UMT Research Outlook

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[Library|Learning Resource Centre]
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Foreword

The world around us is changing dramatically from science and technology to social sciences, from geopolitics to changing landscape of the geographical boundaries, from economics and finance to globalization. Every change based on research marks the beginning of another new era. But one thing for sure will remain unchanged behind all of these changes – Research. What is emerging from research is invoked as the symbol of global significance. Best mind needs to reflect on change and only the research is the option we are left with.

Research is not only critical to transform human living; it is also critical to the vision and mission of our universities. Universities are the breeding grounds of innovation and hub for research activities, setting up research standards for coherent thinking with a global perspective. Bringing together the academic/university research and the expertise of practitioners makes possible what was once only the imagination. Academic research providing new course of ideas, tools & techniques, and innovation & invention across a broad spectrum of disciplinary/multi-disciplinary areas focusing on global perspective is needed more than ever.

UMT is determined to best ensure its continued relevance, quality and usefulness to its research priorities: investing more in research. Cohesive research strategies have been formulated to keep the momentum on the go. As a direct result, the scale of research output has accelerated almost by twofold in the last year. Accordingly, the library has moved into new role to strategically manage research produced within the university. To establish university research profile and maximize its research potential the library started maintaining comprehensive management of university’s intellectual assets ‘Research Outlook’ since last year by upholding the highest academic standards possible.

Research outlook aims to inform the interested audience about the research work carried out during one calendar year. The idea behind this publication is to raise knowledge-sharing exercise with learning communities for specifying research objectives. We are pleased to present the second edition of the same to provide the immediate help to browse through the content, title and abstract of the scholarly work done by UMT community. It is also pertinent to mention the eScholar – a database that showcases the research produced at UMT.

Sohail Aslam
Chief Library Officer
Journal Articles


   **Abstract:** The impact of economic growth; international trade, unemployment and money supply on inflation has been subject to a long debate both in developing the developed countries. The advocates of economic growth; international trade and easy monetary policy are of the view that inflation increases because of increase in the economic growth, international trade and money supply. However, the existing literature sheds light on the inverse relationship between unemployment and inflation. Therefore; this article investigates the impact of economic growth; trade liberalization, unemployment and broad money supply on inflation for Pakistan for the data set from 1976- 2010. This present study applies Augmented Dicky Fuller (ADF ) and Philip Perron (P-P) tests to investigate unit root problem, Autoregressive Distributed Lag Model ( ARDL bounds testing a approach ) to test existence of co-integration among inflation and its factors, Fully Modified Ordinary Least Square Method (FMOLS) to compute long run dynamics, Error Correction Mechanism (ECM) to examine short run dynamics and Granger Causality Test to explore the direction of causality among the variables of this study. The empirical results demonstrate that only growth led inflation hypothesis works in long run, whereas, trade and unemployment led inflation hypothesis works for Pakistan both in long run and short run time spans. Economic growth and inflation have trade off in short run but money supply and inflation have trade off both in short run and in long run time spans. It is also evident that there exists unidirectional relationship that runs from economic growth to inflation; from trade to economic growth and from economic growth to money supply in the short run, but, money supply and inflation have bidirectional relationship between them in short run. Besides this, the study finds the existence of long run causality among inflation and its factors. Moreover; it is concluded that there prevails joint causality among inflation, economic growth, unemployment and money supply in Pakistan.

   **Key Words:** Inflation – Pakistan, Economic Growth, International Trade.


   **Abstract:** Urbanization expands the size of people in the cities; consequently, it puts pressure on the aggregate demand in the country. High aggregate demand opens up two channels in the country. First, it opens the doors for investment to produce more goods and export more after meeting domestic demand. Second, it encourages importers to meet this rising domestic demand by importing such goods. As a result, trade of such goods will increase. The proponents of urbanization led trade hypothesis reveal mixed opinion, such as urbanization could contribute positively and negatively to trade openness depending on the domestic condition of each country. Therefore, an effort is made to inspect the relationship between urbanization and trade openness in Pakistan. This study applies Autoregressive Distributed Lag Model (ARDL) to explore the long term association between urbanization and trade openness; Fully Modified Ordinary Least Square Techniques (FMOLS) to compute long term coefficients, Error Correction Mechanism (ECM) for the short term coefficients and Granger Causality Test to investigate short term and long term direction of causality between urbanization and trade openness for the period from 1975- 2010.
Keywords: Trade Openness, Auto Regressive Distributed Lag Model (ARDL), Granger causality.


Abstract: The study scrutinizes the existence of long run association and triangular causality among real GDP per capita, per capita education expenditures and per capita health expenditures in Pakistan. The present study applies Ng - Perron test to investigate stationarity, ARDL bounds testing approach to examine the existence of long run relationship and Granger Causality test for estimating short run, long run and combined short run and long run triangular causality among the variables for the time series data of Pakistan from 1972 - 2009. The present study exposes that there exists long run relationship among real GDP per capita, per capita education expenditures and per capita health expenditures in Pakistan. There exists bidirectional relationship between per capita real GDP and per capita education expenditures in the short run, whereas per capita health expenditures and real GDP per capita do not granger cause each other in short run in Pakistan. Also, there exists bidirectional granger causality among real GDP per capita, per capita education expenditures and per capita health expenditures in long run in Pakistan. The present study also confirms the existence of joint causality among real GDP per capita, per capita education expenditures and per capita health expenditures in both short run and long run in Pakistan.

Keywords: Real GDP per capita, Education Expenditures, Health Expenditures


Abstract: This study focuses on the identification of main determinants of food price inflation in Pakistan. Using the data from 1972 to 2008, Johansen’s co-integration technique is utilized to find out the long run relationships among food price inflation and its determinants like inflation expectations, money supply, per capita GDP, support prices, food imports and food exports. Empirical findings prove the long run relationships among food price inflation and its determinants. All the determinants affect food price inflation positively and significantly except money supply which is insignificant with correct positive sign. In the short run, only inflation expectations, support prices and food exports affect the food price inflation. The results reveal that both demand and supply side factors are the determinants food price inflation in Pakistan. However, our study supports the structulists’ point of view of inflation as money supply shows insignificant results.

Keywords: Food Price Inflation-Pakistan, Food Exports-Pakistan, Food Imports-Pakistan

Conference Papers


Abstract: The present study aims to explore some of the important factors contributing to the fiscal deficit in Pakistan. GDP per capita, total debt servicing as percentage of GDP, volume of trade as share of GDP, and monetary asset (proxy for money supply) as share of GDP are considered major factors affecting fiscal deficit in Pakistan. The period taken for analysis ranges from 1976 to 2009. The study applies ADF and Phillip Perron tests to investigate stationarity; Johansen Maximum Likelihood technique to explore the existence of long run relationship among the running actors of the study, Fully Modified Ordinary Least Square Method to estimate the long run coefficients., Error Correction Mechanism to inspect the short run coefficients and finally, Granger Causality test to investigate the direction of causality among the operating variables of the present study for
Pakistan. The empirical evidence shows that GDP per capita and money supply are significantly squeezing fiscal deficit in Pakistan in both the short run and long run span of time. The total debt servicing lagged by one year declines fiscal deficit in the long run. However, volume of trade; total debt servicing and time trend are positively and significantly contributing to the fiscal deficit in Pakistan in the both long run and short run time span. Moreover; the empirical findings report that there exists univariate Granger causality from fiscal deficit to GDP per capita, from fiscal deficit to money supply, from volume of trade to GDP per capita, and from money supply to GDP per capita. Finally, the present study diagnoses the existence of bivariate Granger causality between volume of trade and fiscal deficit in Pakistan.

**Keywords:** Microeconomics-Pakistan, Fiscal Deficit, Total Debt Servicing.

**Department of Management**

**Journal Articles**


**Abstract:** Business incubation is one of the implementation tools of government’s strategy for facilitating women entrepreneurship development in Pakistan. Purpose of this study was to measure the importance and effectiveness of incubation services for women entrepreneurs in Pakistan. Study was carried out by using survey method. Tenants from a women specific incubator participated in this survey. Self-administered questionnaire measuring the importance and effectiveness of 34 incubation services was incorporated in this study. Results revealed that tenants perceived all the investigated incubation services very important for the success of their businesses. However, difference in perceived importance and perceived effectiveness, for majority of the incubation services, has been found.

**Keywords:** Entrepreneurship-Women-Pakistan, Gender Development-Pakistan.


**Abstract:** Psychic prison-Plato’s cave metaphor introduced a compelling concept that how organizations can get trapped by their favored ways of thinking and thus fail to adapt to the environmental changes and demands. This metaphor provides organizations with a subjective clue that how organizations can be trapped in their favored ways of thinking and mental models which ultimately lead them to a state of psychic prison. However, little is known about the antecedent(s) which might lead organizations to this psychic prison mentality. Therefore, this paper aims to identify the factor(s) which objectively contribute toward this psychic prison mentality. This paper holds the view that despite its initial success and utility, “organization’s vision” after a certain period of time creates an internal environment which limits organization to see outside of the vision’s boundaries and thus leads organization toward a state where organization becomes psychic prison of its vision.

**Keywords:** Mental Models, Organization Memory, Failure of Unconscious.


**Abstract:** Multinational enterprises exist because they hold certain competitive advantages over their local counterparts and affect local economies through their spillover effects. Research streams exploring the raison d’ etre and consequences of MNEs are quite distant and remote. This paper analyzes and integrates these two streams of literature, i.e. the competitive advantages that MNEs...
hold and their spillover effects in developing countries. The paper proposes a relationship and predicts the nature of spillover effects on the basis of competitive advantages of MNEs. This paper can guide the policymakers of developing countries to differentiate between the FDI that is good for their countries and FDI that weakens the already fragile economies of developing countries. The paper also opens a new avenue for the researchers by pointing towards a potential connection between MNEs’ competitive advantages and their spillover effects for the local economies. The relationship between FDI and competitive advantages of MNEs has rarely been researched previously and thus this paper contributes significantly to the existing literature.

Keywords: Foreign Investment, Multinational Enterprises, Economic growth.


Abstract: Conventional economic theories epitomize the staple decision making process of an organization and label them almost similar rather identical in most of the cases; as the derivative basics circle around the market dynamics which is co-related to the referral output that is duly generated by a firm to ensure its survival and growth. The notion of similarity in economic decision making of scores of the organizations round the globe is an outcome of the input that is precisely and principally all common [Information and Technology sources, market trends, demand and supply curves, power of purchasing, currency valuation etc] and facilitate the organizational decision making that seems rational and anticipated. Herbert A. Simon, famous renowned Economist, a Noble Laureate clarifies that economic sciences focus upon one primary aspect of Man and that is his power of reasoning and its application on allocation of resources, especially at the time of scarcity (Simon, 1978). Orthodox and Internal neucleus stimulated the decision making flapped around core organizational hierarchy, managerial capabilities, institutional settings and diverse strengths and primal features are sidelined and not considered.

Keywords: Economic Governance, Organizational Economy.


Abstract: Organizations round the globe are trying their level best to maintain the flow of knowledge across organization in a holistic manner, keeping all the groups, sections and department on board; but most of the time the process of knowledge sharing does not seem smooth, casual and ordinary. On the contrary, it is trouble shooting, particular and situational. This paper encompass the concept of ‘quality circle’ as described in Total Quality Management and strives to have the same incorporated as ‘knowledge circles’ in an applied manner across organization in order to establish a comprehensive and cohesive network for intra organizational knowledge sharing that not only facilitates those involved in routine operations but paves the way towards organizational learning.

Keywords: Knowledge Management, Total Quality Management, Knowledge Sharing.


Abstract: The paper analyses the relationship between the popular Barro and Lee (2001) ‘average years of schooling’ with income inequality, wage inequality, and income deciles and income percentiles for the sample of developed and developing countries. The results suggest that countries where students complete higher numbers of years of schooling on average also perform
better on relative incomes meaning that increase in average income comes from improvements in the earning capacity of the lower income groups or unskilled labour. The paper also finds that an educated population means that there is redistribution of income from the rich to the poor creating thriving middle class.

Keywords: Education-Pakistan, Wage Inequality-Pakistan, Income Inequality-Pakistan.


Abstract: The purpose of this paper is to demonstrate the concept of global branding, what it stands for being socially responsible, and what its link with leverage is. It also highlights the range of social responsibility issues with reference to Pakistani brands and explores the relevant issues and deep insights from strategic corporate social responsibility (CSR) literature and global branding literature in the context of Pakistani organizations. It also suggests future implications for theorists, practitioners and academicians with reference to effective strategic CSR and global branding. This paper embarks on the intellectual journey with the concept of CSR and global branding in local context of Pakistan, while reviewing the relevant literature and addressing the issue of complexity in Pakistani context. This study gives insights about the issue of complexity at the time of strategically integrating CSR into global band and sorts out three strands of complexity namely, 1) issue complexity, 2) organizational complexity, and 3) communication complexity in the context of Pakistan. The limitation of this paper is due to the limited academic literature, giving insights about how global organizations in corporate CSR initiatives for the development of brands, and insights dealing with the issues needed to be taken into account at the time of integrating into branding strategies. This paper gives fresh enquiry to the issue complexity, organizational complexity and communication complexity with reference to global brands and CSR activities in the context of Pakistan which has been applied so far.

Keywords: Global Brands, Pakistani Brands, Pakistani Organizations.

Conference Papers


Abstract: This preliminary study endeavors to link the professional competencies and willingness of the HR professionals in Pakistani banks with the effectiveness of HR professionals. Human resource professionals are people managers and supervisors in support areas of profit making. The HR Professionals have to learn the new competencies which are required to manage and develop the knowledgeable employees in the banking sector of Pakistan. The objective of this preliminary study was to check the reliability of the instrument which has been used in USA and European countries and it was found that the overall Cronbach Alpha of the instrument is 0.98, whereas for each constructs in this study it ranged from 0.85 to 0.96. At the outset it is also found that the HR professionals are lacking the professional competencies and hence have an impact on their effectiveness in the banking sector of Pakistan.

Keywords: HR Professionals, HR Competencies, HR Effectiveness.

International Business and Economics Conference (TiBEC III), Kuala Terengganu, Terengganu, Malaysia.

Abstract: This ongoing study examines the human resource (HR) professional effectiveness through the lens of HR professionals’ competencies and HR professional willingness at the large privatized bank in Pakistan. The Human Resource Competency Study (HRCS) model is used in this research. Impact of HR professionals’ social and technical competencies and HR professionals’ willingness on their effectiveness is examined. The analysis reveals that the HR social competencies have a highly significant correlation with HR professional effectiveness than the HR professional technical competencies and the willingness. At the outset it is also concluded that the HR professionals of the bank are lacking the competencies and hence have a negative impact on their effectiveness in the banking sector of Pakistan.

Keywords: Banking–Pakistan, Private Bank–Pakistan, HR Effectiveness.


Abstract: This preliminary study endeavors to link the professional competencies and willingness of the HR professionals in Pakistani banks with the effectiveness of HR professionals. Human resource professionals are people managers and supervisors in support areas of profit making. The HR Professionals have to learn the new competencies which are required to manage and develop the knowledgeable employees in the banking sector of Pakistan. The objective of this preliminary study was to check the reliability of the instrument which has been used in USA and European countries and y it was found that the overall Cronbach Alpha of the instrument is 0.98, whereas for each constructs in this study it ranged from 0.85 to 0.96. At the outset it is also found that the HR professionals are lacking the professional competencies and hence have an impact on their effectiveness in the banking sector of Pakistan.

Keywords: HR Effectiveness, HR Competencies, HR Professionals.


Abstract: Organizational collective knowledge plays an important role in innovation and also provides a competitive advantage. Human Capital (HC) is the sum total of intelligence found in individual human beings and consists of individual’s learning and education, experience and expertise, and personal creativity and innovation. Many researchers believe that only knowledgeable and innovative organizations are going to survive in future in the knowledge based economy. The present study is focused on a Pakistani private commercial bank and is aimed to study the impact of its HC on its Innovative Capability (IC). In this survey based research, four hypotheses were empirically tested. The survey instrument comprised of a 25-item Human Capital Construct, and 27-item Innovative Capability Construct. Using a systematic random sampling design of probability sampling technique, 170 participants from a Pakistani private commercial bank completed this survey. Multivariate data analysis techniques like exploratory factor analysis, multiple regression, and simple regression were used to analyze the data. All four hypotheses for the present study were supported. Findings from the present study reveals that (a) Human Capital (HC) is influenced by bank officers skills/competence, bank officers transformational leadership role, bank officers knowledge, bank officers ability, and bank officers personal mastery; (b) Innovative Capability (IC) of the bank was found influenced by support for innovation available to bank officers, bank officers innovative behavior, and tolerance for difference available to bank officers.

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officers; (c) bank officers leadership role, bank officers personal mastery, and bank officers ability were significant and positively related to bank’s Innovative Capability, whereas, bank officers knowledge was less significantly related to bank’s Innovative Capability for the present research; and finally (d) bank’s collective Human Capital was found to have positive relationship with bank’s Innovative Capability. The research limitations of the present study regarding generalization, along with recommendations for future academic research are included as well.

**Keywords:** Banking–Pakistan, Commercial Banking–Pakistan.


**Abstract:** In recent years internet market continues to maturely expand at even more pace than ever before. In Pakistan entrepreneurs and organizations are accepting web technologies to expand businesses utilizing the robust dynamics of Internet Marketing and e-Advertising. The e-Advertising artifacts offer wide range of benefits to business community such as interactive and personalized e-ads, social media and use of SEO to reach target customers precisely. This study is focused on attempt to mark the trend for adoption of such models in Pakistan e-Business startups and their effectiveness. There are variety of advertising models available in e-Advertising i.e. Search engine marketing, permission advertising, affiliate advertising etc each with its own unique features. The core benefits of e-advertisement are measured in terms of creating brand awareness, attracting customers and improving brand loyalty. The literature review establishes a sphere highlighting use of internet in businesses around the globe generally and Pakistan especially. Furthermore, a close study of Pakistani environment has been taken as a test case to understand and develop an e-Advertising model for e-Business startups. The e-Advertisement adoption model suggests artifacts that are most suitable for e-Business startups considering their specific needs. This model will be helpful for organizations in Pakistan who wish to utilize the exciting features of e-Advertisement artifacts such as feedback of e-Advertisement campaigns or just in time advertisements.

**Keywords:** E-Advertising-Pakistan, E-Business-Pakistan, Web Marketing.


**Abstract:** The saturation of retail markets in the developed countries and the growth potential of Asian markets are enticing the big retailing giants to enter the business markets of countries like Pakistan whose retail potential is expected to be $42 billion.

**Keywords:** Retailing-Pakistan, Retailing-Asia, Business Marketing.


**Abstract:** Purpose Business incubation is one of the implementation tools of government’s strategy, for facilitating women entrepreneurship development in Pakistan. Very few of the business support initiatives in Pakistan have translated into accrual of genuine benefits for target beneficiaries. That being so, purpose of this study is to measure importance and effectiveness of incubation related facilities/services for women entrepreneurs in Pakistan from the perspective of its primary beneficiaries (tenants) and draw implications for future women specific incubation programs. Methodology Study was carried out by using survey method. Tenants from women specific incubator participated in this survey. Self-administered questionnaire measuring importance and effectiveness of 34 incubation related facilities/services was incorporated in this study. Findings
Results revealed that tenants generally perceive all the investigated incubation related facilities/services very important for the success of their businesses. In general, tenants have shown their agreement with incubator’s ability to deliver all the facilities/services effectively. However, difference in perceived importance and perceived effectiveness for majority of the incubator’s facilities/services has been found. Originality There is no research study conducted, whatsoever, on incubation and/or its effectiveness in women entrepreneurship development in Pakistan. In an attempt to fill this gape, this study provides an empirical evidence of perceived value and effectiveness of incubation related services for its tenants. The results of study have also been interpreted in the light of similar prior empirical studies on measuring effectiveness through client’s satisfaction. In this sense, this study also intends to discuss, somehow, the world wide scope of incubation model.  

**Keywords:** Gender Development, Entrepreneurship-Women, Incubation.

Books/Book Chapters/Book Reviews


**Synopsis:** A timely discourse on significance of organizational existentialism in raising bar of ethical consciousness. The corresponding study has been undertaken in order to understand and explore the most significant, prime and important area of discussion in the perspective of prevailing corporate world as the corporate greed and sense of profit maximization has damaged and tarnished the integrity of human essence and man is being dealt as nothing more than a machine in an organization. In the wake of recent financial crisis, it has become necessary to explore ways and means reinforcing ethical consciousness as a deterrent to the intrinsic drivers such as interplay of greed damaging the interest of stakeholders and even threatening the very existence of the company as well jeopardizing the careers of executives and employees. This research study seeks to explain the relevance and usefulness of OE in reinforcing ethical awareness and moral foundations of decision-making in organizations in an attempt to develop internal mechanism for moderation and control of actions based on pure greed.  

**Keywords:** Existentialism, Organizational Existentialism, Decision Making.


**Abstract:** Not Available  

**Keywords:** Cultural Studies, Capitalism.


**Synopsis:** This work aims to provide an insight of the sources and level of work stress present in the business organizations operating in Lahore, a metropolitan city of Pakistan. Differences among demographic groups in work stress experiences are also investigated. Individuals from management positions participated in this study. Data is collected from private sector organizations by using survey method. Six factors namely role ambiguity, role conflict, quantitative role overload, qualitative role overload, career development, and responsibility for others as identified by literature as potential sources of work stress are taken for this study. Gender, age, experience, and education are taken as demographic variables to identify the differences among individuals in level and sources of works stress. All the variables in instrument score high on reliability tests. Results
reveal that 87% of the employees have experienced moderate to high level of work stress because of the mentioned stressors. In general, all the factors used in this study cause employees above average level of work stress.

Keywords: Work Stress, Business Community-Lahore.

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Department of Marketing

**Journal Articles**


Abstract: The successes of the firms depend on creating high customer loyalty by adopting appropriate strategies. In response, the industry is shifting its strategic focus away from attracting only new customers by offering competitive prices and packages, towards retaining existing customers through creating customer loyalty. This study aims to investigate the effects of customer satisfaction and switching barriers on customer loyalty. The data is collected by questionnaire based survey using simple convenient sampling technique and the target population includes all the current users of mobile telecommunication services. Multiple regression method is used to test the impact of customer satisfaction determinants and switching barrier on customer loyalty. The result shows that call quality and customer support have significance relationships with customer loyalty. A one way ANOVA test was also used gender differences among customer satisfaction and switching barriers in Pakistani mobile telecommunication services. Findings of the study may be useful for strategists and policy makers in telecom industry and the results can be generalized to the industries.

Keywords: Service Quality, Telecom Industry-Pakistan, Customer Satisfaction.


Abstract: This paper studies the Herzberg’s two factor notion of job satisfaction. The purpose of this paper was to examine the relationship between job motivator and job hygiene with job satisfaction. It also aimed to explore whether these job attributes reflect the same notion put forward by Herzberg or not. The study was being conducted on faculty members at SALU. An instrument containing five job hygiene facets and five job motivator facets was used to collect data from respondents. The faculty members were generally found satisfied with their job but satisfaction level varies across gender, age, tenure, rank as well as towards the various attributes of Job motivator and Job hygiene. The facet “Work itself” was found to be the most satisfying job attribute while “Policy” was the least satisfying aspect of job respectively. The result also showed that both job motivator and Job hygiene are moderately to substantially relate with job satisfaction. The factor job Hygiene was found more influential in predicting job satisfaction than Job Motivator. It contradicts Herzberg’s conception that only content factor tends to develop a positive attitude towards job. On the other hand demographic variables showed an insignificant impact in determining the level of job satisfaction among faculty members at SALU.

Keywords: Job Hygiene, Job Motivator, Job Satisfaction.
Department of Operations and Supply Chain

Journal Articles


Abstract: *Purpose* – The purpose of this paper is to show how the quality practices such as leadership and strategic quality planning, supplier relationship management, customer focus, quality data and reporting, process management and human resource management are as relevant to supply chains as they are to an individual firm.

*Design/methodology/approach* – Based on the review of relevant literature, propositions have been framed to stimulate future research. In order to evaluate the quality management (QM) practices in Pakistani supply chains, three cases have been presented. These cases provide information about QM practices of the case companies with respect to the supply chains they represent. Based on the case comparisons, common themes regarding the state of QM in Pakistani supply chains have been identified.

*Findings* – The current study shows that the state of QM in the supply chain context is at a primitive level in Pakistan. Most organizations have instituted quality departments and devised quality policy and planning inspired by ISO 9000 standards. However, quality culture that promotes bottom-up improvement throughout the organization is nonexistent. Compared with the proposed framework of total supply chain quality management (TSCQM), Pakistani organizations have a long way to go before any significant integration can be achieved in the quality functions at the supply chain level.

*Originality/value* – Building upon the current literature in the field of supply chain and QM, the current study proposes a new, more comprehensive framework TSCQM.

*Keywords*: Supply Chain Management, Quality Management, Supply Chain Quality.

Conference Papers


Abstract: By products and waste materials are the parts of every manufacturing activity. These wastes can be a valuable input for various industry processes if handled properly and can cause the environmental damage if handled unprofessionally. It is usually assumed that supply based approach to recycling can disrupt the market equilibrium whose beauty reside on the well known demand and supply principle. Recycling industry is totally depends upon supply based approach because no one can predict the returns in a originating from different streams. Reverse logistics are the valuable input for the recyclers. This paper presents the framework of reverse logistics optimizing the stakeholders’ gain, social gain, economic gain and environmental gain. It identifies the roadblocks that prevail in recycling industry and describes various types of returns and wastes. This paper not only highlights the recycling activities but as well shares the best practices for effective implementation.

*Keywords*: Supply Chain Management, Operational Framework, Recycling.


Abstract: Not Available

*Keywords*: Energy, Biogas Energy–Pakistan, Biogas Plant.
School of Science & Technology
Department of Basic Sciences

Journal Articles


   **Abstract:** Refractive index and thickness of a transparent \( \text{Im} \) (ZnS) on a transparent substrate (BK-7 glass) have been determined from measurement of normal incidence transmittance, using different methods. Some of the methods considered here are most widely used, as is apparent from the literature. The outcome of this study could help a researcher in selecting an appropriate method for such an application. The values of the refractive indices determined by different methods were found to be close to each other (within 0.5%). However, large (up to 4.4%) differences existed in the values of the thickness determined by different methods.

   **Keywords:** Optical Constants, Thin film, Transmittance.


   **Abstract:** Islam is recognized as a broad approach of life whose teachings cover every likely human relationship including that with the environment. We, human beings, are permitted to employ the earth’s resources land, water, air, minerals, flora, fauna, feathered creatures to accommodate our needs, but only in an approach that does not disturb ecological equilibrium and that does not discredit the ability of future generations to meet their needs. Wind farming is a mean of obtaining electric energy that does not produce air toxic wastes, effluence, greenhouse gasses, smog, fumes, litter, trash or other forms of environmental squalor associated with fossil fuel technologies. For a wind farm model, birds may be injured by direct impact with turbine blades, towers and/or transmission lines. This review explains the impact of wind farms on birds with an assessment of the probable bird species/groups that may fabricate problems by wind farm occurrences. It describes a couple of means by which wind farms can possibly have cogent effects on birds. Firstly they can pose a risk of collision, with birds soaring into rotor blades, resulting in increased mortality rates. Secondly they can cause loss of habitat, mainly through movement of birds from an area around the wind turbines. The degree and austerity of all impacts could best be lessened by the careful laying of proposed wind farms and by preparing a site management plan and design through numerous active strategies as explained in the paper

   **Keywords:** Wind Farms, Birds, Wind energy.


   **Abstract:** The in vitro total antioxidant and radical scavenging properties of organic extracts from leaves, stem and inflorescence of male and female plants of Cannabis sativa were studied using 2,2‘-azinobis(3-ethylbenzothiazoline-6-sulfonic acid) (ABTS) radical cation scavenging, total phenolic contents (TPC), 2,2-diphenyl-1-picrylhydrazyl (DPPH) free radical scavenging, lipid peroxidation inhibition and metal chelating activity assays. The stem, leaves and inflorescence of male (MS, ML and MI, respectively) and female (FS, FL and FI, respectively) plants were initially extracted in methanol and subsequently partitioned in n-hexane, chloroform, ethyl acetate and 1-butanol, successively. Employing ABTS radical scavenging activity assay the fractions obtained in polar
solvents exhibited high ABTS scavenging activity. Trolox equivalent antioxidant capacity (TEAC) values obtained for various extracts of different parts of C. sativa ranged from 144.46- 1.47 mM trolox equivalents for 1-butanol fraction of Fl and chloroform fraction of FS, respectively. Total phenolic contents using Folin-Ciocalteu's method ranged from 3.562-0.339 mg/L gallic acid equivalent for 1-butanol fraction of FS and chloroform fraction of MI, respectively. A direct relationship between Trolox equivalent antioxidant capacity and total phenolic contents values was not observed for the extracts except for MS indicating that only phenolic compounds were not responsible for the total antioxidant activity of the fractions. The rate of scavenging of DPPH radical for these extracts reflected the presence of a diverse nature of antioxidative components. Using ammonium thiocyanate method, all the extracts of both the genders demonstrated significant lipid peroxidation inhibition activity. The per cent chelating activity using ferrozine as reference chelator ranged from 9.46-84.94 for ethyl acetate fraction of ML and methanol fraction of Fl, respectively. A poor correlation of ferrous ion chelating activity with total phenolic contents of the extracts was observed and this indicates that phenolic compounds might not be the main chelators of iron ions.

Keywords: Total Phenolic Contents, Trolox Equivalent Antioxidant Capacity, Lipid Peroxidation Inhibition.


Abstract: Phytochemical studies of the aerial parts of Abutilon muticum resulted in the isolation of eight new source compounds, which had not been isolated so far from this investigated source. The compounds isolated were: 3,4',5,6,7-pentahydroxy flavones; 3,3',4',5,7-penta hydroxy flavone-8-O-b-D-glucopyranoside, 3,3',4',5,7-pentahydroxy flavones; stigmastanol, benzoic acid, 1-tricosanol, cholesterol and triacontyl palmitate. Proximate composition of A. muticum revealed that the protein content was appreciable (23.5 %) and similar to that of cotton (28.72 %). As far as human nutritional aspects are concerned A. muticum had significant mineral contents. Potassium is most abundant (443.01 mg/100 g), followed by calcium (395.23 mg/100 g), phosphorus (327.13 mg/100 g) and magnesium (193.42 mg/100 g). In addition hepatoprotective activity of A. muticum was evaluated against hepatic damage in rabbits. The substantially elevated enzyme levels were restored towards normalization significantly by the extracts. The biochemical observations were supplemented with histopathological examination of rabbit liver sections. These findings reveal A. muticum, indigenous to Pakistan to be potentially valuable herb for minerals, delivery of drugs and liver diseases.

Keywords: Chemical Constituent, Minerals, Histopathology.

**Conference Papers**


Abstract: Gasification technology includes the conversion of fossil fuels into either combustible gas or synthesis gas (syngas) for subsequent utilization. It finds its applications in the production of clean power as well as chemicals. Coal is one of the world's important sources of energy fueling around 40% of the power stations around the world. It is commonly agreed that coal pits will be mined more intensively and in more numbers in the coming years and that lignite and hard coals will be the major energy suppliers until 2100. Integrated gasification fuel cell hybrid power generation system is a promising system for coal utilization. It combines clean coal gasification
technology with high efficient fuel cell technology. In this paper, effect of syngas and coal composition on performance of solid oxide fuel cell was studied. It was observed that different ratios of H2 and CO affect the current and voltage of fuel cell. With higher molar fraction of H2 the better output voltage was obtained under the same working conditions. The trace species in coal also affect the performance of solid oxide fuel cell. Ni, Be, Cr, K and Na trace species present in coal also affect the performance to some extent.

Keywords: Syngas, Coal Gasification, Solid Oxide Fuel Cell.


Abstract: In this paper electric equivalence model is formulated for the constructional and operational features of a Polymer Electrolyte Membrane Fuel Cell (PEMFC). The proposed model is capable of explaining the behavior of PEMFC in both steady state and transient modes of operation. For the efficient designing of fuel cell related applications it is highly desirable to model the electrical output of fuel cell in terms of its internal electrochemical dynamics. The proposed model includes the phenomenon like activation polarization, ohmic polarization and mass transport effect. An analogical electrical circuit is formulated by taking these phenomena into considerations. Within acceptable limits, the effects of load variation on output voltage, efficiency and fuel flow demands are also investigated. The static and dynamic characteristics obtained through simulations are compared with the standard available data. Simulation results show that the model can be used in PEM fuel cell distributed generation related control studies.

Keywords: Proton Exchange Membrane Fuel Cell, Electric Equivalent Circuit, Electrochemical Dynamics.


Abstract: In this paper an analytical comparison is presented between the various developed configuration of fuel cells under the different operating conditions of temperature and load variations with respect to their efficiency and output power. The fuel cells such as Polymer Electrolyte Membrane, Solid oxide, Molten Carbonate and Alkaline fuel cells have very high conversion efficiency and they can be used for distribution generation and electric utility. However performance and degrading issues are always of concern for researchers. Carbon black is one of the major causes of performance degradation of fuel cells. Carbon Nanotubes having the carbon support materials with a higher graphitic character are used to improve the efficiency and stability of these fuel cells. Further, the potential of alternate energy resources would be compared based on several important parameters such as efficiency, economics, ease of construction and other important parameters. Attempts would also be made to make a technical and economic comparison of these types of cells and evaluate their merits and de-merits. Although, out of all of these cells under consideration the solid oxide carries a risk of high temperature corrosion and breakdown of components, improvements are being worked out. Finally all results obtained from different cells will be simulated by using Matlab Simulation Tools.

Keywords: Molten Carbonate Fuel Cells, Solid Oxide Fuel Cells, Fuel Cells.

**Abstract:** Orthogonal Frequency Division Multiplexing (OFDM) is a bandwidth efficient signaling scheme for digital communications that was first proposed by Chang. In OFDM, the spectrum of individual orthogonal subcarriers mutually overlaps, giving therefore an optimum spectrum efficiency. A data communications system based on OFDM is particularly sensitive to frequency offset in the channel. Frequency offset is a phenomena, which causes phase shift and hence, reduction in signal strength at the output of the filters matched to each of the carriers and introduces ICI from other carriers which are now no longer orthogonal to the filter. In OFDM the carriers are inherently closely spaced in frequency compared to the channel bandwidth, the tolerable frequency offset becomes a very small fraction of the channel bandwidth. This paper is based on the study and comparison of algorithms that estimate the carrier and sampling frequency offsets from the demodulated data signals in the receiver. An implementation of these techniques to correct the respective offsets along with the performance of these algorithms, via simulation, is also presented.

**Keywords:** Orthogonal Frequency Division Multiplexing, Multiple Input-Multiple Output Systems, Frequency Synchronization.


**Abstract:** This paper presents the implementation of a digitally controlled hybrid power source system, composed of fuel cell and battery. Use of individual fuel cell stacks as a power source, encounters many problems in achieving the desired load characteristics. A battery integrated, digitally controlled hybrid system is proposed for high pulse requirements. The proposed hybrid power source fulfils these peak demands with efficient flow of energy as compared to individual operations of fuel cell or battery system. A dc/dc converter is applied which provides an optimal control of power flow among fuel cell, battery and load. The proposed system efficiently overcomes the electrochemical constraints like over current, battery leakage current, and over and under voltage dips. By formulation of an intelligent algorithm and incorporating a digital technology (AVR Microcontroller), an efficient control is achieved over fuel cell current limit, battery charge, voltage and current. The hybrid power source is tested and analyzed by carrying out simulations using MATLAB simulink. Along with the attainment of desired complex load profiles, the proposed design can also be used for power enhancement and optimization for different capacities.

**Keywords:** Fuel Cell, Hybrid Power Source, Energy Storage Management.


**Abstract:** This paper proposes neural networks based graph coloring technique to assign Physical Cell Identities throughout the self organized 3GPP Long Term Evolution Networks. PCs are allocated such that no two cells in the vicinity of each other or with a common neighbor get the same identity. Efficiency of proposed methodology resides in the fact that minimum number of identities is utilized in the network wise assignment. Simulations are performed on a very large scale network, where initially all the cells are without any PCs assigned. Results of simulations are demonstrated to analyze the performance of the proposed technique.
Keywords: Physical Cell Identity, Neural Networks, Networks.


Abstract: This paper proposes a methodology for the long UHV transmission lines distance protection using microprocessor for fault detection, isolation and auto reclosing processes. In the present era, with the development of microprocessor technology, their extra efficient controlling and computing abilities can be utilized in distance relaying for efficient computing of fault distance and the type of fault occurred on the transmission line. Using Symmetrical component theory a single performance equation is developed that will encounter all type of faults on transmission lines regardless of the nature of the fault. Microprocessor will process on these sequence components to estimate the type of fault and the distance of fault from the relay. ETAP is used as a simulation tool to obtain the desired results. Although the formulation described here is independent of hardware yet it provides a complete analytical base for distance protection and is analyzed for different types of fault conditions using simulation tools.

Keywords: Symmetrical Components, Sequence Circuits, Faulty Phase Classification.


Abstract: In this research work a Fuel cell based power system is explicitly modeled and analyzed under the various possible operating conditions. In order to ensure a reliable, efficient, durable and cost effective operation, a control system based on the management of air and fuel flow regulations can be designed. Fuel cell systems produce clean energy and they have got higher energy conversion efficiencies as compared to Internal Combustion Engines based power plants. In order to make this technology economically viable, feed of the air and fuel, pressure regulations, flow rates and the heat produced must be optimally controlled. Oxygen depletion, during the transient reactions, is the major cause of low performance and subsequent deteriorations. In order to overcome the stated limitations, internal subsystem reactions are modeled deliberately and examined carefully. Based on the mathematical deductions and feedback control techniques, optimal pressures and flow rates for hydrogen and oxygen are selected. Breath control unit can be efficiently controlled by using this model to avoid degradation. The output voltage model is also delineated in terms of internal electrochemical dynamics to confirm the maximum power gain by the selected parameters. Results are also verified using MATLAB/ Simulink tool. The Proposed methodology is equally valid for both Polymer Electrolyte Membrane and Solid Oxide Fuel Cells based power systems with some modifications.

Keywords: PEMFC, SOFC, Fuel Cell Power System, Breath Control Unit.


Abstract: This paper presents the equivalent dynamic model accounting for the thermodynamic and electrochemical characteristics of Proton Exchange Membrane Fuel Cell (PEMFC). The proposed model was implemented in MATLAB/SIMULINK environment. The effects of temperature variations, fluid flow changes and capacitance due to double layer charging were incorporated in this model. The proposed model responses are in good correspondence with the published experimental results. It also predicts the temperature and pressure response of the PEMFC. The
model formulated here would be helpful for the optimal prediction of characteristics and dynamic operation of a fuel cell stack.

**Keywords:** Electrochemical Characteristics, PEMFC (Proton Exchange Membrane Fuel Cell).


**Abstract:** For shortest path computation, Travelling-Salesman problem is NP-complete and is among the intensively studied optimization problems. Hopfield and Tank’s proposed neural network based approach, for solving TSP, is discussed. Since original Hopfield's model suffers from some limitations as the number of cities increase, some modifications are discussed for better performance. With the increase in the number of cities, the best solutions provided by original Hopfield’s neural network were considered to be far away from those provided by Lin and Kernighan using Heuristic algorithm. Results of both approaches are compared for different number of cities and are analyzed properly.

**Keywords:** Neural Networks, Interfacing and Communications, Computer Networks.


**Abstract:** Shortest path routing and its computation is a crucial point in computer networks, and has significant impact on overall network's performance. Being an issue of salient importance, many algorithms were proposed for shortest path computation and are still under research for more enhancements. Hopfield proposed a neural network based architecture for such optimization problems. Mehmet and Park Keum suggested improved energy functions for this neural network to implement it for routing in computer networks. A search algorithm is a heuristic based approach, with the properties of Dijkstra algorithm and is used for same purpose. Performances of both approaches are compared and results are analyzed.

**Keywords:** Neural Networks, Computer Networks, Interfacing and Communications.


**Abstract:** The paper proposes a solution to the problem of optimal placement of base stations, with effective utilization of resources. First, it analyzes the placement of base stations in x-y plane. Then this analysis is extended to 3-dimenisonal system, by including the z coordinate for representing height. This analysis optimizing these xy coordinate values as well as value of z coordinate, as height also contributes in covering the area of base stations. The Hopfield neural network model is used to find the solution to our problem. Neural network and all parameters, i.e. x, y and z coordinates are used to maximize the coverage area and to minimize the interference, as optimal placement of base stations refer to these two points. In wireless communication system, the placement of base stations requires work force and costly equipments like GPS etc. resulting in loss of time and money. However, with proposed strategy only a laptop or desktop PC will be required to compute the positions of base stations within very less time. The energy equations are developed for our network which shows that the solution resulting from these equations is stable. The computer simulations and graphs are also included to validate the results.
Journal Articles


Abstract: In this paper, we prove a coupled fixed point theorem for a multivalued fuzzy contraction mapping in complete Hausdorff fuzzy metric spaces. As an application of the first theorem, a coupled coincidence and coupled common fixed point theorem has been proved for a hybrid pair of multivalued and single-valued mappings. It is worth mentioning that to find coupled coincidence points, we do not employ the condition of continuity of any mapping involved therein. Also, coupled coincidence points are obtained without exploiting any type of commutativity condition. Our results extend, improve, and unify some well-known results in the literature.

Keywords: Coupled Fixed Point, Coupled Coincidence Point, Coupled Common Fixed Point.


Abstract: The interrelationship of notions is presented in fuzzy transitivity and monotonicity of fuzzy similarity measures. It is observed that the axiom of fuzzy transitivity may replace that of monotonicity in the definition of fuzzy similarity measures.

Keywords: Fuzzy Similarity Measures, Fuzzy Transitivity, Monotonicity.


Abstract: The present article aims to report the effects of hydrodynamic slip on entropy generation in the boundary layer flow over a vertical surface with convective boundary condition. Suitable similarity transformations are used to transform the fundamental equations of hydrodynamic and thermal boundary layer flow into ordinary differential equations. The governing equations are then solved numerically using the shooting method and the velocity and the temperature profiles are obtained for various values of parameters involved in the governing equations. The expressions for the entropy generation number and the Bejan number are presented and the results are discussed graphically and quantitatively for the slip parameter, the local Grashof number, the Prandtl number, the local convective heat transfer parameter, the group parameter and the local Reynolds number. It is observed that due to the presence of slip, entropy production in a thermal system can be controlled and reduced.

Keywords: Coal Gasification, Solid Oxide Fuel Cell.

**Abstract:** In this paper, we obtained Suzuki type fixed point results for a generalized multi-valued mapping on a set equipped with two b-metrics. As a consequence, existence and uniqueness of solution of functional equation arising in dynamical programming is also derived.

**Keywords:** Multi-Valued Mapping, Pompeiu–Hausdorff Functional, Successive Approximations.


**Abstract:** An investigation has been conducted on the convective heat transfer and the entropy production attributable to the presence of an infinitely long cylinder in a viscous fluid exhibiting oscillatory motion. The heat transfer analysis is carried out by assuming that the surface of the cylinder is isothermal. The entropy generation is caused by heat transfer attributable to the finite temperature difference MT and viscous effects produced in the fluid. The number of independent variables in the governing equations is reduced by using a proper set of similarity variables. To obtain the solution of the nonlinear partial differential equation, we use a well-known finite difference scheme by transforming the semi-infinite domain to a finite domain. The numerical results have been analyzed by means of a comprehensive parametric study. It is observed that the entropy production intensifies in the presence of the oscillatory motion of the cylinder.

**Keywords:** Thermal Science, Thermal Analysis, Cylinder.


**Abstract:** The unsteady laminar boundary-layer flow and heat transfer of a viscous fluid over a stretching cylinder is discussed in this work. To normalize the governing system of equations a proper set of similarity variables is used. Two types of thermal boundary conditions, prescribed surface temperature (PST) and prescribed heat flux (PHF), are taken into account for thermal analysis. The governing equations are solved using the homotopy analysis method, and the obtained series solution is found to be valid for the entire temporal and spatial domains and for certain ranges of the other physical parameters. The effects of various material parameters on different physical quantities, such as the coefficient of skin friction and the Nusselt number, are illustrated through graphs and tables.

**Keywords:** Prescribed Heat Flux (PHF), Heat Cylinder, Prescribed Surface Temperature (PST).


**Abstract:** In the present study, we deal with the momentum and heat transfer analysis in a horizontal annulus of a composite porous medium. The Darcy–Brinkman model is used to develop the governing equations for the flow and heat transfer phenomenon. The annulus injects the time dependent oscillatory velocity normal to its surface. Both the regions of the flow have their own viscosities, and the heat transfer analysis is carried out by retaining viscous dissipation. The governing equations for flow and heat transfer are solved analytically using a perturbation series for solutions in both regions of the annulus. A brief parametric analysis is performed for the velocity and the temperature profiles through graphs.

**Keywords:** Unsteady Flow, Heat Transfer, Porous Medium.

Abstract: A family of numerical methods, based upon a rational approximation to the matrix exponential function, was developed for solving parabolic partial differential equations. These methods were partially sixth-order precise in space and time, due to combination of sixth-order finite approximations and fifth-order pde’s approximations. These methods do not involve the use of complex computation. In these methods second-order spatial derivates were approximated by sixth-order finite difference approximations. Parallel algorithms were developed and tested on the one, two and three-dimensional heat equations, with constant coefficients, subject to homogeneous boundary conditions and time dependent boundary conditions. It was observed that the results obtained through these methods were highly accurate and can be easily coded on serial or parallel computers.

Keywords: Heat Equation, Fifth Order Numerical Methods, Parallel Algorithm.


Abstract: A fourth-order numerical technique is developed for the solution of the diffusion equation\( \frac{\partial u}{\partial t} = \Delta u \) subject to \( u(0,x) = f(x) \), \( 0 < x < L \), \( u(t,L) = g(t) \), \( 0 < t < T \) and the specification of energy \( \int_0^L u^2(x,0) dx = M \). The purpose of this study is to find relationship among the various domains. In particular, the domains possessing factorization properties and the domains which hold different chain conditions on ideals.

Keywords: Diffusion Equation, Fourth-order Method, Method of Lines.


Abstract: The purpose of this study is to find relationship among the various domains. In particular, the domains possessing factorization properties and the domains which hold different chain conditions on ideals.

Keywords: Laskerian Rings, Q-rings, Archimedean Rings.


Abstract: We investigate anti- homomorphic images and pre images of semiprime, strongly primary, irreducible and strongly irreducible fuzzy ideals of a ring. We also prove that: For a surjective anti-homomorphism \( f : R \rightarrow R'/ \), if every fuzzy ideal of \( R \) is \( f \)-invariant and has a fuzzy primary (respectively, strongly primary) decomposition in \( R \), then every fuzzy ideal of \( R'/ \) has a fuzzy primary (respectively, strongly primary) decomposition in \( R'/ \).

Keywords: Fuzzy, Prime Fuzzy Ideal, Irreducible Fuzzy Ideal, Anti-homomorphism.


Abstract: In this paper, we study a methodology for numerical simulation of sea urchin shapes in biological organism’s development particularly at the blastula phase, consisting of a hollow, two-layered sac of ectoderm and endoderm surrounding an archenteron that communicates with the exterior through the blastopore with the help of newly developed “PDE Methods”. The geometric modeling of the sea urchin shapes are under taken by means of surfaces generated as Partial Differential Equations (PDEs). We merge PDE based geometric modeling technique with numerical
optimization in order to study the stable shapes adopted by the sea urchin during its blastula phase. Thus, by using the PDE method we produce a generic model which is then capably parameterized. Using this parameterization to set up a numerical optimization process which enables us to predict a series of sea urchin shapes at the early stage subject to given surface area and volume at that time.

**Keywords:** Optimization, Partial Differential Equations, Surface Modeling.

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**School of Social Sciences and Humanities**

**Department of Education**

**Journal Articles**


   **Abstract:** Considering the importance of human resource development goals of today’s Schools and organizations, to address the patterns and techniques necessary for understanding and guiding staff is one of the most effective methods and guidance, familiarity with topics and transformative leadership styles and management practices is the transformative leadership style and management skills. The purpose of the present research as a descriptive-correlative research was to study the relationship between emotional intelligence and transformative leadership style of Principals who work in Secondary education. So five components include self-awareness, Self-regulation, Motivation, Empathy and Social skills and four styles of transformative leadership Inspirational. Principals have high EI (Emotional Intelligence) focus their efforts to create enthusiasm in their team with abundant energy and refer others to move forward. A principal’s skill in the area of human relations, decision-making, control of subordinates and conflict resolution are indicators of transformative leadership traits and behaviors. Effective leaders will support and encourage staff to model behaviors promoting collegiality and a professional working environment.

   **Keywords:** Empathy, Inspirational Motivation, Intellectual Stimulation.


   **Abstract:** The study was designed to investigate the influence of Emotional Intelligence and creativity on the academic achievement of Business Education Students using Ex- post facto research design. A total of 235 students purposively selected from four College of Education participated in the study. Three research questions were raised and answered in the study. Three instruments: Student Cumulative, Grade Point (CGPA) Information Format (SCIF); Wong and law emotional intelligence scale (WLEIS) and Nicolas Holt Creativity Test (NHCT) were used for data collection. The multiple regression analysis and ANOVA were the major statistical tools used for data analysis. Findings from the study revealed that; emotional intelligence and creativity when combined, jointly predicted the achievement of Business Education Students. It is recommended among others that emotional intelligence and creativity skills should be taught as a separate course with the aim of enhancing students’ achievement and positive attitude towards learning.

   **Keywords:** Business Education, Creativity, Emotional Intelligence.

Abstract: Teacher must act as a leader because his/her role is very effective in educational change. Influence of personality traits on leadership styles has been a significant topic in management but no research emphasis has been given to teacher’s personality influence on their leadership behaviors. This research investigates the correlation between these two aspects. Quantitative research is done by means of survey to a convenient sample of 150 teachers of public Secondary schools of Lahore. The dominant traits are associated with both leadership styles thus showing that both people and task oriented leadership styles are effective. This research can be generalized to other areas. The research emphasizes the importance of traits and their influence on behavior. Further researches should examine the traits which are needed for an effective leadership styles. The major contribution of this paper is that it correlate personality traits with leadership styles and high light those traits which are associated with effective leadership styles i.e. people oriented so teachers become more aware to adopt those traits which produce effective behavior and change.

Keywords: Personality-Teacher, Leadership Styles-Teacher, Personality Traits.


Abstract: The present study aimed at calibration of general science achievement test for grade (VIII) through Rasch model. For this purpose a general science achievement test comprising 45 items was constructed from the text book of general science for class VIII. Finally the test was administered to 300 students (M/F) in different high schools for boys and girls in Multan district. The answer sheets were scored and results were tabulated. Eleven (11) items were rejected on the basis of F, D and . Fifteen (15) items were to be improved on the basis of F, D and . Remaining all items were good items. Rasch model indicates that overall test is good to measure the achievement of the students class (VIII) in the subject of general science. On the basis of findings, major conclusions were drawn: One item was rejected on the basis of facility index (F). Twelve (12) items need improvement on the basis of facility index (F). Thirty two (32) items were very good items on the basis of facility index (F). Seven items were rejected on the basis of discrimination index (D). One item needed improvement on the basis of discrimination index (D). Thirty seven (37) items were good items on the basis of discrimination index (D). Three items were rejected on the basis of phi-co-efficient (.). Two items needed improvement on the basis of phi-co-efficient (.). Forty items were good on the basis of phi-co-efficient (.). Test has high positive test reliability value.22 distracters were to be rejected as attempted by less than 5%.The distracters D(27), B(28), A(31), D(37), B(41), A(43) and B(10) were distracters attracted by high achievers more than low achievers, so they were rejected.

Keywords: General Science, Achievement Test, Item Analysis.

Conference Papers


Abstract: Not available

Keywords: Special Children-Education-Pakistan, Education-Pakistan

Abstract: This research aims to explore sales people working in the pharmaceutical industry. Study has examined effects of the personality traits on job satisfaction. It was also considered the role of the demographic variables as moderator between different personality trait and job satisfaction. Literature was reviewed for theoretical framework selection. A survey was conducted from 450 sales persons from Turkish pharmaceutical companies. The instrument was comprised of a personality traits and job satisfaction scale, and the moderator demographic variables scales. The results were examined by using SPSS software. The results studied the effect of demographic variables such as pharmaceutical experience, educational level, and age on the job satisfaction. Furthermore the effects of the personality traits were also observed. Key words: pharmaceutical companies, personality traits, job satisfaction.

Keywords: Pharmaceutical Industry, Personality Traits, Job Satisfaction.


Abstract: Not available

Keywords: Education-Pakistan, Higher Education-Pakistan.

Department of English Language & Literature

Journal Articles


Abstract: The paper investigates the spoken English of Sindhi ESL learners through an acoustic and articulatory phonetics. The research examines the English consonants by articulatory techniques coupled with the spectrograms acoustically on Praat speech processing computer-developed software. The key purpose of the study is to analyze the consonantal sounds which are relatively problem-posing with particular reference to production by SESL and to achieve an easy way out for ESL learners and ELT teachers for learn-ability and teach-ability respectively. The study tends to depend on articulatory-phonic results as cited in data analysis; however, overall data include acoustic analysis, which have not been added to the body of the paper i.e. acoustic realizations. The current study illustrates eleven problem-posing English consonants based on the hypothesis as to why SESL articulate English sounds inaccurately. The study investigates that the phonetic variations occur because of the different sound systems of both languages and mother tongue influence with particular reference to phonetic and phonological differences. The research is carried out under the framework of Contrastive Analysis theory presented by Lado (1967). On account of the large number of students’ enrollment from upper Sindh, the convenience/accidental sampling of the population was taken randomly from Cadet College Larkana Sindh, Pakistan.

Keywords: Phonetics-Sindhi, Phonology-Sindhi, Mother Tongue-Sindhi, ESL, ELT.


Abstract: This paper places its focus on an in-depth analysis of text-forming (cohesive) devices in a literature-based discourse. The purpose behind the research is to highlight a significant role of cohesion in generating coherence of a text. Moreover, a detailed study of the language use in a
post-war literary piece aims to facilitate the comprehension of linguistic varieties in the chaotic periods of turmoil.

Keywords: Discourse Analysis Cohesion, Coherence, Text-Forming.


Abstract: Pound and Eliot’s satiric criticism on the new morality of the modern world is skillfully achieved in their famous poems, “In a Station of the Metro” and “The Love Song of J. Alfred Prufrock”. This research paper is aimed at a comparative analysis of these poems, with particular regards to their thematic concerns and stylistic features.

Keywords: Satiric Criticism, Comparative Analysis, Existentialism.


Abstract: This article tests the assumption that SMS language is like a pidgin in every speech community. The article also examines the assumption that a great motor of SMS lives among females whose lexical and morpho-syntactic choices are different from males. It further speculates influence of SMS language on language of media. One hundred messages were taken randomly from 20 cell phones and perceptions of 25 males and 25 females were recorded on an ordinal scale for analysis. The text was analyzed to look into lexicology, morphology and syntactic levels of texters, and influence of SMS on language of commercials. The results show that a novice intelligible language has evolved through SMS, which is influencing language of media. A significant difference is found between male and female texters’ linguistic properties.

Keywords: SMS Language, Gender Differences, Lexicology.


Abstract: The modern day dictionaries, particularly the EFL learner dictionaries, have improved enormously on their micro-macro and super structure, yet the potential users of these kinds of dictionaries are not fully aware of this comprehensive improvement. As a result, the wealth of information, both linguistic and encyclopedic goes unheeded by the potential learners. The main cause of all this is attributed to the lack of requisite reference skill (Dictionary using skills) by the learners. The aim of this study is to find out the extent to which the students of electrical engineering at UMT possess the necessary reference skills to be able to use the EFL learner dictionaries efficiently in situations of linguistic and pragmatic failure. The research methodology used in this investigation is eclectic drawing on the essential principles of both qualitative and quantitative approaches for a comprehensive understanding of the situation under investigation. As many as one hundred students were selected randomly for this study. The findings of the pilot study suggest that most of the students lack the necessary dictionary using skills to make the most of the information provided in the dictionary which, of course, underscores the need to teach the students on how to use the dictionary, the kind of dictionary most suitable for them and integrating the dictionary with the language class. Such a measure is expected to improve the linguistic and communicative competence of the learners and will make them confident and self reliant in their study.

Keywords: Dictionary-EFL, Second Language Dictionary, Dictionary Using Skills.

**Abstract:** This paper encompasses and enforces the decay and gradual decline in mental abilities of Managers who are busy in serving Organizations round the globe. It is being felt that companies are mobilizing their Human Resources in such a manner that this resource seems busy in generating hefty profits for them, however, the paid cost is heavy enough to ignore and whole society is slowly but persistently marching towards a dead end. This dead end leads to their personal failure in society, family, friends, social circles and finally in the organizations as well, by every passing day, we are running faster than before in the very direction of being mechanical. The output is justifying their existence, their worth is calculated in terms of financial gains and their presence is gauged through quantifiable meters. It is not thought that they are human beings, they have a personality, they are thinking being and they cannot rather must not be treated as machines. Unfortunately, it is what we are and the lasting, atrocious and terrible effect of this intellectual transition is hunting their inner selves. The sole purpose of this paper is to highlight those areas that provide Food of thought to an individual acting in his/her capacity as Manager in an organization. The missing links and after effects of these missing, We need to think it over and over again as what is being missed cannot be gained back and what is being gained cannot be saved for ever. The loss is much more than the profits.

**Keywords:** Human Resources, Human Life, Managers in Organizations.


**Abstract:** The current paper presents an in-depth analysis of a variety of non-kernel clauses in English. The structures discussed include interrogatives and negatives with their contrastive types and uses. It further takes up clausal combinations such as subordinates and coordinates with reference to their various functions. Moreover, a detailed exploration of thematic variation follows with particular regards to information structure. Such constructions deal with extrapositioning, existentials and clefts as to how these clauses take account of information packaging in a message, thereby combining syntactic functions to the semantic and pragmatic strategies.

**Keywords:** Linguistics, Syntactic Structures, Non-Kernel Clauses.

**Conference Papers**


**Abstract:** The purpose of the study was to develop a scale for identifying the effectiveness of Human Resource Practices (HRPs) in general public sector universities in Pakistan. The development of the research instrument was done very carefully, keeping in view all the intricacies and specifications taken from literature review. The prevailing scenario of the higher educational institutes of Pakistan was always kept in mind during the research scale development process. The research scale encompassed the six categories of HRMPs namely recruitment and selection, orientation, training and development, performance appraisal, compensation and benefits, and working environment. The research instrument was validated through peer review and with the help of experts’ opinions in the field. Finally, a poll of 34 statements was developed. Two hundred and fifty (250) faculty members from different faculties, gender, designation, qualification, teaching experience and age, filled the questionnaire. The overall Cronbach Alpha was found 0.937, whereas
for each factor, alpha ranged from 0.598 to 0.927. The positive, strong and significant correlation was found among the six components of the HRBP’s indicating the uni-dimensionality of the scale.

Keywords: Education-Pakistan, Human Resource Management-Higher Education, Human Resource Management -Universities.


Abstract: The major purpose of this research study was to explore the perceptions of academia about human resource management practices at University of the Punjab, Lahore as well as to examine link among these practices. This study being descriptive in nature, utilized survey technique. A sample of 150 permanent faculty members was selected through simple random sampling technique. Data were collected by using the Human Resource-Best Practices Scale (HR-BPS) developed by Ahmed, Abbasi & Akhter (2011). Descriptive statistics and item loading were run for data analysis. Results showed that the satisfaction level of academia about the execution of human resource management practices is low, especially about the performance appraisal practice. It was also found that a significant positive relationship exists between various kinds of practices. This research study confirms the need for strengthening the human resource management practices at university.

Keywords: Education-Pakistan, Human Resource Management-Higher Education, Human Resource Management-University-Pakistan.


Abstract: The role of English cannot be ignored in global business. Humor, in its quintessence, bears numerous multi-faceted benefits for business and should be taken seriously. Discourse constitutes a crucial aspect of leadership performance. It has even been pointed out that “Imagining leadership outside of language is all but impossible” (Lyons & O’Mealy, 1998). Indeed, it appears that many of the central leadership activities, such as creating and communicating a vision or mission statement, encouraging, motivating and guiding subordinates, setting a goal and ensuring subordinates” compliance all involve language (Bennis & Thomas, 2002). In spite of this long-winded relationship between leadership and language, there are amazingly few studies which view leadership performance from a linguistic standpoint (Wodak, 1997; Mullany, 2007). This paper aims at addressing this new orientation by illustrating some of the ways through which analysis of leadership discourse especially that involves humor will be carried out. The data analyzed in the paper proves that humor has a positive and productive effect in leadership discourse. CEO’s may encourage this feature in their negotiations, daily written and verbal interactions and may feel the difference by miraculous impact of humor in their leadership practices.

Keywords: Leadership Discourse, Global Business, Employee Relations.


Abstract: Abstract: Tourism education plays a vital role in promoting tourism. This is the core foundational platform where from emerges tourist guides and tourism administrators. In tourism education classroom, appreciations, rewards and mutual competitions are considered sufficient as attention capturing techniques, but there is another newly evolving technique that is asserting its
Humor is an emerging technique now in tourism education classroom. Humor has been finding its place and getting more and more productive and positive effects on learners in improving pleasantness of their personality. Researchers and experts are emphasizing that humor is always engaging and engagement is the key factor towards participator’s involvement. Humor as a motivational tool in tourism education classroom, in this global economic set up hit by recession, is the most economical technique that can be practiced and availed of even by poor countries of the world. It casts nothing but proves more fruitful. Muhammad.

Keywords: Tourism Education, Tourism Promotion, Humor.


Abstract: Not Available

Keywords: English Language, Paralanguage in Learning, English as Second Language.

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**Islamic Thought & Civilization**

**Journal Articles**


Abstract: Starting with the term civilization in singular and plural sense, this paper covers the relevant literature of “clash of civilization as a Paradigm” and then goes on to explore “the cause of civilizational clash” from the research microscope of authentic sources.

Keywords: Study of Civilization, Conflict of Civilizations, Civilizational Clash.

**Conference Papers**


Abstract: Not Available.

Keywords: Islam, Humanity-Islam, Islam and Humanity–Pakistan.

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**Department of Social Sciences**

**Books/Book Chapters/Book Reviews**


Synopsis: Every individual have right to live in society. And it is the responsibility of the society to give him the equal opportunity for play a role in the mainstream. Many people are excluded from development because of their gender, ethnicity, age, sexual orientation, disability or poverty. In past the children with disabilities were neglected and marginalized by the society and thus special education institutions address this problem. It proved a bit successful at primary and secondary level but it led to the raising different problems and issues pertaining to special children at higher secondary and upper level. The problems and issues in the sense, that it has been creating communication gap and adjustment problems among special and regular children. In recent past a concept emerged which is known as ‘Inclusive Education’ in order to address such issues. Inclusive education is to integrate the special children with regular and teach them in classroom setting. The
main purpose of inclusive education is to enable the special children to adjust and play an active role in the society.

**Keywords:** Education System, Inclusive Education System-Teachers.


**Synopsis:** Aggression is one of the most powerful risk factors for school violence, especially sudden rage. Those students who have not learned or have never been taught to manage their anger are the ones who are at risk for aggression and conceivably, even violent explosive behavior. The goal of anger management is to help those students who have a high level of aggression and to make them learn how to control their emotions. Helping the students in understanding and managing their feelings may provide them with tools to stay away from escalating negative feelings. This will further help them to avoid serious confrontation with students, teachers, and administration. The present study sought to expand previous work by investigating the applicability of Cognitive-behavioral group interventions (CBI) with aggressive school children. Through this research, it is intended that knowledge of CBI shall be increased and more understanding may be developed about how effectively a cognitive-behavioral intervention (CBI) can prevent or remediate aggressive and disruptive behaviors for students in the general education environment.

**Keywords:** Management, Aggressive Children, Psychology.


**Synopsis:** This work attempts to understand the role & impact of judiciary in Pakistan Politics. The study provides an insight to the understanding of the legal cases in which the imposition of martial laws and dissolution of assemblies has been challenged before judiciary in Pakistan. The aforesaid judgments of the superior courts have played a decisive role in setting the political history of Pakistan towards democracy. This book, therefore, provides a clear picture of the role of judiciary along with the challenges faced by her in political development and democracy of Pakistan.

**Keywords:** Judiciary System-Pakistan, Democratization–Pakistan, Social Science.

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**Journal Articles**


**Abstract:** Since the times of Western modernity, knowledge is compartmentalized as different fields. This has however, not mitigated the influence of natural science model of theorizing on social sciences. As a result the discipline of organization theory has grown without the influence of abstract, ephemeral and metaphysical fields such as; religion, history, mystic philosophy, arts and literature. With the rise of organizational cultural studies and the emergence of symbolic-interpretive view of organizing during the last three or four decades, the trend is however gradually shifting. Corporate aesthetics is one such field within organization theory which places value on the aesthetical aspects of managing and organizing. Taking lead from corporate aesthetics, this paper highlights the link between organization theory and literature (poetry, both English and Urdu). The
linguistic and conceptual instrument of metaphors is isolated as the underpinning tool of this link. The role of metaphors in organization theory assumes further importance since the emergence of ‘social construction’ and ‘sense making’ view of organizations. The paper reinforces the views of contemporary writers of organization theory that the field draws from multiple and diverse disciplines by highlighting the link between organization theory and poetry through employing metaphoricity.

**Keywords:** Organization Theory, Poetry, Metaphors, Corporate Aesthetics.


**Abstract:** Some of the recent empirical studies relate economic growth and prosperity with religion. This paper raises the question that if economic systems are based on individualism and selfishness, can they be related with religion? The paper also finds that the Secularization hypothesis of Western Modernity is still valid for Western cultures, Judaism and Christianity but its application is highly unlikely in case of the third monotheist religion Islam. The paper expounds the causes of this proposition keeping in view the historical, religious and economic perspectives of Islam.

**Keywords:** Economic Growth, Education, Monotheist Religions.


**Abstract:** The economics and philosophy of Globalization are generally not discussed together. This paper assesses the claims of economic prosperity through economic integration in the backdrop of cultural, political and social value system implications of Globalization. This debate becomes important when we see a major part of developing world still struggling with impoverishment while cheerleaders of Globalization already claim a success story out of increased integration of developed and developing economies post 1980s.

**Keywords:** Globalization, Economic Integration, Postmodernism.

**Conference Papers**


**Abstract:** Purpose - Purpose of this paper is to show the relevant literature about knowledge management and inter civilization dialogue of Islamic economic policy that can pave the way for economic remedy for the whole world. Methodology - Starting with the ideas of knowledge management this paper goes on to discuss knowledge management strategies, globalization, inequality among nations, real cause of civilizational clash, collapse of socialism and capitalism and finally suggests a way ahead applying Islamic economic policy in contemporary economy. Practical implications - This paper has strong and serious implications for management scholars and political leaders and can enhance the overall appeal of the relevant literature package. Introduction - Undoubtedly, there is plenty of literature on knowledge management, civilizations and different economic systems but there is a dearth of relevant literature on these issues in one place. This paper attempts to reduce this knowledge gap by producing and collecting relevant literature on the said topics in this paper.

**Keywords:** Knowledge Management, Islamic Economic Policy, Economic Systems.
Books/Book Chapters/Book Reviews


Synopsis: The Natural Science Paradigm of knowledge has prevailed in Social Sciences for the last century or so. Organization Theory is no exemption to this trend. Though the construct culture is expounded sporadically yet there is no comprehensive body of knowledge linking roots of a civilization with ways of managing and organizing. This study traces the foundational values of Western civilization covering the periods of Dark and Medieval Ages through Enlightenment, Renaissance, Modernity and Postmodernity. It constructs two parallel discourses, historical and organizational, and reflexively compares them. Similar studies for other civilizations can substantiate the main thesis of this study that managerial practices are embedded in larger foci of civilization like philosophical, political, economic, religious and moral thoughts and values.

Keywords: Management, Organization Theory, Discourse Theory.

Organization Theory Review

Journal Articles


Abstract: This paper encompasses Managerial acts and the personality of a Manger within an Organization and working ideology that formulates the theoretical framework of this paper is Islamic teachings in the light of Quranic verses and sayings of Holy Prophet (pbuh). There is a dire need to disseminate the true Islamic teaching in an un-biased, moderate and practical manner that advocates the preaching of Islam and paints the real picture of the said religion with true colors. The significance of this study is more than ever as every passing day is adding more fuel to the fire engulf between Islam and west. The principle ideologies of Islam are universal as the Holy Prophet (pbuh) was the last in the list and series of Messengers sent by GOD. Round the globe the level of uncertainty is on the rise, unrest in many countries and political instability has turned the corporate Managers into money minting machines and companies are trying to squeeze the last drop of blood out of their bodies in order to earn more. A Manager must be a role model and if Ethics is compromised then no organization would be able to survive in the long run and Islamic Managerial Ethics provides the foundation for framing this role model.

Keywords: Managerial Ethics-Islam, Personality-Islam.

School of Textile & Design

Books/Book Chapters/Book Reviews


Synopsis: Yarn singeing process (known as gassing) is one of the latest methods to remove the hairiness from the yarn surface so that a smoother surface of yarn could be available for the fabrication causing less fabric hairiness and ultimately affecting positively the fabric properties especially the pilling. The singeing of yarn is accomplished by passing it over a gas flame at a speed sufficient to burn away the protruding material without scorching or burning the yarn. Different yarn singing machine variables like winding speed, gas pressure and air pressure may affect different properties of the yarn, such as appearance, fineness, evenness and especially its tensile...
properties and ultimately the quality of the end product. Similarly in order to get high quality knitted fabric and for the control of processing faults the friction control during knitting is one of the most important factors. For this the yarn waxing is done. Hence the present research study was planned to evaluate the affects of yarn singeing and waxing on the quality of Single Jersey Fabric in order to choose the best combination and achieve excellent manufacture results.

**Keywords:** Knitting, Yarn Singeing, Waxing.

### Institute of Audit & Accountancy

#### Journal Articles


   **Abstract:** This study tests the agency cost hypothesis that use of debt decreases agency cost. This relationship has been tested using data of 265 non-financial companies listed on Karachi stock exchange during the period of 2004-2009. Assets utilization and General & Administrative expense ratio are used as proxy to measure agency cost. As suggested by Jensen and Meckling (1976) that relationship between leverage and agency cost may not be monotonic and excessive high leverage may have positive effect on agency cost. To test this possibility non-linear regression model has also been included. We find evidence in support of agency cost hypothesis. Results show that total debt reduces agency cost. We also find some evidence of non-linear relationship between total debt and agency cost. In Pakistan nonfinancial companies at total debt ratio of above 60% the diminishing effect of leverage on agency cost starts to diminish and regression results give some evidence that further increase in leverage increases total agency cost. This study also provides implication for the debt holders as well as the policy makers on the use of debt in total financing of a firm.

   **Keywords:** Non-financial Firms, Non-linear Relationship, Business Firms.


   **Abstract:** This study tests the agency cost hypothesis that use of leverage decreases agency cost. This relationship has been tested using data of 265 non-financial companies listed on Karachi stock exchange during the period of 2004-2009. General & admin expense to sales ratio is used as proxy to measure agency cost. Total, short term, long term and contractual debt ratios have been used separately to test agency cost hypothesis. The results of pooled and panel regression models show that general &admin expense ratio is negatively related to all four leverage ratios. Thus, this study gives evidence in support of agency cost hypothesis that use of debt in capital structure reduces agency cost.

   **Keywords:** Agency Cost–Pakistan, Leverage, Non-financial Firms.

### Centre for Global Dialogue

#### Journal Articles


   **Abstract:** Not Available

   **Keywords:** Islam and West, Muhammadanism, Crusade.
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**NOTE:** - Impact factored and indexed articles are marked with the sign “^”.

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