Sample involves 124 UG and PG students of arts and science colleges in and around Chennai metropolis.*

***KEY WORDS****: volunteer services, students' involvement, students' perception*

---

Date of Submission: 18-05-2020 Date of Acceptance: 03-06-2020

---

## I. INTRODUCTION

**"Service to others is the rent you pay for your room here on Earth." - Muhammad Ali**

Volunteering is generally considered an altruistic activity where an individual or group provides services for no financial or so

cial gain "to benefit another person, group or organization. Volunteering is also renowned for skill development and is often intended to promote goodness or to improve human quality of life. Volunteering may have positive benefits for the volunteer as well as for the person or community served. It is also intended to make contacts for possible employment. Many volunteers are specifically trained in the areas they work, such as medicine, education, or emergency rescue. Others serve on a need basis, such as in response to a natural disaster. With busy lives, it can be hard to find time to volunteer. However, the benefits of volunteering can be enormous. Volunteering offers vital help to people in need, worthwhile causes, and the community, but the benefits can be even greater for you, the volunteer. The right match can help you to find friends, connect with the community, learn new skills, and even advance your career.

With India projected to be the youngest nation in the world by 2020, there has been a renewed focus on youth in the country in recent years; engaging with youth and encouraging their participation across sectors has been seen as essential for national development and enabling inclusive growth.

- Volunteering connects you to others
- Volunteering is good for your mind and body
- Volunteering can advance your career
- Volunteering brings fun and fulfilment to your life
- Increase your social and relationship skills
- Volunteering helps counteract the effects of stress, anger, and anxiety.
- Volunteering combats depression.
- Volunteering makes you happy.
- Volunteering increases self-confidence.
- Volunteering provides a sense of purpose.
- Volunteering helps you stay physically healthy.

ISSN: 2249-6661
Vol-44 No.-01 (XXII) January-March (2021)

# BUYER BEHAVIOUR OF GOVERNMENT SCHOOL STUDENTS AS REGARDS USAGE OF SANITARY NAPKINS -A STUDY WITH SPECIAL REFERENCE TO NANMANGALAM GOVERNMENT SCHOOL, CHENNAI

**R.Harini**
Part-Time Ph.D. Research Scholar, Department of Commerce &
Assistant Professor, P.G, Department of Corporate Secretaryship,
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chennai 600 044.
harinir.krishnan@gmail.com

**Dr.R.Savithri**
Associate Professor & Head, Department of Commerce
Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chennai 600 044.

## ABSTRACT

Menstrual hygiene continues to be a challenging issue even today. Deep-rooted myths, illusion, taboos associated with menstruation continue to occupy the minds of young students and women especially in rural and semi-urban areas of India. This creates the need to understand the buying behavior of sanitary napkins among adolescent girls. The present study is based on the perception of the usage of sanitary napkins among 8th, 9th & 10th standard students of Government school, Nanmangalam, Chennai. The sample size of the study is 150. Percentage analysis and Chi-square test are used. The objective of the study is to understand the buying behavior of napkins and satisfaction in using napkins by school students.

**Keywords** – *buyer behavior, perception, adolescent, menstrual hygiene*

## INTRODUCTION

Consumer behavior refers to the decision-making process by which consumers interact with their environment and the actions they take in the market place. Consumers are the king of the market and studying the underlying motives of purchasing behavior is very important.

Sanitary napkins are used during menstrual cycle by students/women to undergo smooth and comfortable periods. After attaining puberty, students are being introduced to napkins. Sanitary napkins are very commonly used product in urban areas. "Sanitary Protection: Every Woman's Health Right", a study by AC Nielsen concluded that out of India's female population (355 million),only 12 % use sanitary napkins. In case of semi-urban and rural areas, many students/women still prefer using clothes and other absorbents. This creates a need to examine the purchasing behavior of sanitary napkins by students and women and to study the satisfaction in using napkins.

## REVIEW OF LITERATURE

S. Deepa et. al. (2018) studied on menstrual health and hygienic sanitation among 319 adolescent students and women between the age group of 13-23 students and 23-49 women belonging to rural and urban areas. Percentage analysis revealed that awareness about menstruation was high among 67% students and women of urban areas and 33% are aware in rural areas. Sanitation practice among rural students and women were found to be unacceptable and there is a need to community education on menstrual hygiene.

Pooja et.al. (2017) analysed the perception of use of napkins among 497 students in Khammam locality, Telangana between the groups of 11-20 and 21-30. Percentage analysis shows that 57.29% were not aware of chemicals used in making napkins, 46.7% respondents change napkins between 4-8 hours. For 37.75% of respondents, buying motives like comfort,




Go to page 1