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Histopathological changes induced by Malathion in wistar rats and its reversal by *Emblica officinalis*

Sharma S, Kaushik D and Sharma RK

Abstract

Malathion, an organophosphate insecticide has been used in agriculture and domestic practices since mid-1940s. Present study aimed to analyze the preventive effect of *Emblica officinalis* juice against Malathion induced toxicity in histological structures of liver of male wistar rats. Mature Wistar rats were divided into 7 groups fed orally with different formulations of Malathion and *Emblica officinalis* juice (equivalent to 5 mg/kg dose of vitamin C) for the duration of 10 days. Group A serves as control. Group B and C administered with 100 mg/kg and 500 mg/kg of Malathion respectively. Recovery groups (Group D supplemented with 100 mg/kg of malathion along with *Emblica officinalis* juice (EOJ). Group E tested with 500 mg/kg of malathion along with EOJ; Group F administered with for 5 days and then supplemented with EOJ till 10th day; Group G treated with 500 mg/kg of malathion for 5 days and then supplemented with EOJ till 10th day). Present study revealed Malathion induced groups showed Sign of pyknosis in Hepatocytes, alteration in normal morphology of liver, depletion in organelles, congestion of blood vessels with hemorrhage, increased vacuolization in cytoplasm of hepatocytes in dose dependent manner. EOJ supplemented groups showed normal cellular arrangement, reduced signs of necrosis, significant decrease in number of vacuoles and intracellular spaces, elevated level of hepatocytes. Present study concluded that Malathion induced devastating effects on liver morphology and *Emblica officinalis* juice reverse the deleterious effects of Malathion.

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Cytogenetic analysis, karyotype evolution and phylogenetic study of family Scarabaeidae (Coleoptera: Insecta)

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ABSTRACT

The family Scarabaeidae comprises 25, 000 described species and is known cytologically by 404 species of 123 genera and 18 subfamilies. The present investigations recorded an account of 33 species representing 6 subfamilies, of which 17 species are new additions to this family. Scarabaeidae is conservative family in having the chromosome number 2n=20, sex determining mechanism 'Xyp' and metacentric chromosomes. Most of the cytogenetically known species have a chromosome number varying from 2n=8 in Eurytemus canbaeus to 2n= 36 in Gymnopleurus millaris race-II (present study). The most prevalent sex determining mechanism is Xyp, the most common karyotype possessed by 175 species belonging to 18 subfamilies is 9AA+Xyp male, the most prevalent condition in Coleoptera as a whole. As many as 302 species showed a haploid number of 10. So, this can be very well designated as the 'modal number' for Scarabaeidae.

1. Introduction

The Polyphagan beetles possess 2n=20 as the 'modal number' of chromosomes. Structural changes in the chromosomes, distribution patterns of constitutive heterochromatin and localization of nucleolar organizer region on the chromosomes are equally important in the speciation of beetles and in other group of insects. Detailed analytical studies on the lines of a large number of workers Bickham and Baker (1976), Smith and Virkki (1978) Yadav and Pillai (1979), Bengtsson (1980), Bickham (1981), Angus (1983), Bickham et al. (1983), Lyapunova et al. (1983), Vorontsov et al. (1984), Virkki (1984, 1988), Pettipierre (1987), Yadav et al. (1991), Colomba et al. (2000) and Bione et al. (2005a, b) are essential for proper understanding of interrelationships and evolutionary processes in this group.

The order Coleoptera has the highest species diversity within the animal kingdom, yet cytogenetic data using specific banding techniques are still scarce. C-banding data have revealed a preferential localisation of constitutive heterochromatin (CH) in centromeric area and less so observed in interstitial and telomeric areas. Sex chromosomes also show a variable CH distribution, as it has been observed in the pericentric region or along the entire chromosome. Major contributions in using C-banding technique for the cytological analysis of Polyphaga are of Ennis (1975), Colomba et al. (2000, 2004), Mafei et al. (2000, 2004), Rozek and Holecova (2002), Pettipierre and Garneria (2003), Vitturi et al. (2003), Pettipierre et al. (2004), Wilson and Angus (2004 a, b, 2005 a, b, 2006), Bione et al. (2005 a, b), Beauchamp and Angus (2006), Angus et al. (2007), Holecova et al. (2008), Arcanjo et al. (2009) and Oliveira et al. (2010), Carbal et al. 2011.

Silver nitrate staining of meiotic chromosomes of eukaryotic species has been a very useful approach for the analysis of the structure and variability of nucleoli, nucleolar organizer region and kinetochores (Goodpasture and Bloom 1975; Virkki and Denton 1987; Virkki et al. 1991). NOR activity at the beginning of the meiotic prophase is widely observed in a

large number of organisms, including Coleoptera species. However, this activity was observed during a restricted period of time only, declining rapidly and disappearing in the middle of the diplotene phase. Nevertheless, the nucleolar masses produced can persist for a longer period of time, especially in species with prolonged diplotene (Virkki and Denton 1987; Virkki et al. 1991).

The cosmopolitan beetle family Scarabaeidae comprises approximately 2000 genera and 25000 species (Arcanjo et al. 2009). Despite of the large number of species, there are few studies about the chromosomal diversity of Scarabaeidae representatives and approximately, only 390 species have been analysed, predominantly using conventional staining (Arcanjo et al. 2009). About 70 Scarabaeidae species have been studied using differential or molecular cytogenetic technique, such as C-banding, base specific fluorochromes, silver nitrate staining or fluorescence in situ hybridisation by Moura et al. (2003), Wilson and Angus (2004 a, b, 2005 a, b, 2006), Bione et al. (2005 a, b), Angus et al. (2007) and Dutrillaux et al. (2007 a, b). The constitutive heterochromatin in this family is predominantly located in the pericentric region of the chromosomes and this genomic component shows wide heterogeneity regarding A-T richness and G-C richness. However, the nucleolar organiser region (NORs) is predominantly located either in a single autosomal pair or in the X chromosome or more than one rDNA site clustered in different chromosome pairs (Moura et al. 2003, Bione et al. 2005 a, b, Macaisne et al. 2006).

2. Variation of chromosome number


The family Scarabaeidae comprises 25, 000 described species and is known cytologically by 397 species of 123 genera and 18 subfamilies (Table 1). The major contributors are Yosida (1949b, 1951), Virkki (1951, 1954a, 1967a), Manna and Lahiri (1972), Salamanna (1972), Kudho et al. (1973), Yadav and Pillai (1975a, 1976a, b, 1978, 1979), Vidal et al. (1977), Smith and Virkki (1978), Vidal (1984), Yadav and Dange (1988b, 1989, 1991), Yadav et al. (1989), Hanski and



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Changing Structure of Political Economy in Early Medieval India

Sukhdev Saini*

Abstract: *The economy of any place depends largely on its natural resources and on the technological skill of the people inhabiting it on one side and socio-political organization at the other. The early medieval India was a period of proliferation and fragmentation. The existing varnas were split up into many castes and numerous new tribes and castes were annexed to and incorporated within them. In this period 'Kanauj' was the center of Political hierarchy in northern India. The tripartite struggle between Pratihāras, Pālas and Rāstrakutas resulted in the emergence of many small principalities in 7th century. The Rāstrakutas ascendancy constitutes such a brilliant chapter in the economy of southern India. The background to socio-political changes in early medieval India is provided by certain economic developments. The most significant change in the economy of the period is the large-scale transfers of land revenues and land to both secular and religious elements by princes and their vassals. There was a*

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A STUDY ON POSITION BASED ROUTING FOR VEHICULAR NETWORKS

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Kurukshetra University, India

ABSTRACT
VANET is a promising and emerging step towards the intelligent transportation system. Number of algorithms are available to disseminate the data between the vehicles. But position based algorithms have their own advantages in vehicular networks as it's routing mechanism is depend upon the position of source and destination and therefore there is no need to establish the route in advance between the source and destination. It also saves the bandwidth and overcome the route establishment overhead. But they require position based services like GPS.

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Akbar's Land Revenue System

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Abstract
The present study is an attempt to throw light on land revenue system in Mughal state. Concerning the research work about its administration. But what has become a matter of controversy for the years is Mughal State and its land revenue system. As land revenue system has always been chief source of income for the state treasury, therefore, Mughal Emperors Babur and Humayun followed Saltonic period and collected revenue on the basis of old records resulting a totally failure system. It was only Akbar, the great Mughal emperor, who introduced a definite and filtered revenue system which with the due course of time proved to be workable and profitable for the whole kingdom as well as the state because he inaugurated this system with the survey of the land and ascertainment of the

were much less important to the imperial revenues than agriculture. European travelers visiting India in the 16th and 17th centuries held unanimously the view that the king was the owner of the soil in India.¹ Abul Fazl in his Ain-i-Akbari justifies the imposition of taxes by the state saying that these are the remuneration of sovereignty, paid in return for protection and justice. The Persian term for land revenue during the Mughal rule was mal and mal wajib and Kharij was not in regular use. Mughal Empire had two main objectives in front of them, first, the assessment and collection of sufficient revenue, and secondly, the supply of adequate contingents for the army and regarding the farms, it

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AN EMPIRICAL STUDY OF THE RELATIONSHIP BETWEEN ENERGY CONSUMPTION AND ECONOMIC GROWTH IN INDIA

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ABSTRACT
Energy is central to achieve the interrelated economic, social, and environmental aims of sustainable development. The relationship between use of energy and economic growth has been a subject of greater inquiry as energy is one of the important driving forces of economic growth. This paper examines the relationship between energy consumption and Gross Domestic Product (GDP) per capita of India. It used the annual data from 1970-71 to 2015-16, obtained from Central Electricity Authority and Energy Statistics, 2016-17. Augmented Dickey Fuller test has

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Sustainable tourism development: A key to social peace

Dr. Vijay Sharma
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Abstract
The very intentions of the Indian government to tap & care tourism sector is not very recent rather initiated almost in the mid of the last century and is still continuing with an objective to make India a world known destination. Going through the various social impacts of tourism, we today have a firm understanding that caring for tourism leads to a peaceful and growing harmonious community. The target of increasing the inflow of the tourists has now been coupled with the required and desired concept of sustainable tourism. We are hearing the words 'sustainable development' and 'sustainable tourism development' every now and then. But a common man here is still wondering on what does the terms exactly mean? A general perception of the term sustainability is taken as meeting the needs of the existing generation but without compromising the ability of coming generations to meet their needs. The truth is that the guidelines and management practices of sustainable tourism development are applicable to various forms of tourism in all types of destinations like mass tourism, adventure tourism, cultural tourism and rural tourism etc to mention a few. The objective of sustainable tourism is to implement all areas of sustainable development, may it be environment issues, economical issues or social issues in tourism wherein the aim is to set a suitable balance between these three dimensions to guarantee its long-term sustainability leading to peace in the masses. The paper here explains the significance of an appropriate approach for sustainable tourism development so that we are able to compete at the world level in tourism sector and project a real image of harmonious community with higher level of understanding.

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DUSHYANT GUPTA

A Review of Hybrid Algorithm deployed for Mobile Ad-hoc Wireless Network

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A Study of Educational Aspirations of Secondary School Students in relation to their Achievement Scores

Dr. Mamta Chawla*

Abstract
In today's world, education is a necessity, and for that reason, it has assumed an increasingly important role in future plans, especially for young people. During the educational process people gain necessary skills and competencies to be able to function on different competitive markets. Higher levels of education are associated with higher income, a more prestigious career, lower risk of unemployment and an improved well-being. Education plays a vital role in preparing the newer generation of India, In general to face the challenge of a developing system. Education, in real

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Impact of cyclodextrin derivatives on systemic release of duloxetine HCl via buccal route

Rajiv Kumar, V. R. Sinha, Lalita Dahiya, Guralp Singh & Amita Sarwal

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Abstract

Aim: The aim of this work was to develop buccoadhesive tablets for the systemic delivery of duloxetine HCl (DXT) using more soluble derivatives of β -cyclodextrin, i.e. hydroxypropyl- β -cyclodextrin (HP β CD) and sulfobutylether- β -cyclodextrin (SBE β CD) and

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Protective Effects of *Tribulus terrestris* and Vitamin C on Permethrin Induced Oxidative Stress in Goat Testis

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Abstract: Present study was designed to evaluate the ameliorative effect of *Tribulus terrestris* (TT) and vitamin C against permethrin induced oxidative stress in goat testicular tissue in vitro. Testicular tissue was divided into control and three experimental groups EI, EII and EIII. All the groups were cultured in TCM-199 nutritive media at 95% humidity, 5% and 39°C in CO₂ incubator for 4hr. and 8hr. duration. In group EI, the testicular tissue was exposed to 100µg/ml and 200µg/ml of permethrin. EII group was exposed to 100µg/ml and 200µg/ml of permethrin along with 0.1mmol of vitamin C. While EIII group was tested for 100µg/ml and 200µg/ml of permethrin along with 100µg/ml hydro-alcoholic extract of TT. Present study revealed that the activity of antioxidant markers such as catalase (CAT), glutathione peroxidase (GPx) and reduced glutathione (GSH) were significantly ($p < 0.05$) decreased in permethrin treated groups as compared to control in both dose and time dependent manner. Maximum decline (62.69%, 39.4%, 51.5% decrease in level of CAT, GPx, GSH respectively) in the antioxidant status of the tissue was reported at 200µg/ml for the duration of 8hr. However, 100µg/ml of permethrin resulted in 29.3%, 14.3%, 29.5% decrease in CAT, GPx, and GSH level respectively for the same exposure duration i.e. 8hr. The activity of antioxidants was found to be improved in vitamin C (EII) and TT (EIII) supplemented groups ($p < 0.05$). From the present study, it is concluded that permethrin induce a decline in the status of

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Bārā Culture: An Overview of Problems and Issues

Sukhdev Saini

Abstract:

Bārā culture was a culture that emerged in the eastern region of the Indus Valley Civilization around 2000 BC. It developed in the doab between the Yamunā and Sutlej rivers, this territory corresponds to modern-day Punjab, Haryana and Western Uttar Pradesh in North India. Bārā culture is believed to have initially developed from Pre-Harappan traditions independently, although later on intermingled with the Harappans in locations. In the conventional timeline demarcations of the Indus Valley Tradition, the Bārā culture is usually placed in the Late Harappan period. The Bārān pottery is thickly distributed in the Sutlej and Ghaghara basins. From this hub centre of the culture it has spread on the Sarasvatī and Driśdvatī in Haryana and to the Yamunā-Gangā doab in western Uttar Pradesh.

The painted designs of Bārān ware recall the Pre-Harappan designs from north Baluchistan, Bahawalpur, Sind and Ganganagar areas. So, this poses a problem among the archaeologists regarding the origin and expansion of this culture. Bārān ware plausibly is a local version or variable of 'Pre-Indus pottery', perhaps a near cognate of pre-defence Harappan ware which shows many traits with these various contemporary Chalcolithic cultures. In the Chautāng valley Bārān ware is largely comparable to Siswālian ware. Bārā-Siswālian ware is a long-lived ceramic with Early Harappan motifs carrying the entire sequence in Divide. So, it is called Bārā-Siswālian pottery tradition. As far as the excavated sites of this culture are concerned, at the sites like Mahorānā, Kotlā-Nihang-Khān, Ropar, Bārā, Sanghol, Bālu, Mīrzāpur;



FEMININE REFERENCES AS GLEANED FROM THE EPIGRAPHIC RECORDS OF MAURYAN PERIOD

Shalu Rani¹ and Dr. Rajpal²

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ABSTRACT

Epigraphical records are of great importance to reconstruct the various aspects of the history of the Mauryan Empire. Asokan records are considered to be the earliest epigraphical records. The position of women is also one of the aspects reflected in the inscriptions. The notable thing about the Mauryan records is that some of the names of the personages as Karuvaki and some other aspects are not known from any other source. But most of the references to women are in context of religion as following Buddhist order. Royal ladies are said to have been engaged in the acts of donations. Some idea of the position of laywomen can also be traced. As Bairat Inscription present them as upasikas or the follower of Buddhism. In an another inscription they have been said engaged in some religious ritual.



KEYWORDS: Edicts, Karuvāki, Devdasi, Sutnukā, Queen's edict, Bhikkhuni, Upāsika, Devī, Purdah, polygamy, Aavrodhan.

INTRODUCTION

Mauryan Empire was one of the vast and powerful Empire of Indian History. As a source of Mauryan History Epigraphic records are of great significance. These are the earliest epigraphical records. These throw light on his policy of promoting Dhamma. But along with religious life they throw light on the other facets of life also. In Aśokan edicts there are some references related to the position of women. Whatever information they provide is of great significance which is not known from any other source. Some of the records which bear the references to Women are as under:-

1. Queen's, Edict, Kaushambi¹
2. Pipharwā vase inscription²
3. Major Rock Edict I³

¹. Rajbali Pandeya, Aśoka ke Abhilekh, p. 188

². Sivasvaroop Sahai, Bhārtiya Purālekhon kā Adhyayan, p. 81-83.

³. E. Hultzsch, CII, vol.1 p. 27.



FIELD EXPLORATION: RECENT FINDINGS IN DISTRICT JIND, HARYANA (INDIA)

Dr. Rajpal

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ABSTRACT

The region of Jind is extremely rich archaeologically and, thus has been in focus of research since mid of last century. Archaeological activities in the area were initiated Suraj Bhan in the 1960s and 1970s was responsible for starting explorations in the region. The present researcher took up exploration in the region. As a result of this effort 284 sites were explored, out of which 60 new sites were placed on the archaeological map for the first time. In addition to this a number of sites have yielded new cultural remains not reported by previous scholars. These sites show cultural



sequence from the Ghaggar Hakra Culture to the Medieval times. Almost all the sites are either under cultivation or under modern habitation. Pottery and other associated finds of the different cultures were collected from these sites not only to study the different aspects of the cultures but also this effort has also plugged the major gap in the previous work as the earlier researchers generally had not given details about the location, size and coordinates of the settlements. Secondly, some of the sites need thorough investigation in order to have more data, and as a consequence of this a number of sites have yielded new cultural remains which were not reported earlier.

KEY-WORDS: *Hakra-Ware, Early-Harappans, Mature-Harappans, Late-Harappans, PGW, Grey-Ware, Historical Pottery, Citadel, Fortification, Craftmanship, Dwelling-Pit, NBPW.*

INTRODUCTION

Archaeology is the study of past and begin from the inception of the human species. By carefully applying scientific techniques in excavation, explorations and analysis of their findings, archaeologist attempt to reconstruct the past ways of life and understand why different customs developed and evolved. In short we can say that, it is a way to understand humanity and ourselves. Archaeology is also a part of history, but it is more reliable sometimes because in history we uses mainly literary documents while in archaeology we take the help of material evidence. Haryana has been an area for Archaeological investigation from the time of Cunningham and when it

Material Matters : A Case Study of The Antiquities of The Inhabitant of District-Jind, Haryana Recovered in Recent Exploration (2014-15)

Rajpal*

Introuction

Different type of material remains of ancient cultures, viz. ornaments, toys, household utensils, human and animal figures, etc., were found during the course of exploration. These remains are the important tools for the reconstruction of various aspects of ancient cultures particularly their socio-economic life. These are not only the art pieces but, represent the activities of people of an unknown society for which we have no other documentary evidences. During the exploration in the area under present study, the researcher has brought to light a variety of objects of agate, bone, carnelian, copper, faience, glass, gold, lapis lazuli, shell, steatite, stone, terracotta, etc. from the explored archaeological sites, which are ranging from Pre-Harappan to Medieval times. Of these, some antiquities have been selected to be illustrated in this work. The chronological position of these finds could be possible by typological comparison and on the basis of culture represented at the site from where these were found. The description of these antiquities is given below material-wise.

Discussion

Beads

Beads of semi-precious stones, such as carnelian, agate, jasper, lapis-lazuli, steatite and terracotta were the part of the jewellery worn by the people of ancient time. Bead making is one of the oldest known craft, which was introduced much before the Harappan civilization. At Mehargarh beads of stone, shell and copper were found even before the introduction of pottery (Kenoyer 1998:160). With the development of the Harappan civilization bead making became highly specialized craft, to cater the needs of the Harappan elite and also for export. The study of beads can give us an idea of differentiation in the society. Beads of semi-precious stones and metals were worn by rich peoples whereas the beads of terracotta were the part of jewellery of poor peoples. In the course of explorations conducted by the researcher, some beads of semi-precious stones were collected from various sites along with the beads of terracotta, faience, shell and ivory. These beads are very beautiful and attractive in their shape and appearance. A brief description of illustrated beads is as below.

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Pottery Unfold History: A Case Study of the Inhabitants of District Jind, Haryana (India) through the Ages

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KEYWORDS

Pre-Harappans, Classical Harappans, Late Harappans, PGW, Hakra Ware, Historical, Medieval, Ceramics, Mud Appliqué Ware, Incised Ware, Regional Hakra, Tan Slipped/Chocolate Slipped Ware, Black Burnished Ware, Brown or Buff Ware.

ABSTRACT

Pottery is a tangible evidence like any other archaeological find. It throws light on socio-cultural, religious, economic aspect of past cultural civilization. It is a very important source for the reconstruction of Pre-history when written records are not available and even during historical times its importance does not diminish. With the help of pottery, archaeologists could unlock many secrets of the past, which would otherwise have remained unknown. During the course of exploration, a huge amount of potteries were collected from sites in the region of the present study which helped determine the different cultural periods. The main ceramic industries found in the area include Ghaggar-Hakra, Pre-Harappan, Early Harappan, Mature Harappan, Late Harappan, Painted Grey Ware, PGW. Historical and Medieval. It is useful to review briefly the characteristic features and chronological sequence of the ceramics found in the study area in order to put the cultural sequence of the study area in a proper perspective. Some sites of the adjoining region were also explored and some good pottery specimens were included in the present study.

Pre-Harappan Pottery

The earliest group of the ceramic industry of this region is Pre-Harappan pottery. Pre-Harappan pottery is genetically akin to 'Hakra Ware'. Mughal reported this type of pottery from Cholistan for the first time (Mughal 1982:90). In India this type of pottery was firstly reported from Kunal as the pottery of the earliest settlers (Khatri and Acharya 1995:84). Amarendra Nath also reported the same type of pottery from Rakhi Gachi (Nath 2001) and from Bhirrana, where these types of sherd were found in association with dwelling pits (Rao et al. 2005; 2006). The excavations at Girwad also yielded the same type of pottery and the excavators named it 'Regional Hakra' (Shinde et al. 2008: 135). At each above-mentioned site, this type of pottery was found in association with semi-subterranean dwelling pits.

Mughal classified Hakra pottery into several classes viz. Mud Appliqué Ware, Incised Ware, Black Slipped Ware, Black Burnished Ware and Buff Ware (Mughal 1997: 63-67). Rao categorized the ceramics recovered from the lowest level at Bhirrana into eight groups, i.e. Mud Appliqué ware, Incised ware, Tan Slipped/Chocolate Slipped ware, Black Burnished Ware, Brown or Buff ware, Buff-ome Ware, and Black-on-Red ware (Rao et al. 2004-05: 61-2). Shinde et al. (2008:123-130) has classified pre-Harappan pottery recovered from Girwad into seven types, i.e. mud appliqué ware, chocolate/black slipped ware, red ware, incised ware, grooved ware, periano reserve slip ware and grey

Femininity in Proto-historic South Asian Art: an Analytical Study of Harappans.

- **Source:** Antrocom: Online Journal of Anthropology . 2018, Vol. 14 Issue 1, p139-147. 9p.
- **Author(s):** Hooda, Rajesh; Rajpal; Parkash, Kushal

- **Abstract:** Women carry divine procreative powers gifted by nature. There is an inherent sophistication in the movements of a woman's body and the livelihood of these movements has been well represented since proto-historic times. Be it either sculptural art or terracotta art, the artisan or even a novice took care of representing the associated sophistication. The statuettes of females, despite crude and imperfect figurine elements, can be identified by the prominently shown sexual organs female body parts. In the context of the Harappan Civilization, the feminine figurines have been widely reported. From Mundigak III and IV the female figurines with prominent breasts have been reported. The most famous female figure is a Zhob mother goddess; the name has been suggested by the findings at the Zhob valley. Harappa and Mohenjodaro have been blessed with a different kind of female figurines. These figurines are characterized by wide hips, narrow waist and sometimes large breasts. The feminine representation appears also in the Chalcolithic pottery in Maharashtra.
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Secure Iris Recognition with Visual Cryptography

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Abstract

Biometrics is the science of uniquely recognizing an individual based on his/her physiological or behavioral characteristics. Amongst all the biometric characteristics, iris recognition is the most secure technique due to its stability and uniqueness. In this paper, an approach based on visual cryptography has been proposed to protect the biometric template of iris. Visual cryptography is a secret sharing technique which divides the secret image into number of shares which independently reveals no information about the original image. It is impossible to obtain any information about the secret image from shares individually. It does decryption simply by human visual system without any cryptographic computations. Experimental work has been performed on a public dataset to demonstrate the performance of proposed approach and it seems an efficient way to protect the biometric template.

Keywords: Security, biometric template, visual cryptography, iris, secret sharing

1. Introduction

Biometric characteristics are inherent features of the person to be authenticated that's why biometrics is getting more attention for automated personal identification. It requires no password to remember and no ID card to carry along. Generally, a biometric recognition system works by acquiring raw biometric data from various biometric characteristics (iris, face image, fingerprint, hand geometry, gait, signature etc.) that are possessed by the person to be authenticated. Relevant feature set is extracted from the acquired data and it is compared against the templates stored in the database with the aim of identifying the person or to verify the claimed identity [1].

The biometric systems are vulnerable to numerous attacks which declines their security. Attacks on biometric systems have been analyzed and classified into eight types [2]. A typical biometric system with these attack points is shown in Figure 1. Type 1 attack is providing a fake biometric characteristic to the sensor module. Type 2 attack is submitting previously captured biometric data to the system. In type 3 attack, the feature extraction module is forced to generate feature sets that are chosen by attacker. In type 4 attack, genuine feature sets are replaced with those selected by the attacker. Type 5 attack is on the matcher module which is modified to produce a falsely high matching score. Type 6 attack is on the template database. In type 7 attack, the transmission medium between template database and matcher module is attacked which results in modification of the send out templates. Type 8 attack is to override the result *i.e.*, accept or reject given by the decision module.

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A Comparative Analysis of Itinerary Planning Algorithms for Single Mobile Agent and Multi Mobile Agent

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Abstract— Using Mobile Agents (MAs) every conventional distributed system work can be performed efficiently, robustly and easily within a single and general framework. Despite many benefits, Mobile Agents have a number of issues like fault tolerance, security, routing etc. Among these issues this paper emphasizes on routing of MAs. This paper defines types of itineraries based on their knowledge and based on number of Mobile Agents used to perform optimum itinerary. It describes disadvantages of single mobile agent itinerary planning (SIPs) and different challenges faced by multi mobile Agent itinerary planning (MIPs). The objective of this paper is to bring out a comparative analysis of the existing Itinerary planning algorithms.

Keywords—Itinerary planning, Mobile Agent, Mobile Agent routing

I. INTRODUCTION TO MOBILE AGENT

Mobile Agents are the autonomous programs which are designed to perform any task or to gather desired information on behalf of any general user's requirements. Mobile Agents are comprised of both code and data, having the capability to migrate autonomously from one system to another when they are connected together through network to perform its assigned task on behalf of any remote user. Mobile agents are so intelligent that they know what to do, when to do and where to migrate. Using Mobile Agents every work can be performed efficiently, robustly and easily within a single and general framework. Any Mobile Agent System can perform better than conventional paradigms when queries are more complex and network conditions are poor but perform worse when queries are simple and network conditions are good.

They are capable of doing work in heterogeneous environment. They are also capable of reducing network load, as mobile agents can execute their programs even after the disconnection of network. Despite its many practical benefits Mobile Agents have number of design issues like fault tolerance, security and routing etc. Out of these issues, this paper focuses on routing problem. Mobile Agents are used to discover and maintain routes in network. For this an itinerary can be defined which may decide the order of movement of a Mobile Agent to gain the information or to do a task. Routing is a process used to find the optimum path to carry out the data to the destination.

II. ITINERARY PLANNING AND THEIR DESIGN ISSUES

In Mobile Agent's routing, route has to be defined for Mobile Agents. Set of nodes where Mobile Agents have to move to perform the task is called itinerary. Itinerary can be defined for single Mobile Agent as well as for multiple Mobile Agents.

- Single Mobile Agent Itinerary Planning (SIP), wherein only single Mobile Agent is dispatched in data aggregation process.
- Multiple Mobile Agent Itinerary Planning (MIP), wherein more than one Mobile Agents are dispatched in parallel, each mobile agent is assigned some number of hops in network.

SIP algorithms are satisfactory to small networks but not scalable to large networks, because traversing large networks, a single mobile Agent accumulates a large data with itself and behaves like conventional system. SIP algorithms incur following drawbacks:

- Long Delay
- Mobile Agent size increases
- Low reliability

In order to overcome these weaknesses of SIP, MIP can be used. Even MIP can overcome drawbacks of SIP but having its own challenges:

A. Finding the optimal number of Mobile Agents

Most important question arises how many number of Mobile Agents should be dispatched? If less number of mobile agents are dispatched, then network load increases and there can be delays in task duration. While, when large number of Mobile Agents are dispatched, then its obvious that the complexity will increase. If itinerary requires less MAs and processing element is dispatching more MAs means needlessly extra code is being transmitted through the network. This may cause large delay and increase in network load. Thus, when a Mobile Agent has the capability of generating its clone as per their requirement, there is no need of dispatching more number of Mobile Agents.

B. Partitioning whole network into subsets of groups and for every group single Mobile Agent is deployed

AN ADEQUATE AMALGAMATED APPROACH FOR ANONYMIZATION

Deepak Narula¹, Pardeep Kumar², Shuchita Upadhyaya³

Abstract: Digital era empowered with data sharing for the purpose of research and increasing business prospective. However the collected data some time contains sensitive information that need not to be disclosed publically as if that data is available publically it can be a threat to the privacy. So, data privacy is the most crucial act in data publishing. Various methods for anonymization have been suggested in literature. Out of these methods k-anonymization is one of the fundamental and most popular approach but suffering from the shortcoming of homogeneity and background attack. This paper is an attempt to propose an amalgamated approach with less information loss, discernibility cost and the value of average equivalence class size. Moreover, this also increases the data usability and also supports the privacy of sensitive information. The new proposed method can be practically implemented and works even if the domain set of sensitive information is small.

Keywords: Privacy Preserving Data Publishing (PPDP), Fuzzy Logic, Discernibility, Threshold, fuzzify

1. INTRODUCTION

Data collection and data sharing has one of the crucial act in this digital era. Many business organizations for their business and research prospective are collecting data digitally and collected data can be published for the purpose of research. But when the collected data that contains sensitive information is publically available, it may disclose personal information of someone. Sometime, this may attract the attention of attackers who want to extract personal information about an individual. Thus, this remains a challenge to protect the privacy of an individual and keep individual safe and secure. Moreover, the aim of PPDP is to publish the information but by keeping the individual's information secret.

Various techniques are available in literature for the purpose of PPDP, but selection of an appropriate technique is always a matter of concern and challenge for a professional. k-anonymity [1][2] is one of widely discussed approach used for anonymization that is based on the process of generalization and suppression but suffers from the problem of homogeneity and background attack. Moreover, after applying the process of generalization and suppression to anonymize the data always results in information loss [2][3], value of discernibility[2] [4] and the value of average equivalence class size[2] [5]. A new amalgam method of anonymization have been proposed that does the process of anonymization with less information loss and increases the data utility. Moreover, proposed algorithm also enhances the domain set of sensitive attribute by assigning appropriate weight. Further S-shaped fuzzy is applied on confidential attribute to incur the uncertainties. S-shaped membership function is an efficient approach which is not only used to obtain sanitized data but also gives an illusion as the original one [6][7]. The proposed algorithm uses an amalgamation of shuffling the records, S-Membership function based fuzzy values for sensitive attribute and the process of k-anonymization only for sensitive records.

2. BACKGROUND AND RELATED WORK

Due to increase in the growth of digitalization and huge collection of data, the size of data base is growing exponentially which is an asset for the purpose of research, analysis and for business prospective [6]. But while publishing the data publically the aim of attacker is to obtain personal information of an individual and use this information with some malafide intentions. A variety of techniques have been available in the literature.

2.1 Anonymization:

In literature various method(s) of anonymization exist such as k-anonymization, l-diversity and t-closeness etc. but k-anonymization is one of the fundamental for all types of anonymization and base for all types of approaches [1]. This was the first model for data anonymization and base for the others. The formal definition of k-anonymity for relation is as [9,10]. "A table T is k-anonymous with respect to Quasi-Identifiers $Q_i(Q_1, \dots, Q_d)$ if every unique tuple (q_1, \dots, q_d) in the projection of T on Q_1, \dots, Q_d occurs at least k times". For example Table1 represents the original table containing data about school employees where as Table 2 represents the anonymized data with k=3.

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VM Optimization using Deadline Based Task Scheduling in Cloud Computing

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Abstract - The approach of scheduling the tasks directly impacts the performance of cloud. Deadline based approach is the major area of concern in cloud computing, because deadline based tasks must be executed in time. In this paper, a novel deadline based task scheduling system model has been proposed. In proposed model, tasks have been executed on the basis of deadline constraint. Auto-scalability and resource optimization are other factors that have also been taken into consideration into the present work. The proposed model assists in reducing the makespan of the requests that is valuable to user.

Keywords - Cloud computing, deadline based constraint, makespan, resource optimization, scheduling algorithm.

I. INTRODUCTION

Cloud computing provides dynamic resource allocation and fulfils the clients need at any cost with respect to time. Some users do not care for the cost at which their request is being fulfilled. In other cases, users may provide time and cost constraints as a basic parameter of scheduling the jobs. In this paper, system model has been proposed based on deadline with respect to time. Along with deadline, resource optimization has also been considered in this paper. Resource manager optimizes the number of resources used in execution that automatically reduce energy.

II. RELATED WORK

Deadline based approach is not a new approach of scheduling. In this area, Javier Celaya et. al. (2011) proposed network based methodology. In this methodology, decentralized scheduler was used. Global scheduler found availability of nodes and local scheduler used EDF (Earliest Deadline First) scheduling policy to execute the requests. However, on cloud, using cost and tasks, flow deadline scheduling was implemented by Maciej Malawski et. al. (2012). This approach worked on different workflows of a task. Along with workflow, tasks priority of deadline based tasks were set to schedule the tasks efficiently. To reduce cost, Nitish Chopra et. al. (2013) enhanced the HEFT scheduling algorithm. Their approach worked on private as well as public clouds. First of all, proposed methodology checked the availability of resources that could finish the tasks in time. If resources were not found, then private clouds were availed to fulfil the request on time as well as cost constraint. Deadline tasks were handled by graph theory, using Bipartite methodology by Chien-Hung Chen

et. al. (2014), while ILP (Integer Linear Programming) was used by Zhao-Rong Lai et. al. (2014) to handle deadline based tasks.

Considering cost, task dependency should be handled properly, while executing deadline based tasks. Dinesh Komarasamy et. al. (2015) first removed the tasks dependency, filtered according to their priority and then executed the tasks. Apart from these factors, Longkun Guo et al. (2017) handled deadline based tasks along with increasing the workload of the resources. This increased the CPU utilization and also minimized the number of used resources.

To execute the deadline based requests, auto-scaling technique is used. With this technique, resources can be scaled up and scaled down according to need. Hyejeong Kang et. al. (2013), in their work, simply auto-scaled the resources that satisfy the request's requirement and SLA defined by the user. Jieun Choi et. al. (2015), in their work, first found out the appropriate cluster. If no cluster was found according to need, then request was moved to the private resource. Still, if no appropriate private resource was found, then new private resource was created according to need.

Vinay et. al. (2016) proposed a methodology, in which resources were auto-scaled to execute sub-tasks. In their work, child tasks were checked if they can be executed in time or not. If not, then resources were auto-scaled to finish the tasks in time.



Original Research Article

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Variation in Soil Properties and Carbon Stocks under Roadside Plantation and Rice-Wheat Cropping System in North Western Haryana, India

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ABSTRACT

Understanding ecological diversity and physicochemical properties of the soil is of core concern for better management of roadside plantation, especially in developing countries. Soil properties and carbon stocking are largely influenced by the landuse and spatial distribution. This study compares two different landuse, i.e., roadside plantation and rice-wheat (RW) cropping system at five different locations (Ambala, Kurukshetra, Karnal, Panipat and Sonapat) to assess their effects on soil properties and carbon stocking as well as maintaining ecological diversity in North-Western (NW) Haryana, India. Our data showed that physicochemical properties of the soil varied among the landuse and sampling locations. Soil bulk density was significantly different in both the land use and ranged from 1.10 to 1.27 g cm⁻³ and 1.15 to 1.43 g cm⁻³ for roadside plantation and RW cropping system, respectively. Soil carbon stock increased by 51.1% in roadside plantation as compared to rice-wheat cropping system that substantially contributes towards carbon sequestration in the soil. Available Nitrogen in the agricultural soils is statistically higher as compared to the roadside plantation. Principal component analysis of landuse and sampling sites showed variability in the soil properties suggesting the effect of soil management. Higher ecological diversity in roadside plantation improved the physicochemical properties by diverse organic inputs. The study highlights the importance of roadside plantation comparative to rice wheat cropping system in improving soil properties and sequestering carbon.

Keywords

Land use, Carbon stock, Nutrient availability, Ecological diversity, Rice-wheat cropping system

Article Info

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Introduction

In India, human population has increased six-fold from 200 million to 1200 million that coupled with economic growth has resulted in significant land use and land cover changes during 1880–2010 (Tian *et al.*, 2014). Such enormous pressure of population explosion leads to rapid deforestation of tropical forest

in India to compensate per capita availability of land. To maintain the ecological balance and natural cycling, we need to explore other viable options for the tree outside forests (TOF). TOF as plantation forestry plays a significant role in many ways like increasing aesthetic, ecological and environmental safeguard. Plantation forestry such as roadside plantation, block plantation is a low-cost

Phytosociological Analysis in Kumaun Himalaya using Satellite Remote Sensing with Special Reference to Woody Vegetation

Richa Tripathi Sharma, S. Chaudhry, M. Kudrat, N.K. Sharma

Abstract

Abstract

The present study deals with phytosociological analysis of woody vegetation (tree layer and shrub layer) of different forest types occurring in Kumaun Himalaya, Uttarakhand. A total 12 forest types were mapped using multiseason satellite data of IRS-P6, AWiFS sensor. Sampling was carried out in all the forest types to characterize the structure of forests in terms of abundance, density and dominance at different sites. The field data from different sites was pooled across site for different forest types and was arranged in girth classes. Among all the tree species maximum IVI was recorded for *Pinus roxburghii* and minimum IVI was observed for *Dalbergia sissoo*. Maximum density was recorded for temperate conifer forest and minimum density exhibited by degraded sal forest. Maximum total tree basal cover was observed for temperate conifer forest. However, minimum basal area was recorded for degraded low altitude oak forest. Different forest types were also evaluated for the similarity in species composition.

Keywords: IVI, IRS-P6, AWiFS, Remote sensing, Pine, Oak, Basal area

GEOSPATIAL TECHNOLOGY BASED GEO-ENVIRONMENTAL IMPACT ASSESSMENT OF SLATE MINING ACTIVITIES

TEJPAL¹, M.S. JAGLAN², B.S. CHAUDHARY³

ABSTRACT

Environmental impact assessment is nowadays an important aspect of mining operations. Remote sensing data with Geographical Information System (GIS) enable to identification, delineation, and monitoring of pollution sources and affected areas. The objective of this study is to develop an environmental health model for a slate mining site using both satellite data and ground-based information along with GIS techniques. For this purpose, areal expansion of slate mining and their impacts on local environment have been examined using LANDSAT 5 TM and LANDSAT 7 ETM+ data. Both natural (vegetative index and moisture index) and anthropogenic (land use/ cover change) parameters have been computed to assess the slate mines induced environmental degradation. It is revealed that the mining of slate has adversely affected the vegetation cover, moisture content, land use/ land cover and ground water depth. The environmental health of the area surrounding slate mining site has deteriorated significantly between 1989 and 2009 following an upsurge in slate mining activities.

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Perspective of Innovation in Developing Countries: A Study of Economic Transition

[P. Chauhan](#), [Geetanjali Singh](#) • Published 1 October 2018 • Economics • International Journal of Management Studies

The paper describes firm innovation in developing countries and provides a resolution to the innovation paradox. The analysis shows that firms report innovation across the income spectrum and in all sectors, but that innovation often consists of marginal improvements in process or products, rather than significant technology adoption or new product imitation, and it very infrequently involves frontier research. The coexistence of the extraordinarily low levels of innovation-related investment... [Expand](#)

On Some New Generalization Of Extended Beta Function

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ABSTRACT

In this paper, we introduce a new generalization of extended Beta function in terms of integral whose kernel contain the Mittag-Leffler function. We shall establish integral representation, differentiation formula, Beta distribution formula and various properties of new extended beta function. A number of new and known results are obtained as special cases.

Key Words : Beta function , Extended beta function, Mittag-Leffler function, Beta distribution .

1.INTRODUCTION

Special Functions have various applications in the field of Engineering, Mathematics and Statistical sciences. The classical Beta function given by Euler's is one of the essential special function. Euler's Beta function and its extensions have proved useful and necessary tool for the scientists and researchers. In recent years , several authors [3,4,5,9,11] have introduced a number of interesting and useful results related to extended beta function.

We start by recalling the classical Beta function $B(\alpha, \beta)$ defined by Euler [1,6,10] as

$$B(\alpha, \beta) = \int_0^1 t^{\alpha-1} (1-t)^{\beta-1} dt, \quad \operatorname{Re}(\alpha) > 0, \operatorname{Re}(\beta) > 0 \quad (1)$$

In 1997, Chaudhary et al.[2] introduced the extension of Euler's beta function in the following form:

$$B(\alpha, \beta; p) = \int_0^1 t^{\alpha-1} (1-t)^{\beta-1} \exp\left[-\frac{p}{t(1-t)}\right] dt, \quad (2)$$

($\operatorname{Re}(p) > 0; p \neq 0, \operatorname{Re}(\alpha) > 0, \operatorname{Re}(\beta) > 0$)

The classical Mittag-Leffler function [7, 8] denoted by $E_\mu(\cdot)$ is defined as

$$E_\mu(x) = \sum_{n=0}^{\infty} \frac{x^n}{\Gamma(\mu n + 1)}$$

Where $\mu \in \mathbb{R}_0^+, x \in \mathbb{C}$.

Symbiotic and Synergistic Efficiency of Bioinoculants on *Catharanthus roseus* (L.) G. Don

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Abstract: *Catharanthus roseus* (L.) G. Don widely known medicinal herb, belongs to Apocynaceae family has been cultivated for its wide range of therapeutic values. Arbuscular mycorrhizae (AM) are helpful symbionts for growth of the plant and its development, offering a possible substitute for high input agricultural technology employed for production of environmentally hazardous fertilizers. Therefore, the present investigation was focused on to analyze the effect of AM fungi (*Acaulospora laevis* and *Glomus mosseae*) along with *Pseudomonas fluorescens*, alone and in combinations, on different growth parameters of *Catharanthus roseus* in a pot experiment with autoclaved sterilized soil under polyhouse condition. AM inoculum and *P. fluorescens* showed significant increase in different growth parameters after 120 days of inoculation. Among all treatments, consortium of *G. mosseae*, *A. laevis* plus *P. fluorescens* was most effective for increased shoot height, root length, leaf area, shoot and root biomass, percent root colonization and AM spore number. Moreover, chlorophyll content, phosphorous and phosphatase activities were found to be maximum when AM fungi and *P. fluorescens* were applied in consortium.

Keywords: *Glomus mosseae*, *Pseudomonas fluorescens*, *Catharanthus roseus*, Leaf area, Phosphatase activities.

I. INTRODUCTION

Catharanthus roseus (L.) G. Don (family: Apocynaceae), commonly known as "Madagascar periwinkle", is an important ornamental as well as medicinal herb growing in many tropical, subtropical and temperate regions of the world (Lata, 2007). *C. roseus* is being extensively studied and commercially exploited plant species due to its antitumor indole alkaloids vinblastine and vincristine, used in treatment of leukemia and Hodgkin's disease. Vincamine and vinpocetine have vaso-dilating and memory enhancing properties and have been shown to alleviate Alzheimer's diseases and vascular dementia. Moreover, ajmalicine is being widely used to treat blood circulation disease (Noble, 1990; Hindmarch et al., 1991; Fischhof et al., 1996; Leveque et al., 1996; Sottomayor and Ros- Barcelo, 2006; Rabbani-Chadegani et al., 2009; Risinger et al., 2009; Jaleel et al., 2007). The plant parts have varying concentrations of alkaloid like leaves accompanied with 1% and roots have 9%; therefore, to achieve desired compound, a large amount of plant sample is required to obtain commercial quantities (Tyler, 1988). Many attempts have been made to enhance the synthesis of secondary metabolites by using cell suspension cultures, but all are unsuccessful (Bonzom et al., 1997) therefore, researchers are trying to find out efficient methods to enhance the biomass production, in order to compensate for a very low content of active ingredients.

Strategies to enhance biomass production included use of chemical fertilizers, growth regulators and growth retardants (Bhattacharjee and Gupta, 1984; Choudhury and Gupta, 1996). The inadequate and non-mobilized nutrients in the soil also affect the productivity of plants. Moreover, direct application of nutrients by using synthetic fertilizer to the soil, increases crop production and its cost. In spite positive effects, excessive use of synthetic fertilizer starts displaying their adverse effects like soil leaching, water pollution, destroying microbial diversity and friendly insects, increases crop susceptibility towards disease and reducing soil fertility. On other hand, use of bio-fertilizer is cost effective as well as eco-friendly approach to enhance biomass production without affecting natural ecosystem. Bio-fertilizers are microbial inoculants consisting of living cells of micro-organism like fungi, algae and bacteria which may help in increasing production by enhancing biological activities in the rhizosphere of plants (Tilak and Reddy, 2006).

Self Repairing Of Routing In MANET Using Weight Factor

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Abstract: *The challenge of wireless communication is that, the environment that wireless communications travel through is unpredictable. Wireless networks that fix their own broken communication links may speed up their widespread acceptance. An effort has been made to propose an on-demand distributed algorithm for self-organizing, multihop, mobile packet radio large network. These nodes are independently controlled and are dynamically reconfigured as nodes may move from one range to another. It is seen that when the network size increases, per node throughput of an ad hoc network rapidly decreases. This is due to the fact that in large scale networks, flat structure of networks results in long hop paths which are prone to breaks. A weight factor has been added that will be broadcast to each node in the network. The proposed algorithm is robust due to the motion, failure, insertion or deletion of nodes. This non periodic algorithm reduces the cost due to computation and communication. Simulation experiments evaluate the performance of the proposed scheme.*

Keywords: *Mobile Ad Hoc networks, Self healing, Load balancing, Mobile computing, Routing*

1. Introduction

In developing broadband digital networks, a short service-outage such as a link failure or a node failure can cause a serious impairment of network services. It is due to the volume of network traffic carried by a single link or node. Moreover, the outage can stimulate end users to try to re-establish their connections within a short time. The retrials, however, make the problem worse because the connection establishment increases the traffic volume further. Fast restoration from a network failure becomes a critical issue in deploying high-speed networks. Self-healing algorithms have been recognized as a major mechanism for providing the fast restoration. A self-healing system [1,2,8] should recover from the abnormal state and return to the normal state, and should start functioning as it was prior to failure. One of the key issues associated with self-healing networks is to optimize the networks while expecting reasonable network failures [3,4,5,8]. Self-healing network (SHN) [6,8] is designed to support transmission of messages across multiple nodes while also protecting against recursive node and process failures. It will automatically recover itself after a failure occurs. The problem of self-healing is in networks that are reconfigurable in the sense that they can change their topology during an attack. One goal is to maintain connectivity in these networks [9], even in the presence of repeated adversarial node deletion. Modern computer systems are approaching scales of billions of components. Such systems are less akin to a traditional engineering enterprise such as a bridge, and more akin to a living organism in terms of complexity. A railway overbridge must be designed in such a way that, key components never fail, since there is no way for the bridge to automatically recover from system failure. In contrast, a living organism can not be designed so that no component ever fails: there are simply too many components. For example, skin can be cut and still heal. Unfortunately, current algorithms ensure robustness in computer networks through hardening individual components or, at best, adding lots of redundant components [7].

Critical issues [10] in self-healing systems typically include ; Maintenance of system health, recovery processes to return the state from an unhealthy state to a health one. Self-healing components or systems typically have the following characteristics [10] : (a) perform the productive operations of the system, (b) coordinate the activities of the different agents, (c) control and audit performance, (d) adapt to external and internal changes and (e) have policies to determine the overall purpose of the system. Most of the self-healing concepts are still in very early stages; still some possible areas explored are Grid computing, software agents, middleware computing, ad hoc networks. Emphasis here is on ad hoc network self healing characteristic.

A Mobile Ad Hoc Network, properly known as MANET [20] is a collection of mobile devices equipped with interfaces and networking capability. Hosts [19] can be mobile, standalone or networked. Such devices can communicate with another node within their radio range or one that is outside their range by multi hop techniques. An Ad Hoc Network is adaptive in nature and is self organizing. It is an autonomous system of mobile hosts which are free to move around randomly and organize themselves arbitrarily. In this environment network topology may change rapidly and unpredictably. The main characteristic of MANET strictly depends upon both wireless link nature and node mobility features. Basically this includes dynamic topology, bandwidth, energy constraints, security limitations and lack of infrastructure. MANET is viewed as suitable systems which can support some specific applications as virtual classrooms, military communications, emergency search and rescue operations, data acquisition in hostile environments, communications set up in exhibitions, conferences

Depository system and depositories importance for various parties

Karamdeep Saini

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Abstract

Over the past few years, capital market has shown rapid growth. This growth has been possible just because of various initiative has been taken by government of India who enacted various act from time to time in order to regulate the activity. So in this paper a biggest reform of capital market has been given due importance which is known as Depository system. Its essential pillars have been studied and depositories meaning and its importance have been taken into deep study.

INTRODUCTION

In earlier time Indian capital market had to face lot of problems because of manual and paper base settlement. Under this system, the clearing and settlement of transaction take place with the use of paper work. This system created lots of problems for various parties like purchaser or sellers. In order to remove such problem, script less trading which is known as paperless trading came into existence. Then the old system was exchanged with new as well as modern system of depositories. This new system can be understood with the help of depositories system who are the major players of working of depositories. Its role towards investors, issue, countries is also playing its significant role to create its importance among masses.

Literature review

B hari babu and B.K Surya Praksha Rao, have concluded from their study that role and growth of capital market has been successful because of adoption of depository system adoption

Dr. Pawan Verma, Dr Shiv Ram Singh Jhajharia have examined the depositories role in indian capital market growth and progress

Shashi K.Gupta, Rosy Joshi have concluded that depository is very important pillar of depositories system. It leads to serve the best towards various party

Statement of problem

Indian capital market growth is essential for country proper mobilization of financial resources. This mobilization work flawless with the help of depository system too..So What does depository system stands for is being taken into consideration ?What is the role and importance of depositories to various party is also taken as part of such study.

Objective

- ★ To study the present depositories system with help of its constituents



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USE OF TEACHING LEARNING RESOURCES TO ENHANCE LEARNING IN COMMERCE AT SENIOR SECONDARY STAGE

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Abstract

Learning is the modification of learner's behaviour through experience whether planned or unplanned. On the other hand teaching is a planned activity in which all the efforts are directed towards learning. Learning resources are the devices, procedures or any instructional material in the hands of teacher to make the teaching and learning more interesting and effective. Carefully and judiciously selected learning resources can work wonder in stimulating and reinforcing students' learning. There is some difference between teaching learning material and resources. The concept of teaching learning resources is quite wide and it includes all teaching learning material in its range together with intangible support from different persons, places and institutions used as a resource in the instructional process. The proper use of teaching learning resources helps in permanent retention of the concept. As the instructional material has capability to appeal to ones senses, the attention of the learner is captured for longer duration as compared to traditional monotonous oral way of delivering the facts and information. Wisely selected teaching learning material makes the classroom interactive and lively. As far as commerce is concerned, it is a living discipline connected with other fields of knowledge. Any development in political, social, economic and technological field will result in fluctuations in business and capital market. The ever-changing environment of business cannot be cope up by traditional instructional material especially text book. Besides text book a commerce teacher should use other radical learning resources to foster learning among students. This paper studies the need and use of dynamic teaching learning resources for providing updated and practical experience to the commerce students at senior secondary stage.

Keywords: Teaching Learning Resources, Teaching Learning Material, Commerce Club, Specimens, Field visits

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Sustainability : Dimensions and Education

*Mrs. Kanwalpreet Kaur**

Abstract

The concept of sustainable development emerged as a response to growing concern about human society's impact on the environment. As countries around the world continue to advance socially, economically and technologically, it has been recognized that human kind is facing a number of challenges such as water scarcity, climate change, inequality, hunger and so on reflecting that current development trends are not sustainable. For a sustainable future education must be revisited in light of a renewed vision of sustainable human and social development that is both equitable and viable. Education for sustainable development allows every human being to acquire the knowledge, skill, attitude and values necessary to shape a sustainable future. UNESCO (2014). While technological innovations, financial incentives and targeted policies are needed to catalyze new ways of producing and consuming, they cannot reshape people's value systems so that they willingly uphold and advance the principles of sustainable development. It is the education that brings about a fundamental shift in how we think, act and discharge our responsibilities towards one another and the planet.

A strong education system provides the people with the skills needed to thrive in the new sustainable economy, working in areas such as renewable energy, smart agriculture, forest rehabilitation, the design of resource- efficient cities and sound management of healthy ecosystems. It considers the social, environmental and economic dimensions of human development and thus builds productive and creative human resources who live with nature in peace and harmony.

Keywords : Sustainable Development , Sustainability, Education for Sustainable Development.

Dimensions of Sustainable Development :

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development is a concept that appeared for the first time in 1987 and with the publication of the Brundtland Report, warning of the negative environmental consequences of economic growth and globalization, which tried to find possible solutions to the problems

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TEACHER EDUCATION PROGRAMME AS TORCH BEARER: LEADING TOWARDS HOLISTIC EDUCATION

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Abstract

Over the course of the 20th century, one of the persistent controversies in the study of human development was whether nature or nurture was more important in shaping the direction of development. There are also debates within the field of psychology and human development that took the position that development was a direct product of the events that the person experienced. If we take an example of the analogy of a plant, one needs to give the general direction of development, which may be guided by the genetic information within a seed and environmental factors such as nutrients, sun, water, soil, and air temperature are exactly what will determine whether the plant flourishes. Environmental factors are a source of enormous variation including experiences, nutrition, health care, cognitive stimulation, interpersonal interactions, educational opportunities, role models, resources, stressors, community resources, work settings, cultural artifacts and rituals, climate and geographic conditions. These environmental factors produce differences in individual thought and behavior that are interconnected and dynamic and thus it is in harmony with the cosmos. In contrast, much of traditional education has been static and fragmented, ultimately promoting alienation and suffering (Neveu, 2009). The present paper focuses upon the role of teacher education programmes as torch bearers leading towards the holistic development of the child / students. It should help to stimulate to change the perspective of people / teachers (future teachers) towards their professional understanding, their understanding of learning and teaching towards the purpose of education that is to nurture human potential in as comprehensive sense.

Introduction: A Child's needs from Conception through the Early Years in terms of physical, intellectual, emotional and social well-being, the period from conception to age 6 is the key to subsequent growth, development and ultimate productivity. Pre-natally through the sixth year there are several distinct stages. They include: intra-uterine, intrapartum (the birth itself), postpartum (birth to 1 month), early infancy (the first six months), late infancy (6-12 months), toddlers (1 to 3 years), and the pre-school child (3-6 years of age). Children have different needs, depending on where they are within these stages.

In order to create a program for young children, it is critical to have more specific information on their needs. A delineation of developmental differences is provided by Donahoe-Colletta (1992) for three age groups. She defines the needs as follows:

Infants (birth to 1) need:

- Protection from physical danger
- Adequate nutrition
- Adequate health care
- Adults with whom to form attachments
- Adults who can understand and respond to their signals
- Things to look at, touch, hear, smell, and taste
- Opportunities to explore the world
- Appropriate language stimulation

Toddlers (1-3 years of age) need all the above and also require:

- Support in acquiring new motor, language and thinking skills
- A chance to develop some independence
- Help in learning how to control their own behavior
- Opportunities to begin to learn to care for themselves
- Daily opportunities to play with a variety of objects

Children ages 3-6 (and above), in addition to the above, also need:

- Opportunities to develop fine motor skills



INCULCATION OF MORAL VALUES IN YOUNG GENERATION

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Abstract

Values have major influence on a person's behaviour and attitude and serve as broad guidelines in all situations. Values exist, whether you recognise them or not. Our values are important because they help us to grow and develop. Value systems can be different from culture to culture. The Indian society and culture gives high regard to the moral values. Most of our basic values are learnt early in life from family, friends, neighbourhood, media etc. these values become part of our personalities. They are generally shared and reinforced by those with whom we interact. Values deals not so much with what is, but with what ought to be. Our values are the basis of our judgement. Our society needs more individuals that possess good moral values in order to grow and develop the right way.

Keywords: Nuclear Family, Values, Society, Media

Introduction

Values are important and lasting beliefs or ideals, what is good or bad and desirable or undesirable. A value is a guide, a norm, a principle by which a person lives. It constitute an important aspect of self-concept and serve as guiding principles for an individual, that play decisive role in making the direction of life. These are a set of principles or standards of conduct which are regarded desirable, important and held in high esteem by a particular society in which a person lives. Honesty, respect, dependability, kindness, courage, self-discipline, sympathy, apologize, character are some values which plays an important role. The process of acquiring values begins at birth. It develops through life and evolves from life experiences. They are formed by combining: intellect, will, emotions and spiritual needs. The term value may mean different things to different people.



Value inculcation through co-curricular co-scholastic activities in school students

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Abstract

Education is inherently values oriented and must develop in learners caring, co-operation and respect for others. In addition to equipping them with life skills and attitudes, it must prepare them to lead a full life. Our educational policies and the subsequent curriculum framework all along have emphasized the need for values education but careful analysis reveals that we value those aspect of education that translates into academic excellence creates opportunities for employment. Co-curricular and co-scholastic activities play a very important role for inculcation of values in the learners. In this research paper researcher discussed about how value inculcate through co-curricular and co-scholastic activities in the school students.

Keywords: education, learners caring, co-operation

Introduction

"Values are the ideals, beliefs, or norms which a society or the large majority of a society's members holds".

– Kane (1962)

Education is inherently values oriented and must develop in learners caring, co-operation and respect for others. In addition to equipping them with life skills and attitudes, it must prepare them to lead a full life.

Values are essential for positive human behaviour. Education from time immemorial has focused on values. Values form the core of educational goals and objectives. Almost every education policy document has emphasized the role of education in fostering values. Education Commission (1966) recommended introduction of social, moral and spiritual values in the school curricula. The National Policy of Education (1986) also highlighted the need of education for values in removing intolerance, violence, superstition and upholding social, cultural and scientific principles to make India a secular, democratic and progressive nation taking pride in its cultural heritage. The National Curriculum Framework for School Education (2000) brought to focus the erosion of ethical, social and spiritual values and suggested the integration of values in the curriculum.

The National Curriculum Framework (NCF), 2005 strongly advocates values like cooperation, respect for human rights, tolerance, justice, responsible citizenship, diversity, reverence towards democracy and peaceful conflict resolution.

In designing a Values Education Programme, a school needs a clear vision and approach to ensure the integrity and consistency of the effort. It helps to organize thinking and effort to achieve a goal. Once an Action Plan has been developed, especially in the curriculum, it can be developed spirally, in depth and width, from grade to grade.

Our educational policies and the subsequent curriculum frameworks all along have emphasized the need for Values Education but careful analysis reveals that we value those aspects of education that translates into academic excellence

and creates opportunities for employment. Values Education is also perceived as an extra workload or an additional programme or activity. In this research article researcher discussed that how co-curricular and co-scholastic activities play a important role of activities, development of values.

Values development through co-curricular / co-scholastic activities

Co-curricular or Co-scholastic activities are great sources of Values Education. Almost all activities, other than academic programmes, come under the ambit of co-curricular activities. They contribute immensely towards development of students. These activities, often voluntary, are taken up with involved participation and are therefore highly refreshing and creative. The informality and openness generated by these activities help the child to come in close contact with the teachers and their peer group several times, and it is just the right natural environment for values learning.

Defining the aim of Education in 'Learning to be' the most significant document of UNESCO, on Education, the Education Commission states "the physical, intellectual, emotional and ethical integration of the individual into a complete man is a broad definition of the fundamental aim of Education. A well designed and organized programme of co-curricular activities with its wide range and potential can definitely help the schools to achieve such an aim of Education.

The sweep of co-curricular activities in educational process is such that it is possible through them to effectively achieve that the physical, intellectual, emotional and ethical integration.

The very significant title of UNESCO document 'Learning to be' in itself indicates that education has to be formative in character and not merely informative; that it has to be essentially values oriented; leading to development of an integrated holistic person and that the schools must bring in all such forces, programmes and resources into play which help achieve the very fundamental aim of Education. Co-curricular

DEMONSTRATION METHOD OF TEACHING SCIENCE AS A DEVICE- AN OVERVIEW

Dr. Digvijay Singh, *Asst Professor, Pedagogy of Biological Science, University College of Education, K. U. Kurukshetra*

Abstract

Demonstrations are very useful teaching devices; they serve several possible functions, often two or more at the same time. Generally, teachers should use demonstrations more freely than they do, but it must always be remembered that demonstrations have certain limitations. Demonstrations should not be used indiscriminately nor to the exclusion of other teaching techniques. Improperly used, they defeat the purposes of the science program. Used to the exclusion of other techniques they prevent the full realization of the potentialities of the science program.

INTRODUCTION: A demonstration is, as the word implies, a showing. When a teacher shows his class how to cut a pane of glass he is presenting a demonstration. When he shows the reaction of sulfuric acid and sugar he is presenting a demonstration. Many demonstrations are called "experiments" when according to the strict meaning of the latter term they should not be. To be an experiment, a demonstration must be built about a problem the solution of which is unknown to the pupils. The teacher who demonstrates the electrolysis of water to show that water is composed of oxygen and hydrogen is not performing an experiment. The teacher who demonstrates electrolysis of water to find out what constitutes water is performing an experiment. There is a subtle but important difference. By custom, demonstrations are presented by teachers. There are many valuable outcomes to demonstrations presented by the pupils themselves, either acting alone or in small groups. To profit by these possible outcomes the teacher should broaden his concept of demonstrations to include pupil presentations.

SPECIAL FUNCTIONS OF DEMONSTRATIONS- Demonstrations may be used in several ways, each of which makes its own special contributions to the teaching of science.

1. **To set a problem.** A demonstration may be presented without previous discussion. From the results arise problems of interest to the class.
Mr. Arvind used the traditional "water to wine" trick to introduce a study of chemical indicators. As he poured water containing a little phenolphthalein from a bottle into a drinking glass containing traces of sodium hydroxide, the liquid became bright pink. The startled pupils demanded to know the cause and thus the topic was introduced.
2. **To illustrate a point.** This is the most common use of demonstrations.
During a discussion of a recent eclipse of the moon Miss Rita set up a model to demonstrate the relative positions of the sun, earth, and moon during an eclipse.
3. **To help solve a problem.** Sometimes a problem of general interest arises spontaneously. If the answer can be discovered by an experiment that lends itself to demonstration, it may be advantageous to employ this technique.
During a discussion of safety practice/the question about the electrical conductivity of water arose. Mr. Ravi needed but a few moments to assemble the equipment needed to provide an answer to the question.

LEARNER-CENTRED TEACHING IN ELEMENTARY SCHOOL

NEED OF THE HOUR

Dr. Digvijay Singh*

Introduction

The teacher's attitude toward himself, his attitudes toward others, and what he wants from life determine for the most part how he works with his pupils. If, for example, a teacher decides to become a teacher because he wants to dominate and to manipulate others but doubts his ability to dominate adults, this will reflect itself in the way he works with children. Frequently, the teacher is not fully aware of these motivations himself; consequently, he may not realize the extent to which he manipulates his pupils to meet his own needs. In fact, most such teachers build a rationalization which justifies their behavior. Other teachers believe that they know what is best for all children and that any effort to adapt instruction to the pupils' interests, needs, or academic backgrounds represents a failure to protect society's best interests (though for some this too is a rationalization of their emotional needs). There are three possible reasons for this view: (1) they do not know that a child may be hurt by repeated failures, that repeating a grade often fails to improve significantly a child's score on achievement tests, and that retarded children may have a bad influence on their younger classmates; (2) they understand the consequences of enforcing rigid standards and of not providing challenging work for the gifted children but they are either unwilling or unable to provide the special individual assistance required; and (3) they do not believe in free public education for all American youth – they want to encourage the slow learners to leave school.

On the other hand, there are many good elementary-school teachers who believe that they know what is best for their pupils and that their pupils are too immature to help them formulate classroom regulations and plan worthwhile learning activities.

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Quality Assurance in Education: Problems and Remedies

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Abstract

The process of assessment, however, must be more structured and formal than the learning process if the purpose of the assessment process is the assurance that students have mastered a given discipline. The paper explains the objectives of quality control for the education system. It defines quality control as a system for setting standards in education process. The factors that affect the quality control were discussed. Finally the problems related to financing of education are explained in terms of its appropriateness in assessing quality were highlighted with their remediation measures.

Key-Words : Quality assurance, Determinant factors, Remedies, Higher Education.

Introduction

The term quality assurance in education is increasingly used to denote the practices whereby academic standards, i.e., the level of academic achievement attained by education graduates, are maintained and improved. Academic quality as equivalent to academic standards is consistent with the emerging focus in higher education policies on student learning outcomes: the specific levels of knowledge, skills, and abilities that students achieve as a consequence of their engagement in a particular education program (Brennan and Shah, 2000). A useful distinction is drawn between internal and external academic quality assurance. Internal quality assurance refers to those policies and practices whereby academic institutions themselves monitor and improve the quality of their education provision, while external quality assurance refers to supra-institutional policies and practices whereby the quality of higher education institutions and programs are assured. Individual universities have always possessed policies and practices designed to assure the quality of education, but academic institutions have also always operated within a national policy framework designed by the state to assure academic standards.

Quality Control

The quality control are often understood as related to excellence, trait or asset, associated and linked with standard, class effectiveness and features. All these terms are interchangeable and when put to control, guidance, direction or judgement; become the term quality control. According to Higher Education Quality Council, it is observed that "Quality is higher education embraces, but is not synonymous with effectiveness, efficiency and accountability." Educational quality control is the only way to help a nation to develop progress and become advanced nation. The University Education Commission (1948-49) used the term standard and not quality. The quality in education need to be defined in the wider sense

Saini

Computer as a Tool to Assist in Teaching and Learning

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Abstract

A frequent challenge for teaching and learning lies in keeping knowledge up to date. This article provides a view on rationales for the use of computers in teaching and learning. The intent of this research paper is to help foster discussion about the ways of using computers in teaching and learning to meet the needs of a continuously evolving and changing teaching learning process in terms of computer technology skills. The article includes obstacles or concerns in using computers as teaching and learning tools. Finally, a discussion regarding role of an organization to have a success for the whole institution are presented.

Key-Words : Computer , Teaching and Learning, Research.

Introduction

Teachers are creative, intelligent people. When they learn to use computer in their professional lives for keeping records, for creating documents, and for enhancing their own learning etc, they will soon discover the ways in which technology can enhance their professional growth and how they can help their students. Computer-based technologies can be used as tools for learning and teaching in a wide variety of context across all areas of learning. The extent to which educational computing enhances student learning outcomes depends on the intentions or purposes for which they are selected and applied. These intentions primarily reflect the learning needs and predilections of the students and teachers involved.

Rationales for The use of Computers in Teaching and Learning

Hawkrige identified and described the following four main rationales for the use of computers in Teaching and Learning:

- The social rationale: The social rationale suggests that all pupil teachers' should be aware and unafraid of how computers work. Because computers play an increasingly important part in modern life and institutions are supposed to prepare pupil teachers' for better life, it follows that institutions should provide some measure of computer awareness.
- The vocational rationale: This rationale suggests that pupil teachers' should learn to operate computers because learning to programme gives pupil teachers' confidence in their ability to control computers. Learning how to use applications programmes (word processors, spreadsheets) provides skills that will be needed later in life. Computer literacy and computer science should therefore be offered at school.

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A STUDY OF BURN-OUT IN RELATION TO DEMOGRAPHIC VARIABLES AMONG PRIMARY SCHOOL TEACHERS

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ABSTRACT

The present study attempts to study the Burn-out among primary school teachers in relation to their demographical variables. The research was carried out with the total of 100 primary school teachers of Faridabad district, Haryana. Maslach Burn-out Inventory (MBI) by Maslach and Jackson (1981) was applied to find out significant difference in burn-out of primary school teachers in relation to Sex and Pay-Scale. The study reveals that burn-out has no impact on the sex. This means this variable don't affect the burn-out of the teachers. But income of teachers is the cause of teachers burn-out at primary school stage. "Education is the preparation for complete living, adjustment to environment, perfection of one's nature, character building and harmonious development of personality." Hence Null hypothesis is accepted. But the calculated value for total burn-out is significant at both the levels. It means there is significant difference between teachers having high income and low income in relation to their burn-out. Some researchers revealed in their studies that those employees who suffer burn-out are located in lower levels of job satisfaction which cause reduction in their motivational level and performance (Rocca & Konstanski, 2001; Bettina & Piko, 2006). Thus the negative symptoms of job burnout among teachers are harmful to both students and teachers themselves. The effect of this factors make teacher facing unprecedented challenges of a career crisis and survival."

KEYWORDS: Burn-Out, Income, Primary School Teachers, Sex.



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A Quest For Better Evaluation Through Accreditation In Teacher Education

Dr. Rita Saini
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Abstract

In teacher education, accreditation is not only necessary but also mandatory because it is the most vulnerable and abiding quest for better evaluation of teachers. As teaching is a complex and unique activity, accreditation in teacher education is also a very complex and unique one. As teachers are always unique in their methods of teaching, whereby no two teachers are one and the same at any time anywhere, so accreditation should never be one and the same. Otherwise, it will simply deny the psychological truth of individual differences in teachers and their methods of teaching. Moreover, accreditation should also avert a common pattern of generalization of nature. This paper attempts to revisit our educational endeavours so far, highlight the factors affecting accreditation in teacher education; policies and principles for accreditation. Discussion on internal and external evaluation in teacher education also covered.

Keyword: Accreditation, Teacher Education, Evaluation

Introduction

Accreditation is the hallmark of recognition given to one's performance in achieving quality and excellence. It is the boosting component for any one in any activity where his/her involvement is assessed in terms of all-round performance quantitatively and qualitatively. This is particularly felt in higher education where the picture of qualitative education is sordid and dismal in relation to the vast pupil-clientele who reasonably or unreasonably rushes for higher education at the cost of a huge public exchequer.

Factors Affecting Accreditation In Teacher Education

This has been further aggravated due to the following factors:

- Good teachers are not credited with due appreciation.

॥ वांछित ॥

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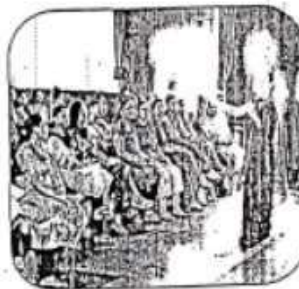
SELF-EFFICACY IN RELATION TO EMOTIONAL INTELLIGENCE OF SENIOR SECONDARY SCHOOL STUDENTS'

Dr. Rita Saini

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ABSTRACT :

This research has been performed with the aim of determining the relation between emotional intelligence (EI) and Self-Efficacy of the senior secondary school students. In gathering the data the descriptive method has been used and the measuring tools of Self-Efficacy Questionnaire developed by Peter Muris and Emotional Intelligence scale (2005)



developed by Dr. Rambir Sharma have been used. The results obtained from Pearson Correlation showed that there is a positive significant correlation between emotional intelligence (EI) and self-efficacy ($r = 0.3$). It was also found that female students were better than male students with regard to their self efficacy and emotional intelligence.

KEYWORDS: Emotional Intelligence (EI); Self-Efficacy; Self-Awareness; Managing emotional; Motivating oneself; Empathy; Handling relationships; Academic self efficacy; Social self efficacy; Emotional self efficacy.

INTRODUCTION

People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided. Such an efficacious outlook fosters intrinsic interest and deep engrossment in activities. They set themselves challenging goals and maintain strong commitment to them. They heighten and sustain their efforts in the face of failure. They quickly recover their sense of efficacy after failures or setbacks. They approach threatening situations with assurance that they can exercise control over them. Such an efficacious outlook produces personal accomplishments, reduces stress and lowers vulnerability to depression.

In contrast, people who doubt their capabilities shy away from difficult tasks which they view as personal threats. They have low aspirations and weak commitment to the goals they choose to pursue. They slacken their efforts and give up quickly in the face of difficulties.

SELF-EFFICACY

Self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. It refers to a person's judgment of own capabilities to organize and execute courses of action required to attain designated type of performance has also been found to be a major contributor to an individual's academic achievement (Bandura, 1986). It includes following dimensions.

1. Academic self-efficacy.
2. Social self-efficacy.

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R. Saini

345.45

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132

REVIEW OF RESEARCH

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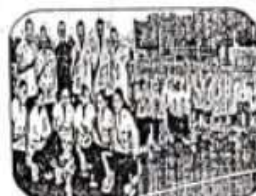
GIRLS PARTICIPATION IN GAMES AND PHYSICAL ACTIVITIES: SOCIO-CULTURAL HINDRANCES

Dr. Rita Saini

Assistant Professor, University College of Education, Kurukhetra.

ABSTRACT

This paper has reviewed the quantitative research into the reasons for non-participation of girls in sport and physical activity as appropriate or as a priority for women. Participation is motivated by enjoyment and the development and maintenance of social support networks. Barriers to participation include transitions at key stages of the life course and having to reorient individual identities during these times. But now the changing attitude of society and the new concept of Physical Education have created interest in games and sports among the people. It has been realized that existence of girls' participation in sports can't be ignored. They have a vital place in the category of sportsman.



KEYWORDS : Physical Education , category of sportsman.

INTRODUCTION

Sports activities develop awareness, gracefulness, aesthetic sense, higher degree of proficiency, neuromuscular skill and better neuromuscular co-ordination among the participants. Sports activities help to reduce the risk of heart disease, control body weight, prevent hypertension, delay degeneration and promote better growth.

On a simple level, barriers to participation in physical activity include high costs, poor access to facilities and unsafe environments. Other more complex issues relating to identity and shifting social networks also have a great influence. Some women in the groups described how in their culture, women were expected to adhere to particular roles and participate in separate activities from men. Men are participating in games and physical activities with greater enthusiasm but the women are lagging behind due to some cultural factors. Women are restricted to participate in sports due to the attitude developed towards sports and physical activities. Women used to occupy the secondary status in the society as compared to men. This type of feeling was not prevalent in India but all over the world. They used to be considered the solution of family and welfare of the children. Hart (1972) has remarked that women normally used to experience rejection for sports participation because of social norms and sex-role in the society.

Participation rates among women and girls are much lower than men's. The many reasons for this gender gap can be grouped as practical, personal and social and cultural. Socio-Cultural Barriers refer to specific social and cultural practices, beliefs and traditions within a community or society and how these impact on self perceptions and the perceptions of others. Of particular significance in this area are

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RESEARCH DIRECTIONS

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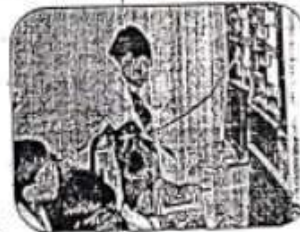
USE OF COMPUTERS : TEACHERS' OF SENIOR SECONDARY SCHOOLS OF KAITHAL DISTRICT

Rita Saini

Assistant Professor in Teaching of Computer Science, UCEK.

ABSTRACT

The present study attempts to study the status of use of computer by teachers in senior secondary schools. Fifty teachers were selected from five schools randomly. The result reveals that computers were available for students, teachers and administrative staff and also for library. It was found majority of teachers spend less than five hours on computers per week. They did not get sufficient time to use computers. The study revealed that the teachers were quite apprehensive about the use of computer in their teaching, but they are looking forward to the challenge. The teachers use computer for their teaching and for recreational purposes. The teachers felt that the use of computer is partially integrated in the studies of their institution.



KEYWORD: Computer, Secondary school teachers.

INTRODUCTION

A computer has a lot of applications in all the fields. The presence of computer cannot be ignored in any field of life. For the best use of the presence of computer everywhere, it is necessary that people must have proper knowledge of uses of computer and its advantages to them. It is a powerful aid to representing and solving complex problems. In technological environment teachers and students can learn valuable lifelong skills such as self assessment, planning a task of significant length, budgeting time and other resources, working in a team, peer assessment etc.

JUSTIFICATION OF THE STUDY

It was found that the teachers alone, through lectures and text books failed to clarify the subject matter to the students. Hence they need some effective devices and instructional techniques to carry out their teaching tasks successfully and effectively. Most of the efforts at present are invested in providing computers, training teachers and producing software. Few research studies have been conceived to investigate its actual use or effect on teaching. Since in our country, there is no optimum use of computer in schools by teachers. The investigator is interested to determine the status of use of computer in senior secondary schools by teachers, that why the investigator choose this study.

Rita Saini

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137 (121)



REVIEWS OF LITERATURE

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SELF-CONCEPT IN RELATION EMOTIONAL INTELLIGENCE OF SENIOR SECONDARY SCHOOL STUDENTS'

Ms. Rita Saini

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ABSTRACT

This research has been performed with the aim of determining the relation between emotional intelligence (EI) and Self-Concept of the senior secondary school students. In gathering the data the descriptive method has been used and the measuring tools of Self-Concept Questionnaire (SCQ) developed by Dr. Raj Kumar Saraswat (1984) and Emotional Intelligence scale (2005) developed by Dr. Rambir Sharma have been used. The results obtained from Pearson Correlation showed that there is a positive significant correlation between emotional intelligence (EI) and self-Concept ($r = 0.3$). It was also found that female students were better than male students with regard to their self-Concept and emotional intelligence.



KEYWORDS: Emotional Intelligence (EI); Self-Concept; Self-Awareness; Managing emotional; Motivating oneself; Empathy; Handling relationships; Physical self concept; Social self concept; Temperamental self concept; educational self concept; Moral self concept; Intellectual self concept.

INTRODUCTION

The self can be described as an object or as a process. Self as a person refers to a person's attitudes towards his feelings and his perception and evaluation of himself as an object. There are different aspects of self such as perceived self, ideal self, social self, real self, material self and spiritual self. Once a person becomes aware of his 'self' then the next step is the formulation of a concept of that self. Children with positive self-concept are described as imaginative, confident, assertive, able to assume leadership roles, less preoccupied with themselves and able to devote more time to others and to external activities. Children with of negative self-concept are said to be quite, unimaginative, unobtrusive, unoriginal, withdrawn, doubtful about themselves.

SELF-CONCEPT

What a person thinks about himself determines his activities and behaviour, pleasurable experiences enhance self-concept while failures lower the self-concept. It is also determined by what significant other say (encouraging or discouraging) about you.

Self-concept is inherently phenomenological, that is, it refers to the person's own view of himself or herself. It is one of the most popular ideas in psychological literature. Terms such as "self-concept," "self-esteem," "self-worth," "self-acceptance," and so on are often used interchangeably and inconsistently, when

Available online at www.lbp.world

Saini

Pedagogical Practices for Effective Inclusive Education



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Abstract: Education should include a wide range of learners, learners with special educational needs being one of the compact target groups. Seeking pedagogical support to learners with special educational needs has become a blazing topic of discussion among contemporary educational theorists and practitioners. Implementation of an Inclusive Approach in education is accompanied by a series of interrelated topical issues on the levels of pedagogical practice, school administration and academic debate. In this point, a traveling around of the inclusive practices is inevitable to explore appropriate strategies and practices to successfully implement an Inclusive Classroom set up. The present paper aims at bringing out an account of the theoretical bases for evolving an effective Inclusive approach.

Keywords: Education, Inclusion, Approach and Pedagogical Practices

Introduction: The term 'Inclusion' has been widely accepted as common idiom within today's education system. The growing number of persons who are barred from meaningful participation in the social, economic, political and cultural life of their communities is one of the challenging problems the world faces today. Such a condition is neither efficient nor safe. Inclusion is the provision of services to students with disabilities in their vicinity, schools with necessary support services and additional aids for both children and teachers. It means meeting the needs of children with disabilities for a free and eminent public education in the least restrictive and most effective environment. The aim of inclusion is to prepare students to participate as full and contributing members of the society. Inclusion is not an experiment to be tested but a value to be followed. Education is the right for all children whether they are disabled or not, as they are the future citizens of the country. Over the years, the concept of inclusive education has replaced the term integrated and Special education. Inclusion is not confined to the disabled. It also means non-exclusion (NCF-2005). It refers to an education system that embraces all children, regardless of their physical, intellectual, social-emotional, linguistic or other conditions. Inclusive education is about embracing all (NCF-2005). An inclusive class may have amongst others, differently abled children or street children, street or working children, children from remote or nomadic populations, children belonging to ethnic, linguistic or cultural minorities or children from other disadvantaged or marginalized groups. The national curriculum framework for school education (NCFSE) (2000), carried out by the NCERT, suggested inclusive school for all without exact reference to pupil with special education needs as a way of providing quality education to all learners.

The Draft of Inclusive Education Scheme, MHRD, (2003) "Inclusive Education means all learners, young people with or without disabilities being able to learn together in ordinary preschool provisions, schools and community educational settings with appropriate network of support service." National Curriculum Framework (2005) policy of inclusion needs to be implemented in all schools and throughout in our education system. The involvement of all children needs to be made sure in all domains of their life in and outside the school. Schools need to become center that prepare children for life and ensure that all children, especially the differently abled children from marginalized sections, and children in difficult circumstances get the maximum benefit of this critical area of education. UNESCO 2006 gives four key elements for Inclusive Education

- i. It is essentially a process of looking for the most appropriate ways of responding to diversity as well as trying to learn how to learn from the differences;
- ii. It is linked to stimulating, through multiple strategies, the creativity and the capacity of addressing and resolving problems by students;
- iii. It comprises the right of the child to attend school, express his/her opinion, have quality learning experiences and attain valuable learning outcomes; and
- iv. It implies the moral responsibility of prioritizing those students who are at risk of being marginalized and excluded from the school, and of obtaining low learning outcomes.

Benefits of Inclusion for children with Disabilities: There are many benefits inclusion for children with diverse abilities. McGregor and Vogelsberg (1998), in comprehensive review of literature list the following benefits.

- i. Children with disabilities demonstrate high levels of social interaction with non-disabled peers in inclusive setting.

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A study on attitude of under-graduate students towards privatization of higher education in Universities of Haryana

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University College of Education
Kurukshetra University
Kurukshetra (Haryana)

Abstract

The study was designed to find out attitude of under-graduate students towards privatization of higher education in Universities of Haryana. The sample consisted of 100 under-graduate students out of which 50 were boys and 50 were girls. For this purpose of investigation "descriptive survey method" of educational research was preferred. In the study, systematic or stratified a random sampling method was employed to select a representative sample. Hundred under-graduate students were selected from various University Departments. Out of 100 students, 50 male and 50 female were included. In the study, a self-developed attitude scale is used by the investigator as a tool for collecting data. The attitude scale comprised of 30 items. The students were asked to fill the response as Strongly Agree, Agree or Disagree and it was analyzed.

Keywords: Privatization, Higher education, University, Under-graduate

Introduction

Education is a must for the development of every country as without education there are chances of development, so in this respect education is main weapon to improve and eradicate evils. Higher education is the need of the hour. Indian education set up is distinctly different from other countries and facing crisis in the higher education segment. Higher education is not a recent phenomenon in India. Since ancient times, India has been a center of excellence in the field of higher education. Nalanda, Vikramshila and Takshashila were few of the oldest universities in the world and were the most renowned seats of higher education during their time. Students from far off countries came to study in these universities.

The only purpose of a University is to teach a student how to live his life by developing and equipping him to deal with reality. It develops manpower for different levels of economy and contributes to national development through dissemination of specialized knowledge and skills. It is, therefore, a crucial factor for survival and to make progress. Higher Education has the power to produce change for moving the country along the development continuum. Higher education brings strength to the nation. Higher education is associated with the education that is provided by colleges and universities to educate all the youth. The kind of higher education has been found in a developing country today, will play a

QUALITY ASSURANCE IN TEACHER EDUCATION: PROBLEMS AND CHALLENGES

Dr. Angrej Singh, Assistant Professor, University College of Education, Kurukshetra University,
Kurukshetra

Abstract

The Development of teacher education in India has not shown any sustained growth except for the quantitative expansion of teacher training colleges. The Indian Education Commission (1964-66) has very rightly put its finger on teacher education and has expressed concern over it. It suggested that teacher education being a vital programme should be given priority in the educational reconstruction of the country in the post-independence era. In the fact, there is no dearth of ornamental nomenclatures in the field of teacher education, but a mere change in nomenclature cannot deliver the goods. There is wide-spread dissatisfaction among educational circles about teacher education. Education of teachers not only facilitates improvement of school education by preparing competent, committed and professionally well qualified teachers who can meet the demand of the system, but also functions on a bridge between schooling and higher education. In any educational system the teacher has a pivotal role to play. Ultimately, the responsibility of making the education works lies within educational programs, the quality of education will depend on the quality of teachers. So it is necessary to raise the professional status of teachers, developing among them greater commitment of society, their students and their profession, increasing their professional competencies and performance skills and empowering them to face new challenges. This paper discusses the concept of quality governance in teacher education contemporary issues and future challenges. However, in view of several other issues and challenges that are emerging due to socio-economic and technological developments, attempts for improving and technological developments, attempts for improving and strengthening teacher education system in order to make the system fully relevant and effective in the present and future contexts of our society. Here in this article some major problems of the teacher Educators have been brought into notice.

Keywords : Teacher Education, Quality of Education

Introduction : The Development of teacher education in India has not shown any sustained growth except for the quantitative expansion of teacher training colleges. The Indian Education Commission (1964-66) has very rightly put its finger on teacher education and has expressed concern over it. It suggested that teacher education being a vital programme should be given priority in the educational reconstruction of the country in the post-independence era. For achieving this goal, the teacher education must be more intensive and purposive. The greatest concern of every teacher education institution should be to turn out competent teachers, who not only can function effectively and fruitfully in class room situation but also establish pleasant human relations with their students, colleagues and the community at large. And therefore, the teacher education should aim at the development of healthy attitude among teachers towards the profession, the society and the nation. It should inculcate leadership so as to help the teachers to inspire the young generation with new ideals.

Professionalism in Teacher Education : Teacher education programmes at all levels need to be so remodelled that they reflect professionalism in the process of teaching and training. The essence and central concern of professional ideal is competence which will ensure quality and character of teaching in our schools. Teacher education revamped with this ideal in view, will equip teacher with personal attributes of empathy, perception of the need profile of learners and capability to impart education in all aspects of cognitive and affective domains as well as psychomotor skills. Therefore the teacher education programmes has to be totally professional. Meaning thereby that the teacher education courses have to have specialized knowledge, specialized skills and inherent code of ethics. For this purpose the teacher education programme will have to develop specialized, skill training and strong knowledge base.

Development of Education as a Discipline : Concerned with the issue of professionalisation of teacher education is the issue of developing and recognizing education as a discipline Education is still predominantly perceived within the domain of teacher training and equated with pedagogy which is expected to be located in training institutions. This restricted view of the rich area of study of education has curbed its development in the past. Serious attempts can be made by the educationists and administrators of universities to be made to visibly correct this perception. It should acquire the same place in teaching and research at secondary and undergraduate levels as is occupied by other social sciences.

Article

Gas Chromatography-Mass spectrometry analysis of total lipid and fatty acid content of Spirulina/arthrospira strains

March 2018

Authors:



Neeraj Kumar Aggarwal
Kurukshetra University

ORIGINAL CONTRIBUTION

Open Access

Investigation of nootropic potential of ethanol extract of *Elettaria cardamomum* Maton fruit (Cardamom): a spice of India



Sapna Saini, Manjusha Choudhary* and Ankur Garg

Abstract

Background: Cognitive impairment mainly affects learning and problem solving abilities of the person. Traditional medicines, due to fewer side effects, more efficacy and lesser cost are still the choice of treatment in India. The main objective of the present study is to explore the nootropic potential of ethanol extract of *Elettaria cardamomum* Maton fruits. The present study was conducted by using exteroceptive behavioral models like elevated plus maze, passive avoidance apparatus and object recognition task at doses 100, 300 and 500 mg/kg.

Results: Ethanol extract of *E. cardamomum* fruits significantly decreased transfer latency and increased step down latency and discrimination index respectively when compared to normal control groups. Piracetam and diazepam exhibited respective rise and fall in memory of the animals. The effect of plant extract on total serum cholesterol, acetylcholinesterase and malondialdehyde were more effective at two higher doses. However, it decreased serum glucose levels insignificantly whereas a significant rise in brain GSH levels was observed with increasing dose of the extract.

Conclusions: The study concludes that the nootropic effect of ethanol extract may be attributable to its anti-oxidant, anti-cholinesterase and cholesterol as well as glucose lowering potential.

Keywords: *Elettaria cardamomum*, Memory, Cognitive impairment, Amnesia: Nootropics

Background

Alzheimer's disease (AD), one of the most common cognitive disorders, characterized by progressive neurodegeneration, prevails in around 35 million people worldwide, of which 4.5 million Americans are affected annually [1]. However, the estimated figure for AD patients in India is less than 3.5 million, which is relatively smaller as compared to United States of America [2]. Oxidative stress is a major implication to these disorders as it plays a vital role in various pathological events such as mutagenesis, aging and neurodegenerative disorders [3]. Moreover, neuromodulators, diverse neurotransmitters and receptor systems are included in the cognitive

viz., acetylcholine, nor-epinephrine, dopamine, serotonin, GABA and histamine [4, 5].

Piracetam is the chiefly used nootropic agent [6], along with aniracetam, pramiracetam [7] and choline esterase inhibitors like donepezil which are primarily being used for enhancing mood, gastro protective memory and behavior. However, due to side effects their use has been limited [8, 9]. According to World Health Organization (WHO), more than 3.3 billion people are resident of developing countries and rely on traditional herbal medicines for their primary healthcare needs [10]. Ayurveda, the oldest Indian medical system in the world, reports a group of plants called '*medhyas*' which possess neuro-modulatory activity, of which, *Shankhapushpi* (leaf), *Jataamansi* and *Ashwagandha*, are the most extensively used plants [11].

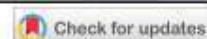
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(RESEARCH ARTICLE)



Molecular docking studies of dihydropyridazin-3(2H)-one derivatives as Antifungal, antibacterial and anti-helminthic agents

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Abstract

Molecular docking is the identification of ligand's correct binding geometry i.e. pose in the binding site and estimation of its binding affinity for the rational design of drug molecule. The current study endeavored the high throughput in silico screening of 24 compounds docked with their respective protein using PyRx-Virtual Screening Tool software. Out of 24 compounds, almost all test compounds showed a very good binding affinity score. Fluconazole was used as a standard drug in case of Antifungal, Ciprofloxacin in case of Antibacterial, and Albendazole in case of Antihelmintics. More negative is the binding free energy score, more favorable is the pose for binding to protein active site. Based on H-bond interactions of these 24 compounds, Compounds 3a5, 3c3, 3d5, 3d6 were found to be the similar outcome for antifungal activity as fluconazole, Compound 3a1 for antibacterial, and Compounds 3b5, 3d6 for the antihelminthic agent. Furthermore, the affinity of any small ligand molecules can be considered as an extraordinary tool in the field of drug design and offer imminent in future examination to build up potent antimicrobial agents.

Keywords: PyRx; Fluconazole; Ciprofloxacin; Albendazole; Antimicrobial

1. Introduction

The arrival of new medication into a market will take an average of 10-15 years and about US \$2 billion. Traditional approaches of drug discovery relied on chemical entities which were obtained from natural products and the whole process was time-consuming and perhaps less economical[1]. These drawbacks allow the shift of the traditional approach to combinatorial and in silico approaches, which supported the assistance in structural information[2]. These new advancements play an essential role in reducing expense and the hour of early drug discovery[3]. Structural and Ligand-based methodologies are the most important techniques in drug designing and virtual screening in CADD. Structure-based drug design relies on the understanding of 3d structure of protein acquired through NMR, X-Ray Crystallography, and any other technique while ligand-based drug designing is based on pharmacophore modeling and Quantitative Structural Activity Relationship(QSAR)[4]. The molecular docking technique determines binding interaction between protein molecule and optimum conformation of ligand molecule so that overall energy of system undergoes minimization to form a stable complex[5]. Ideally, Computational docking gives prediction about binding affinity and interaction with protein's active site before the compound is synthesized[6]. Hence, reduce the cost of money and material for the synthesis.

1.1. Types of drug design

Drug design includes two important types

- Structure-based drug design

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Parenting styles and family environment as predictors of aggression

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The present study was planned to analyze the role of parenting styles and family environment as predictors of adolescent aggression. The sample consisted of 300 adolescents. Children's perception of parenting Styles, Family Environment Scale, and Aggression Questionnaire were used to evaluate parenting styles and family environment and to observe their relationships with aggression. In addition, the predictive capacity of parenting styles and family environment were also analyzed. The data were analyzed with the help of Pearson's Product Moment correlation and stepwise regression analysis. The results of the study demonstrated that (i) democratic, accepting, rejecting, and over-demanding parenting styles are strongly related to aggression and (ii) Family environment also demonstrated strong inverse relationships with aggression. (iii) Stepwise regression analysis revealed that accepting and, rejecting dimensions of parenting styles and independence and expressiveness dimensions of family environment were strong predictors of aggression in adolescents. These results confirm the predictive significance for parenting styles and family environment on aggression.

Keywords: adolescents, aggression, parenting styles, family environment

Aggression is one of the leading causes of loss of human lives and this universal trait is prevalent in all the societies. Aggression is a generic term that includes different types of behaviour including verbal and physical aggression, rape, robbery, and bullying. Loeber and Hay (1997) described aggression as a class of behaviour that causes or threaten physical harm to others. Anderson et al. (2003) have suggested that aggression is directed towards others with some intent to harm them. Baron and Byrne (2000) opined that aggression is a behaviour that is aimed to harm others, who in response, wish to save themselves from such act. Though, there is no consensus over one definition of aggression, most of the psychologists agree that the motive to harm others is the core of aggressive behaviour. Aggression is broadly categorised in two types as covert and overt aggression (Connor et al., 2004). While overt aggression is mainly related to visible aggression where people show direct physical or verbal aggression including fight, threats and singling out others, covert aggression is hidden and aimed to harm others through stealing or arson. Apart from these two categories, researchers have also separated aggression as physical, verbal, or relational aggression, and cyber-bullying.

The incidents of aggression and violent behaviour are on the rise among adolescents and youth which have posed serious threats to the safety and security of society. Kumar et al. (2016) conducted a research to estimate the prevalence of aggression in Indian adolescents and found that aggression ranges from 17.7% overall to 66.5% for physical aggression in Indian teenagers. Some researchers are of the view that genes and biological factors are the determinants of aggressive behaviour in teenagers. While others believe that parenting and family factors play a crucial role in the formation and development of adolescent aggression (Khatri & Kupersmidt, 2003).

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Parenting style has been defined as a universal climate in which a family functions for nurturing their children (Darling & Steinberg, 1993). Different parenting styles have been identified, like the authoritative, authoritarian, and indulgent, which are based on the two fundamental dimensions indicating parental support and strict control (Baumrind, 1967, 1971; Maccoby & Martin, 1983). Baumrind (1967) has recommended four types of parenting styles including authoritative, authoritarian, permissive, and neglectful parenting. Authoritarian parenting style is considered more discipline oriented whereas authoritative style use discipline but provide necessary freedom to the children. Silva et al. (2007) has suggested that children of authoritarian parents experience more anxiety in comparison to authoritative parents. Kopko (2007) mentioned that adolescents of authoritarian parents are at the risk of becoming aggressive and rebellious because this type of parenting is strict and punitive and lacks empathy. Baumrind described permissive parenting style as non-demanding and non-obligatory. Such parents allow their children to behave the way they wish. Greenwood (2013) opines that authoritative parenting style is democratic in nature and here discipline is used with logic and reasoning to control the behaviour of children. Whereas he mentions that permissive parents love, and care but lack control over children even if their security is at danger. Cottrell (2001) and Garrido (2005) have mentioned that both over protectiveness and permissiveness are harmful for the development of the children. Baumrind (1991) also mentioned that negligent or detached parents do not support their children in any situation. They have little demand and take no responsibility of their children. Further, there is almost no communication between parent and child in such type of parenting (Cherry, 2013).

Puberty is the period when conflict between parents and children start taking place. These conflicts majorly relate to parental authority and freedom of the teens. Recently, it has been observed that social media also plays a pivotal role in disagreement between parents and adolescents. Baumrind (1971) said that parenting techniques has a direct effect in shaping child's development. During the early years of a child's life, parents manage the frustration

Molecular Characterization and Dosage Application of Autochthonous Potential Probiotic Bacteria in *Cirrhinus mrigala*

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Abstract:

The present communication deal with the identification of probiotic strain isolated from the intestine of *Cirrhinus mrigala* (Mrigal) on the basis of phylogenetic analysis and nucleotide homology and was found similar to *Bacillus cereus* strain SL1. The strain was further investigated for its probiotic abilities; acid and bile tolerance, autoaggregation, coaggregation and hydrophobicity. A dietary experiment of 90 days was carried out to examine its effect on the growth, digestive enzyme activity and survival of *C. mrigala*. Four isonitrogenous and isocaloric diets were prepared and *B. cereus* was incorporated in the experimental diets; T1, T2 and T3 at three different levels in the proportion of 2×10^4 , 2×10^5 and 2×10^6 cells 100 g^{-1} of feed respectively, along with a control diet TC without probiotic. After 90 days, the group of mrigal fed on probiotic supplemented diets showed significantly ($P < 0.05$) better growth, specific growth rate (SGR), feed conversion ratio (FCR) than those fed with basal diet (control) with best result for diet T2 ($P < 0.05$). Values of digestive enzyme activities (protease, amylase and cellulase) and carcass protein were also significantly ($P < 0.05$) higher and excretion of metabolites (ammonia and phosphate) were lower in groups fed with diet T2. When probiotic supplemented diet fed fish were challenged with pathogenic *Aeromonas hydrophila* by immersion for 10 days, all probiotic fed groups showed high survival in comparison to group fed on control diet without probiotic supplementation indicating immunostimulating effect of probiotic in diets of *C. mrigala*.

Keywords: *Bacillus cereus* strain SL1; Enzyme activities; Mrigal; Probiotic properties; Specific growth rate; Survival

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Enzymatic Profiling and Feeding Preferences of Catla: *Catla Catla*, Rohu: *Labeo rohita* and Mrigala: *Cirrhinus mrigala* in Rural Polyculture Ponds

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Abstract

This study was aimed at understanding the enzymatic profile of three major Indian carps in managed and unmanaged polyculture systems in the Hisar district, Haryana India. The three species were catla (*Catla catla*), rohu (*Labeo rohita*) and mrigala (*Cirrhinus mrigala*). Analysis of gut contents of *C. mrigala* from both the ponds was significantly ($p < 0.05$) dominated by phytoplankton. *L. rohita* gut had similar values of both phytoplankton and zooplankton while *C. catla* gut was significantly dominated by zooplanktons. The specific cellulase and amylase activities were higher in *C. mrigala*. It was further observed that these activities are higher in managed ponds as compared to the unmanaged ponds. *L. rohita* revealed elevated levels of protease and amylase activities which supported the omnivorous nature of the fish. Analysis of digestive enzymes from the gut of *C. mrigala* revealed more lipase, cellulase and amylase in comparison to other enzymes. It can be concluded that *C. mrigala* was phytoplanktivorous, *L. rohita* was omnivorous and *C. catla* was zooplanktivorous. Fishes reared in managed ponds seemed to have higher enzymatic activities in the gut advocating higher growth. The results of the study enhance our understanding of the feeding patterns at different stratus levels within the available nutrition in polyculture systems.

Keywords: Polyculture system; Digestive enzymes; Gut contents; Exogenous enzyme; Enzyme producing bacteria; Trophic level

Introduction

Fish culturing in small water bodies is quite commonly practiced in the Asia region as well as parts of Africa where culture fisheries are established in reservoirs, communal lakes and village ponds / private farm ponds [1-8]. For pond productions based primarily on natural food, achieving a good yield requires sufficient understanding of the plankton production system and limnetic ecology.

The abundance of the species composition and condition of the aquatic organisms in the natural community are related directly with the water quality. The effect of stress due to anthropogenic activities manifests themselves in the pond biota viz. changes in the pattern of distribution, elimination of the sensitive species, changes in diversity and subtle morphological and physiological changes [5,9-11]. The productivity level of a fish pond is dependent upon suitable pond ecological conditions, growth and abundance of fish food organisms.

Digestion depends on the physical state of food, as well as the kind and quality of enzymes secreted. Activity of digestive enzymes has been reported to change with the feeding habits of fish or availability of fish food organisms [12-14]. Improved understanding of pond fish digestive enzyme profiling can provide a better insight to explaining the digestive processes of the pond fishes that operate under variable conditions of feeding. From such understanding, the incorporation of appropriate enzymes can help in increasing the digestibility and improving the growth performance of fish.

Various works have been carried out on endogenous fish digestive enzymes by a host of workers [13-17]. Despite this, there is shortage of material on the subjects of enzyme production, the sources of these enzymes and their significance in fishes. Previous works have studied the native microflora of aquaculture fish for various objectives. These include microbial spoilage mechanisms, the environmental relationship with fish microflora [18-20] and profiling of the indigenous microflora antibiotic resistance [21-23].

Fish tend to continuously intake large quantities of microbes in their gut system from the surrounding water, food and sediments populated with bacteria [24]. Fish gastrointestinal tract is usually colonized by various types of heterotrophic bacteria in large numbers which include both aerobic and anaerobic bacteria. Despite various ecological research works on the gut bacterial flora in fish being previously available [25-27], reports concerning their functions have only appeared recently. There are some reports on microbiological enzymatic production in fish intestinal tract [13,14,17,28-33], however studies on the enzyme producing bacteria distribution in the gut of fish is quite limited. But it is confirmed that there are variations in the quality and quantity of these enzyme producing microorganisms the amounts of enzymes present in fish gastrointestinal tracts also vary.

Catla *Catla catla*, mrigala *Cirrhinus mrigala* and rohu *Labeo rohita* are three widely utilized and significantly important polyculture species in India [34,35], however there is insufficient information on the digestive physiology and feeding preferences of these three species. This study aims to provide a deeper insight on the digestive enzymatic activities and whether the three fish species in polyculture arrangement are occupying different trophic levels in terms of preferred foods for permitting feeding and good production.

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Evaluation of lysine and methionine supplemented duckweed (*Lemna minor*) based diet for *Labeo calbasu*

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ABSTRACT

An investigation was conducted to evaluate the effect of dietary supplementation of lysine and methionine, on growth performance and nutrient retention of *Labeo calbasu* fingerlings. Four experimental duckweed based diets A0 (control, without lysine or methionine supplementation), A1 (lysine), A2 (methionine) and A3 (both lysine and methionine supplementation) were fed to *L. calbasu* for 90 days in laboratory conditions. All treatments were maintained in replicate of three. Significantly higher ($P<0.05$) growth and nutrient utilization in terms of weight gain, specific growth rate, protein efficiency ratio, apparent protein digestibility and lower feed conversion ratio were observed in the fingerlings of group A3, fed on diet supplemented with both lysine and methionine. Significantly ($P<0.05$) low ammonia excretion and reactive phosphate production in holding water by A3 fed group denote the less deamination of protein fed resulting in better water quality. Significantly high erythrocyte and leucocyte count by A3 fed fingerlings illustrated superior health. Although group fed with lysine and methionine supplemented diet separately (diet A1 and A2) did not show low growth, carcass composition yet significantly more effective growth and improved protein accumulation was depicted by fish when fed on diet containing both the indispensable amino acids together revealing proper and efficient functioning and utilization of amino acids to balance the protein synthesis. The supplementation of essential amino acids can be helpful in promoting growth and feed utilization of candidate species by preventing halt in the protein synthesis imparted by the use of deficient and low value plant protein source.

Key words: duckweed, excretion, growth performance, *Labeo calbasu*, lysine, methionine

Escalating demand of edible fish has attracted the fish industrialists all around the world towards the intensive culture to increase the fish production for quenching the appetite of animal protein. The curiosity has generated the exploration of new ways of supplementation to aggrandize the growth and efficiency of the culture system. Dietary protein is of paramount importance for appraising the growth rate of fish. Strict legislation, the scarcity and accelerating prices have generated the interest of researchers to the use of plant protein source to partially or fully replace fish meal in order to mitigate the cost of production. Soybean, cowpea, duckweed, linseed (Garg *et al.*, 2002a) and many more plants

have gained much attention but these are deficient in some of the essential amino acids which may result in a halt to the growth of the organism since they are regarded as key components of cost-effective fish-feed formulations (NRC, 2011).

Deficiency of any of the essential amino acids results in the retardation of growth even if other ingredients are present in sufficient amount (Dutta, 1994). An equilibrium of indispensable and dispensable amino acids derived from the degradation of whole protein or supplementation is essential for protein synthesis to achieve optimum growth and feed efficiency.

Research Article

IMMUNOMODULATORY AND GROWTH PROMOTING EFFECT OF DIETARY
ADMINISTRATION OF INDIAN HERBS *ALLIUM SATIVUM* (GARLIC) AND *OCIMUM
SANCTUM* (TULSI) ON *CIRRHINUS MRIGALA*

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ABSTRACT

The present study was designed to monitor the effect of herbs garlic and tulsi. *Cirrhinus mrigala* (mrigal) fish (0.99-1.04 g) were fed on diets supplemented with dried powder of garlic/tulsi at 3 different inclusion level viz., 10, 20 and 30 g Kg⁻¹ of feed for 60 days while control treatment (CC) was not supplemented with any herb. Growth performance, intestinal enzyme activities, nutritional physiological parameters, non-specific immune response and post challenge survival were surveyed. Significantly (P<0.05) higher growth of fish in terms of live weight gain (g), specific growth rate, Apparent protein digestibility (APD), Gross conversion efficiency (GCE) and Protein efficiency ratio (PER) while lower FCR were observed in diets supplemented with herbs when compared to control. Significantly (P<0.05) high values of digestive enzyme activities (protease, amylase and cellulase), carcass protein coupled with low excretion of metabolites (ammonia and phosphates) were also obtained from herbal supplemented diets. Erythrocyte and leucocyte count, phagocytic ratio and index as well as NBT value were enhanced in fish fed on the plant extract-supplemented diets. A challenge test with *Aeromonas hydrophila* showed that the fish fed on the garlic/tulsi supplemented diets registered high survival rate. Garlic supplemented diets resulted in better growth and immunomodulatory response as compared to tulsi supplemented diets with feed G3 containing garlic in the proportion of 30 g kg⁻¹ of diet showing best results among all diets indicating that incorporation of herbs *A. sativum* (garlic) and *O. sanctum* (tulsi) in optimum dose can promote growth and improve immunity leading to sustainable aquaculture.

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INTRODUCTION

The new trend of improving food security and use of natural products will drive the chemically synthesized antibiotics and growth promoters out of use. Various antibiotics and chemotherapeutics have been extensively used as growth promoters and antibacterial agent. However, extensive use of antibiotics to control diseases without knowledge of dose and pharmacokinetic data on the fish poses serious environmental hazards (Baticados and Paclibare, 1992). Alongside, several studies have indicated antibiotics such as oxytetracycline often cause immunosuppression in many fish (Lunden *et al.*, 1998). Hence, to replace antibiotics, the attention is now being focused on various animal and plant derived immunostimulants. One such strong candidate to replace antibiotics is phytoadditive. Phytoadditives are fodder additives obtained from medicinal plants or plants extracts (Gabor *et al.*, 2010). The use of herbs in aqua farming have received more attention recently not only for their immune stimulating

functions but also for their influence on growth promotion. With their use it is expected to achieve the identical results as in the use of antibiotics with none or minimal side effects. *Allium sativum* (Garlic), an important medicinal plant provide a wholesome effect on the immune and cardiovascular systems besides having antiviral, antibacterial, antiprotozoal, and antifungal actions (Harris *et al.*, 2001). *A. sativum* (garlic) is known to be a rich source of calcium, phosphorus and vitamins; with high content of carbohydrates giving a remarkable nutritive value. Its antibacterial action is thought to be due to multiple inhibitory effects on various thiol-dependent enzymatic systems by allicin (Ankri and Mirelman, 1999). Allicin is formed catalytically by crushing raw garlic or adding water to dried garlic when enzyme alliinase convert allin into allicin (Kourounakis and Rekka, 1991). Additionally, direct intragastric effects are achievable because *A. sativum* antimicrobials are not affected by acid environments (Lawson, 1996); rather the gastric juice enhances the antimicrobial

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Article

Evaluation of dietary protein levels for the growing *Aorichthys aor* (Hamilton 1822)

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Feeding Preferences and Digestive Physiology of Indian Carps in Polyculture Pond System

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Authors' contributions

All authors have collaborated and made significant contribution towards the compilation of this work. Author GS and AB designed the study, performed the statistical analysis, wrote the protocol and the first draft of the manuscript. Authors KA and SAA managed the analyses of the study, managed the literature searches, drafted the discussion and performed editing of the manuscript. All authors read and approved the final manuscript.

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ABSTRACT

Catla (*Catla catla*), mrigala (*Cirrhinus mrigala*) and rohu (*Labeo rohita*) are commercially significant pond species in India. Despite being cultured for a long time in village ponds, sufficient information on the feeding preference and digestive physiology variables of these species in managed and unmanaged polyculture pond systems in India is not available. We carried out the gut content analysis and estimated the forage ratio for catla, rohu and mrigala species. The intestinal enzymes and liver glycogen were also estimated. Analysis of gut contents of *C. catla* indicated that the fish is herbivorous or phytoplanktivorous. Gut contents of *L. rohita* from all the ponds indicated it is Omniplanktivorous fish. In case of *C. mrigala*, the gut contents indicated that the fish is zooplanktivorous. Based on the results of digestive physiology, it can be inferred that consumable plant material would probably be exploited with the highest intensity by *C. catla* compared to *L.*

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Cypermethrin induced morphological changes in developing embryo of *Gallus domesticus*

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Abstract

Present study was designed to evaluate cypermethrin induced changes in different morphometric parameters of developing chick embryo of *Gallus domesticus*. The protective effect of vitamin C against cypermethrin toxicity was also measured. Fertilized eggs of *Gallus domesticus* of BV 300 were divided into four groups i.e. control, vehicle, treatment and protective group and were kept in an incubator at $38\pm 0.5^{\circ}\text{C}$ with a relative humidity of 60-70% and proper ventilation. Control group have untreated eggs. The vehicle group was supplied with distilled water whereas the treatment group was tested for 25 mg/L of cypermethrin, both via immersion technique. The eggs in protective group were administered with vitamin C by air sac method. 16-day old embryos were recovered from all the groups for assessing morphometric parameters including the mortality rate and number of surviving embryos having deformities, crown ramp length, net body weight, head diameter, eye diameter, beak and limb length. Results of present study showed that the mortality rate and number of surviving embryos having deformities were significantly increased upto 27% and 68% respectively in cypermethrin exposed group as compared to control group. The crown ramp length, net body weight, head diameter showed significant decline whereas eye diameter, beak and limb length showed slight alterations in treated groups. Vitamin C supplemented group showed sign of recovery in maintaining overall morphology of developing chick embryo against cypermethrin.

Keywords: Cypermethrin, vitamin C, *Gallus domesticus*, morphometric parameters

Introduction

Pesticides have gained great attention in the field of agriculture, public health and in domestic sphere. These chemicals are very effective against the targeted species, thus became the integral part of modern agriculture. Among different classes of pesticides, pyrethroid are first preference insecticides as they are biodegradable, less toxic to non-targeted species. Beside the valuable effects, they too have some inherent degree of toxicity towards non-target species. Studies quoted that pyrethroids could induce teratogenicity, reproductive toxicity, genotoxicity in non-targeted species [1, 2].

On the basis of presence of cyano group, pyrethroids can be categorized as type I and type II pyrethroid. Cypermethrin, type II, synthetic pyrethroid, has wide spectrum uses for controlling against agricultural pests, insects and ectoparasites [3]. Despite of profitable effects, cypermethrin induce toxicity via impairing sodium channels of non-targeted species [4]. Reports showed that its accumulation in tissues and organs, primarily in the central and peripheral nervous system, is due to its lipophilic properties [5-7]. The exposure of eggs with cypermethrin contaminated feed results in teratological abnormalities, organ dysfunctioning and mortality of young embryos.

Poultry is the one of the biggest industries of food. Increasing demand stir up the use of pesticides in poultry feed and management practices [8]. Thus, poultry animals come in contacts with pesticides. Adults are less prone to pesticides than foetus as they have well developed metabolic capacity [9]. Therefore, the teratogenic changes in developing organism are of more concern [10]. Chick embryo, a non-mammalian model is important for toxicological studies due to their accessibility, small size and known embryonic development [11, 12]. For chick developmental toxicological studies, eggs are contaminated either by injection or by immersion technique. Immersion method or dipping method overrule injection method as it mimics the exposure conditions as established in agricultural practices [13].

Although a lot of work has been done on the toxicity of cypermethrin in fishes and mammals, little is known about chicks [14]. Hence, the present work aimed to investigate cypermethrin induced morphometric changes in the embryonic stage (ED16) of *Gallus domesticus*.

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A Study of Quality of Work Life Across Demographic Variables in Commercial Banks

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Abstract

Work is vital part of every grown up person's life. Work can be defined as a physical and mental efforts or any activity directed towards the production and accomplishment of something. We spend about one third of our entire life in the workplace. It is the job that impact on the mentality of a person, ascertains the purchasing power of people, and the most especially contributes to social identity. It means a job becomes not only a source of living, but also regulates the life of an employee. Those, who are engaged with work, may have various anticipations from work which is essential for organisations to provide better Quality of work life to employees for the attainment of their personal and professional's goals. The quality of work life is more concerned with overall climate and the impact that work has on people as well as on organisational effectiveness. The present study has been conducted to examine the influence of demographic variable viz. age, level of education on the perceived level of quality of work life. The result indicates that there is significant difference in the extent of agreement exhibited by employees having different level of education and level of age regarding various dimensions of QWL. The study suggested that suitable measures need to be adopted to improve the aspects like 'job security' and 'image of organisation in society' as now graduates has become a commonly prevalent qualification. Further, the banking organisations should devote more emphasis on quality of work life activities at younger employees (less than 30 years) to retain them in the banks.

Introduction

In the present scenario the banking organisations are facing competitive challenges to accomplish the organisational goals. The activities of the banking organisations are depending upon their workforce. The higher the proportion of capable employees in the banks, the higher

INFLUENCE OF DEMOGRAPHICS ON KEY DRIVERS TO JOIN MULTILEVEL MARKETING BUSINESS

Dr. Ajay Suneja*

Jiwan Jyoti**

ABSTRACT

In the present context of rising population and increasing mass unemployment especially among youth, need is felt to introduce such a system that absorbs these jobless masses and converts them into working hands. The cost of living is also increasing which crops up the need to do something extra to multiply the Earning and get better survival. Multilevel Marketing (MLM) system has emerged as revolution and an overwhelming chunk of population get involves into it regardless of age, gender, education etc. The people who have the passion to do something get excel in this business. Motivation plays an important role and has direct relation with the performance. Everyone has separate motivational needs. Maslow has given a hierarchy of motivational needs which clearly depicts that when one need is satisfied at one level the other need immediately crops up at next level. Therefore, in this study an attempt is made to outline the key drivers that motivate an individual to join MLM business. This study also explores the impact of demographics, viz. gender, age, educational qualification, occupation, and nature of involvement on the key drivers to choose multilevel marketing business.

Keywords: Multilevel Marketing (MLM), Upline, Downline, Direct Selling, Network Marketing.

INTRODUCTION

Multilevel Marketing (MLM), one of the forms of direct selling, is a distinctive organizational structure that focuses on product circulation. The products are moved through a chain of autonomous distributors cum members to the consumers at their place of convenience without hassle. The distributors cum consumers are also given a chance to enroll other consumers in the business and enhance the chain. They become the business partners of the company. Rather than rigorous media publicizing and huge promotional expenses, the investment funds are transferred to consumer as goods are sold directly without involving the middlemen. As a result, the products are accessible to consumers at discounted prices and profits are shared among the members. Enrolling more and more persons as members to expand the network and increase the sale of the products is the essential condition for the existence of MLM organizations. MLM distributors have an association with both their "upline" sponsor and their "downline" initiates. They work in coordination with each other by attending and organizing meetings and training sessions. Members of Multilevel Marketing Companies convert friends and acquaintances or even the unknown persons into members/partners to expand the Earning irrespective of the gender, age, occupation and the like.

The event study methodology is based on the assumption that capital markets are efficient such as to estimate the impact of new information on anticipated future prices of firms. In capital market with semi strong efficiency one can assess the impact of an event on value of firm by calculating abnormal returns.

Companies like Amway, Herbalife, Tupperware, Oriflame, Avon, AMC Cookware etc. are globally the most recognized MLM companies or network marketing organizations. These organizations provide trainings and guidance to the enrolled

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Celebration of Sexuality in Alice Walker's *By the Light of My Father's Smile*

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Abstract

Walker's concept of 'Womanism' is the idea that women must commit themselves to each other by creating their own identity which implies a characteristics of boldness, capability, responsibility and leadership qualities of the black women. Walker reveals the whole "truth and story" of the black people in order to achieve the 'wholeness' and 'roundness' in her novels. A womanist is not only restricted to the gender relationship, but also expands its horizons to encompass the entire black community and explodes all the myths and stereotypes surrounding the black woman by representing her as an individual of flesh and blood who feels, thinks and has her own desires and freedom to achieve her selfhood. According to Gretcher E. Ziegenhals, a Womanist is one who "is committed to mutuality, sensuality, creativity and freedom, who speaks out, speaks up, speaks against or in defense of something important—a woman who loves herself, her culture.... She is also by definition and common usage, a woman of color, a woman who inevitably has viewed life and society from the underside (Qtd. Smith on Internet).

Key-Words : Sexuality, Womanism.

Walker's concept of 'Womanism' is the idea that women must commit themselves to each other by creating their own identity which implies a characteristics of boldness, capability, responsibility and leadership qualities of the black women. Walker reveals the whole "truth and story" of the black people in order to achieve the 'wholeness' and 'roundness' in her novels. A womanist is not only restricted to the gender relationship, but also expands its horizons to encompass the entire black community and explodes all the myths and stereotypes surrounding the black woman by representing her as an individual of flesh and blood who feels, thinks and has her own desires and freedom to achieve her selfhood. According to Gretcher E. Ziegenhals, a Womanist is one who "is committed to mutuality, sensuality, creativity and freedom, who speaks out, speaks up, speaks against or in defense of something important—a woman who loves herself, her culture.... She is also by definition and common usage, a woman of color, a woman who inevitably has viewed life and society from the underside (Qtd. Smith on Internet).

By the light of My Father's Smile, published in 1998, depicts a story of requited love and sexual healing of the soul. It is a novel which differs from the earlier works of Alice

Womanist Inception in Alice Walker's Novel, *The Third Life of Grange Copeland*

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Alice Walker's first novel *The Third Life of Grange Copeland*, published in 1970 is colored with the purple shade of Womanism, some less some more. Alice Walker wanted to play safe with a traditional male protagonist whose conversion into Womanism is one of the major concerns of this initial endeavour. Being her first novel she wanted to utilize this opportunity to highlight the unique characteristic of this Black shade of Womanism and the essential place of Black men in it. Alice Walker's major concerns in her novel are the outrageous audacious, courageous and wilful behaviour of woman, a woman who loves other woman and men sexually or non-sexually, a woman who is committed to survival and wholeness of entire people, male and female. It also throws light on the concept of inclusiveness, sympathy, forgiveness and motherhood or Womanist maternity of the characters presented by Alice Walker. She has made it very clear in an interview with John O'brien :

I am preoccupied with the spiritual survival, the survival whole of my people. But beyond that I am committed to exploring the oppressions, the insanities, the loyalties and the triumphs of black women. (*Interviews with Black writers 197*)

The Third Life of Grange Copeland focuses on the three phases in the life of the protagonist, Grange Copeland and that it is his third life that is most significant. The first phase, is dominated by his response to a dehumanizing and oppressive socio-economic structure of racist share cropping in the figure of white powerful boss that deprives him of his personhood. Brownfield as a young soul is filled with terror of a white man who drove the truck and turn his father into stone. Infact, the sharecropping system in America exploited the poor, illiterate and unskilled slave workers and did not offer proper wages to them. The inhuman practice made by the land owners is symbolic representation of dehumanization. While explaining the plight of the sharecroppers Benjamin Quarles has noted as,

The (sharecropping) system offered no incentives to improve their lot in life: the harder and longer they worked and the greater their output, the less their reward. (*The Negro in the making of America, 1987*)

Alice Walker states that Brownfield maintains his father's stony silence before the boss because it would be a madness to bite the hands that feed them and at the same time, the belief that they could defeat the sharecropping system can ruin their upcoming life. The Copeland males try to free themselves first by working hard but when they fail in this, they hate themselves for their inability of fulfil the masculine urge to power. The masculine thrust in this society manifests itself in the forms of power and



Reflection of Diasporic Sensibility in Amit Chaudhuri's *Afternoon Raag*

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Abstract

Diaspora is a disarticulation of a community or an individual from one geographical region to another geographical region. Indian English literature is replete with numerous diasporic issues such as rootlessness, identity crisis, homesickness, conflict between tradition and modernity etc. Amit Chaudhuri is remarkable for his distinctiveness of language which speaks to the readers and pave a ground for them to move forward. His works are coated in Indian values and Bengali Sensibility. Amit Chaudhuri's *Afternoon Raag* (1993) Explores an Oxford student's memories of his family and his singing teacher in a foreign land, to which he is unable to relate to.

KEY WORDS: diaspora, alienation, rootlessness.

The term diaspora comes from an ancient Greek word meaning "to scatter about". And that is exactly what the people of a diaspora do- they scatter from their homeland to places across the globe, spreading their culture as they go (web). Homi Bhabha, "Dissemination, Time, Narration, and the Margins of the Modern Nation", speaks about a "time of gathering" - gathering on the edge of foreign cultures. He says: "the emergence of the later phase of the modern nation, from the mid nineteenth century, is also one of the most sustained periods of mass migration within the west, and colonial expansion in the east" (290). Nostalgia with a curious attachment to the homeland's traditions, religions and languages gave birth to diaspora literature. In other words, the sense of yearning for the motherland is the most overwhelming sentiment of the Indian diaspora. Martin A. Halverson - Taylor says in *Diaspora literature*, "Diaspora" refers to the dispersion of people from their homeland. A simple definition of diaspora literature, then, would be works that are written by authors who live outside their native land (web). Some of the most prominent diasporic Indian writers are V. S. Naipaul, Bharati Mukherjee, Salman Rushdie, Vikram Chandra, Firdaus Kanga, Rowinton Mistry and Amit Chaudhuri. These writers

Representation of Cultural Dissemination in Amit Chaudhuri's *A Strange and Sublime Address* and *A New World*

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Abstract

This article addresses the issue of cultural dissemination in the novels of Amit Chaudhuri. The phenomenon like "mass migration" and "colonial expansion" seems to disrupt the idea of a horizontal cultural space within a nation. The result of such experiences is cultural dissemination. The characters in Amit Chaudhuri's novels are trapped in an interstitial space presenting the ambivalent nature of nation, national identity and national cultural

Key-Words: Nation, Cultural, Horizontal Cultural Space, Cultural Dissemination.

A "nation" connotes a large community of people and can be defined in numerous ways. To begin with, we are confronted with the question: what is nation? The Oxford English Dictionary defines nation as "a large body of people united by common descent, history, culture, or language, inhabiting a particular state of territory." Benedict Anderson in his book *Imagined communities. Reflection on the Origin and Spread of Nationalism* argues that nation is an "imagined community", according to him, it is "an imagined political community and imagined as both inherently limited and sovereign"(6). Communities are deliberately constructed by people upon specific fundamentals. It is these fundamentals that differentiate a nation from another and depict the identity of a nation. Gellner says:

1. Two men are of the same nation if and only if they share the same culture, where culture in turn means a system of ideas and signs and associations and ways of behaving and communication.
2. Two men are of the same nation if and only if they recognize each other as belonging to the same nation.(6-7)

There can be arguments about his insistence on the sameness of culture but there is no denying about the concept that nation and culture are inextricably intertwined as the culture of a nation acts as unifying bond for the people of a nation. A nation differentiates itself from others through its culture. To define culture, is a baffling riddle, as it has a huge range of meanings. The Oxford English dictionary defines culture as "a particular form or type of intellectual development in a society generated by its distinctive customs, achievements and outlook." Terry Eagleton in *The Idea of Culture* stresses this view, "[c]ulture is one of the two or three most complex words in the English language and the term which is sometimes considered to be its opposite nature



Evil in aspiration: A study of William Golding's the spire

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Abstract

This paper is an attempt to illustrate the fundamental issue that evil is in aspiration and human being can go at any extent to achieve his aspiration. The present researcher seeks to illuminate this process, mainly from the perspective of psychoanalysis. *The Spire* (1964) represents a world of the dead, a world of undermined from within by an inner darkness, a sad, sick stinking world in which man's fall comes as natural consequences of his own faulty action i.e. aspiration. It is a complex study in human willfulness. It lays emphasis on the dominance of evil as well as the unintelligibility of the human egoism, symbolized in the erection of the spire at the insistence of the Dean of a medieval cathedral, Jocelin, amid opposition from several quarters. Disregarding all opposition, he proceeds with the task of erecting the steeple on unsafe shallow foundations. The Dean has had a vision of four hundred-foot-tall steeple erected supposedly to glorify God. But, it is his own act of glorification. And, as it rises higher and higher, there is an increase in people's dread that it may surely topple down.

Keywords: aspiration, glorification, evil, civilization, darkness

Introduction

William Golding emerges as a serious critic of his age whose utopias have often become dystopias. He is also a writer engaged with earlier mythologies, stories and fables, and his novels betray a nightmarish intensity and poetic symbolism that encapsulate past and present. His fictions express his anxiety concerning his process of religious belief as well as the act of writing. He explores man's inner will and the changing contexts. He constantly brings both religion and science to bear upon the term "civilization". He was greatly influenced by a great master of the time 'Freud' who was exploring the darker zone of human mind. *The Spire* describes the story of Jocelin, Dean of an English cathedral who thinks that he has been obsessed by a divine vision to build a four-hundred-foot spire on the already existing church. The vision as he believes, descends from God and he is also the messenger of God on the Earth. He commissions the construction of the spire. This instruction of the addition of the new spire brings a general opposition. He is confronted with acrimonious protest by the chancellor of the cathedral, Pangall, the impotent caretaker, for he believes that they will suffer a lot of loss both spiritual and pecuniary. This sense of apprehension is also shared by his lifelong friend and confessor, Anselm, who disapproves of the construction of the spire. Even though, he ignores the opposition and the advice and continues his visionary dream for, "They don't know, they can't know until I tell them of my vision" (Golding 8). On the day of work, Roger Mason, the master builder, finds the foundation inadequate and warns of the pillars being unable to support such a massive spire for one reason that the church is floating over a patch of swampy ground. In an attempt to persuade the master builder, Jocelin reassures him that building the shaft is 'the highest prayer', that they are both chosen for the job. He is directed by the will of God that

he is blessed with the presence of angel whose warmth he always feels at his back. But, in reality it was not the will of God, it was the aspiration and foolishness of Jocelin.

Sacrifice is interwoven throughout *The Spire* with revelation and vision; and, as the novel progresses, we witness the appalling personal price Jocelin is prepared to pay as well as the price he inflicts upon the innocent. Nothing deters Jocelin from fulfilling his aspiration, no matter how massive costs and sacrifices are. Neglecting his spiritual duties, he pursues the work relentlessly to be completed in spite of his tubercular spine. This is for the urge of his egoistical nature for self glory. He sacrifices everything for the sake of his doomed divine dream: "Cost what you like" (TS 35). He knows the master builder has an affair with Pangall's young wife, Goody, but he ignores such a relationship lest he should lose the services of the master builder: "she will keep him here" (TS 64). Though, at first he is repulsed to have known of their love affair as he bears sexual intention to Goody.

He also forces the master builder and army of workmen to proceed with the construction of the monument through illegal means. Building the spire has brought pain and disorder into human lives. Pangall is made a butt by the pagan workmen. Later he is kidnapped and murdered by the workmen as a sacrifice to ward off any impending disaster. Goody dies in child birth of adulterous relationship with Jocelin abets. A workman slips off the scaffolding and dies. The town has suffered the ill-mannered behavior by the pagan workmen that riot and disrupt the peacefulness of the town and the cathedral itself.

He is funded corrupt money from a Lady Alison, formerly mistress to the king who looks for a tomb for herself in the church. The money he uses is particularly tainted. It is Lady Alison's generosity towards his nephew, Jocelin that makes the spire financially possible; and she had earned the money

Manifestation of Will to Live in William Golding: A Study of *Lord of the Flies*

Radhe Shyam

Abstract

The present research paper seeks to explore the concept of Manifestation of Will to Live in William Golding's Lord of the Flies (1954) which is supported by the philosophical and psychological thoughts of Arthur Schopenhauer and Sigmund Freud. Will to live is the ultimate reality of life. Search for reality in its various aspects has been an eternal pursuit of mankind. But, it is a quest that has never been satiated; the more one searches, the more one finds that its limits recede. This quest is generally for the ultimate or the absolute meaning. All creatures including human being struggle for this end against anything and anybody to the utmost limits of their powers, and in the last resort all else will be sacrificed to it, including the lives of other people as happened in Lord of the Flies. From this, it is simple to explain that man loves above everything else an existence which is full of want, misery, trouble, pain, anxiety, and then again full of boredom, and which, were it pondered over and considered purely objectively, he would of necessity abhor; and that he fears above everything else the end of this existence, which is nevertheless for him the one and only thing certain.

Key-Words: Manifestation, Will to Live, Reality, Quest, Asceticism, Primitive,

William Golding was a novelist, poet, playwright and a Nobel Prize winner for 1983, best known for his first novel *Lord of the Flies*. Golding's scientific background, his encounter with the sea, his warship, the laboratory and the stage make him different from any conventional moralist. Golding seems a solitary figure in the religious convention. He voices in a world which is largely indifferent to God and religion. However, his art takes the shape of an ironic quest for reality and man's moral struggles.

He taught at Bishop Wordsworth's school, Salisbury and came in close contact with the little people later on the experience finds its expression in the novel *Lord of the Flies*. In many of his novels, his reflections on his pupils and his reaction of the war could be traced out. Broadly speaking he explores man's nature and the changing contexts. He emerges as a serious critic of his age whose utopias have often become dystopias. He is also a writer engaged with earlier mythologies, stories and fables, and his novels betray a nightmarish intensity and poetic symbolism that encapsulate past and present.

Lord of the Flies has been interpreted in widely varying ways ever since. The novel carries mystical, theurgical religious and mythological elements all put together. The themes are about destruction of civilization, the depravity of man, chaos of existence in a world of darkness in which attempts are made to find a pattern and a synthesis of the age old conflict will to live. Golding perhaps finds the real in man's will-to-live. His very first novel, *Lord of the Flies* (1954), suggests Beelzebub's personification in school children, who are shipwrecked on a desert island. While most readers may find the two groups of children distinct – one good, the other bad but, both personify the will-to-live,

In-betweenness and Identity Crisis among Diaspora: A Study of Jhumpa Lahiri's *The Namesake*

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Migrations have been pouring across the globe since a century. The number of people living outside their country of birth is larger than at any other time in history. International migrants would now constitute the world's fifth most populous country if they all lived in the same place. A variety of reasons lie behind these migrations. The desire to create a better social, economical and educational state takes the people from their nation to other developed nations. Because of this, we have come to know terms like Diaspora and transnationalism. Diaspora is a term which has gain a place in literature in 20th century a lot. Infact in literature, this term has been used extensively now. Literature by diasporic writers has come out with the problem and possibilities generated by the experience of migration and diasporic life.

Originally, the term Diaspora is taken from Greek word *Diaspeirian*- the meaning of which is to scatter about and across. The term was used for the ancient Greeks to refer to citizens of dominant city- state who emigrated to a conquered land with the aim of colonization, to include the territory into the empire. During the ancient times a large number of Indians migrated to far East and South East Asia to spread Buddhism. When Britishers arrived, that process of migration became a history of deprivation and sorrow. Then, there came another wave of this migration in 19th century which was due to industrialization towards developed economies.

The state of being in-between and identity crisis marks the Diasporic fiction. While major concerns of the most diasporic writers are fractured and fluid nature of individual identities, they also point out the differences in exploring how new and old generation Diasporas relate to their land of origin and the host culture. Due to the displacement, Diasporas' sense of in-betweenness, a sense of inability to belong becomes more problematic and desperate. The rootlessness, coupled with the apathetic attitude of host culture sums up to the sense of otherness and alienation. If seen metaphysically human beings seem to be in eternal exiles. Human beings do not have a permanent home anywhere. It is this displacement which gives diasporic writing its unique qualities of loss and nostalgia.

JhumpaLahiri born as Nilanjana Sudeshna was born in 1967 in London and raised in Rhode Island. She came on literary stage with *Interpreter of Maladies*(1999) and won Pulitzer Prize for fiction. Her first novel *The Namesake* (2003), is a cross-cultural, multigenerational story of a Hindu Bengali family's journey to self-acceptance in Boston. *The Namesake* talks about the theme of transnational identity and pain of being away from one's own culture. The novel is a narrative about the assimilation of an Indian Bengali Family from

Calcutta, the Ganguli's, into America. The cultural dilemma experienced by them and their American born children is quite different. The spatial, cultural and emotional dislocations suffered by Ashoke and Ashima in their effort to settle home in the new land are in contrast to the miseries of Gogol, Moushumi and Sonia.

Ashoke Ganguli leaves his homeland, and goes to America in pursuit of higher studies to do research in the field of fiber optics with a prospect of settling down with security and respect. After two year's stay in the USA he comes back to India, marries a nineteen years old Bengali girl from Calcutta named Ashima, who has no idea or dream of going to a place called Boston so far off from her parents, but agrees for the marriage. After the legal formalities, she flies alone to be with her husband.

The novel starts with Ashima in hospital going to give birth to Gogol. From the starting of the novel, the mental alienation faced by Ashima in the foreign land is shown clearly. Ashima often feels homesick and feels alone. She feels emotionally dislocated from the comfortable home of her father full of so many loving ones and wants to go back. She spends her time on rereading Bengali short stories and articles from the Bengali magazines, she has brought with her. It is the only way she connects herself with her homeland. Ashima seems to be afraid about the whole idea of raising a child in a country "where she is related to no one, where she knows so little". (*The Namesake*: 2003) The fright of Ashima appears justified as she never has any independence in the conservative society of Bengal. She was habituated with being confined within the homely atmosphere and familial relationships which is common in the Bengali society. In the outside world, which she has to go after marriage, she finds herself out of that homely atmosphere and thus starts feeling lonely and marginalized. She misses her homeland much more now after being separated from it. Home becomes a place of desire in the immigrant's mind after being in different nation. Even after being in totally different world, she is not able to spell his husband's name as it is the tradition in India to do so.

After the birth of her son Gogol, she wants to go back to Calcutta and to raise Gogol among her own people but decides to stays back for her husband's sake and brings up the baby in the Bengali ways so 'to put him to sleep, she sings him the Bengali songs her mother had sung to her' (*The Namesake*; 35).

Ashima and Ashoke too like immigrant of other nations make their circle of Bengali people. They all become friends



SCHOOL EDUCATION INFRASTRUCTURE IN RURAL HARYANA

Rajeshwari and Karamvir

Abstract

(Revised Version Received in July, 2018)

It is widely agreed that education is one of the most important tool for social, economic and political transformation. A well-educated population, equipped with the relevant knowledge, attitudes and skills can contribute more effectively in the economic and social development. In this process, school education is the primary step in achievement of formal education. It may also be noted that the teaching and learning in schools varies a great deal depending upon various factors, yet the role of school infrastructure such as site, building, proper rooms, equipments and other facilities cannot be denied in learning environment. In this context, the present paper attempts to study the availability of teachers and infrastructure in various levels of government schools in Haryana. The paper is based on secondary data obtained from School Report Card of District Information System for Education, Govt. of India. The analysis is attempted at district level and it presents a composite picture of infrastructure indicating the inter-district variations as well as best served and least served districts of the state.

Introduction

Education is indispensable for human progress, empowerment and thereby affecting national development. In this process, the school education is the primary step in achievement of formal education. It may be noted that schools are significant feature of educational landscape in India and quality of education as measured by outcome indicators varies significantly across India (Niti Ayog, 2017). Among various factors, the quality of education and the teaching and learning also depends upon available infrastructural facilities of schools. Studies have revealed that school infrastructure, such as site, building, proper rooms, equipments and other facilities contribute to learning environments (Kingdon 1996; Pandey et al, 2010; Afework 2014; Asfaw 2014). It may also be noted that research over a period of time have documented that schools in rural India have inadequate space, these are without proper classrooms and ventilation, without proper insulation from heat and along with inadequate number of teachers also (NCERT 1978; Rana and Das 2004; Zaidi 2005; Sinha 2012; Asfaw 2014). It may however be noted that there has been a considerable growth in the number of schools in India, which are established in direct response to domestic and international pressure of Millennium Development Goals.

- Maheshwari, A. N. (1997) "Primary Education in Rural Haryana: A Glimpse", Online accessed on http://anmaheshwari.net/primary_edu_rural_haryana.htm.
- Mythili, N. (2002) "Community Pressure for Higher Quality of Education: Rural Primary Schools in Karnataka", *Economic and Political Weekly*, 37(24): 2349-2355.
- NCERT (1978) "All India School Education Survey", Ministry of Human Resource Development, New Delhi.
- Panda, B. K. (2012) "Participation in Schooling and Household Work a Study of Scheduled Castes Girls in Mewat District of Haryana" Working Paper 39. (NUEPA) New Delhi.
- Rana, K. and Das, S. (2004) "Primary Education in Jharkhand", *Economic and Political Weekly*, 39(11): 1171+1173-1178.
- Rana, K., Das, S., Sengupta, A. and Rafique, A. (2003) "State of Primary Education in West Bengal", *Economic and Political Weekly*, Vol. 38, No. 22, pp. 2159-2164.
- Sinha, S. (2012) "Status of School Education in Punjab", Institute for Development and Communication, Chandigarh, pp. 1-126.
- Zaidi, S.M.I.A. (2005) "Provision and Utilization of Elementary Education Facilities in North East India: What DASE Data Reveal", *New Frontiers in Education*, 35(3): 1-21.

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A Study of Victim's Compensation Process of the Cases Reported under the Scheduled Caste and Scheduled Tribe (Prevention of Atrocities) Act, 1989 in Kurukshetra District in Haryana

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ABSTRACT

The sociological aspects of law depict the connection between society, individuals and groups. The development of sociological & human rights jurisprudence has enabled the law to emerge as the legal order of the state with the instrumentality of replacing the harmful customs of society. The law as a regulator, in modern times, attempted to cater the needs of the people with the changing needs of the society. In this line, the Scheduled Caste and Scheduled Tribe (Prevention of Atrocities) Act, 1989 is also an instrument to curb the age old menace of untouchability, exploitation and mal-treatment which is purely based on caste system of Hindu social order. Apart from this, from time to time, the institutional mechanism of the state has also tried to protect the victim through its law, order and policies so that the victim may not merely remain a tool of supplying evidences to the prosecution to further the trial of the court. Depending upon the nature & gravity of the offence Haryana Govt. formulated the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Rules, 1995 Amendments 2011 which enshrine the quantum of relief to the victim under the above act. The present study is based on secondary data on registered cases under the Scheduled Caste and Scheduled Tribe (Prevention of Atrocities) Act, 1989 which is collected from District Social Welfare Office, Kurukshetra from 01/04/2017 to 31/01/2018. It may be concluded that major objectives of the said act was to bring out social equality however, some of the victims started using this institutional measure as a tool for income generation & threatening, harassing, blackmailing and creating a fearful environment for higher castes.

1. Introduction

The system of the criminal justice is an instrument of social control by devising the mechanism of prevention of the occurrence of crime, deterrence of the offenders from committing any crime in the future, punishment and rehabilitation of the wrong-doers and criminals, maintenance of law and order in the society and to compensate the victims as far as possible. The rights of victims can be protected through the effective system of law and order, otherwise the victim remain forgotten and a meek viewer as the accused is to be fined and or imprisoned by the Court whereby he enjoys food, clothing and other facilities in prison at the expense of the state or in other words at the cost of tax payers to the state treasury including the victim etc. But, in the last few decades, the concept of compensation and its benefits for the victims of crime has started gaining momentum among the jurists, criminologists, penologists/sociologists and other scholars etc. UN Declaration of Basic Rights for Victims of Crimes and abuse of Power, 1985 provided the definition of "Victims" means persons who, individually or collectively, have suffered harm, including physical or mental injury, emotional suffering, economic loss or substantial impairment of their fundamental rights, through acts or omissions that are in violation of criminal laws operative within Member States, including those laws proscribing criminal abuse of power. It recognised four major components of the rights of the victims of the crime i.e. access to the mechanism of justice and to prompt redress, restitution to the victims, compensation to the victims or his family and

necessary assistance (material, medical, psychological and social assistance through institutional and indigenous means)

The Hammurabi code has been known as the first "victim rights statute" in history. In Mosaic dispensation of among Hebrews of Greek depicts the traces of restitution to the victim. The law of Manu of requires the offender to pay compensation and pay the expenses of cure in case of injuries to the sufferer and satisfaction to the owner where goods were damaged. The law of Vishnu, Yajnavalkyas, Narada and Brihaspati also advocates compensation to the victim of crime for their injury. Again traders or business men who lost their property while travelling through the kingdom were also compensated. Emile Durkheim in his "The Rules of Sociological Methods" (1895) talked about replacement of repressive laws by restitutive laws. Roscoe Pound also averted the purpose of law to balance between the competing and conflicting interests of people in society. John Rawls (1971) held that the social and economic inequalities are to be arranged so that they are sustain the greatest benefit of the least advantaged.

The Indian jurisprudence has also attempted to recognise directly or indirectly one or more of the above mentioned four components in its system of administration of criminal justice. The constitution of India assures equal access to justice and fair treatment to the sufferer of crime vide its preamble and fundamental rights and other provisions. The provision of registration of First Information Report (FIR) with the police section enables the victim of crime to set the Criminal Justice system into motion. The apex judiciary in India, from time to



HUMAN RESOURCE DEVELOPMENT PRACTICES AND ITS IMPACT ON ORGANISATIONAL PERFORMANCE: EVIDENCE FROM INDIAN BANKING INDUSTRY

Dr. Ajay Solkhe¹
Dr. Priyanka Saini²

ABSTRACT

This research study set out to investigate the Holy Grail of establishing a causal link between HR and Organisational Performance. Researchers have built ample evidence that link HR practices with organisational performance over a period of time. Despite this outpouring of empirical researches, the HRD-OP paradigm is still unexposed by researchers leaving a few exceptions by Katou, (2008), Hassan (2007), Hassan et.al (2006) moreover such researches have largely conducted in the context of developed economies where HR practices have some amount of stagnancy, very few researches have attempted to explore this HR-OP link also known by different metaphors' such as "Black Box", "Russian Doll" and "Rubik Cube" from the perspective of HRD Mechanisms and that too in the context of emerging as well as developing economies like India. Banking Industry has witnessed a great deal of transformations since last two decades. Banking in our country is no longer the same as it used to be a couple of years ago, nor is it expected to remain the same a couple of years after. There are a lot of transformative efforts to bring the banking industry its lost sheen. Today industry is having 27 public sector banks, 22 private sector banks, 44 foreign banks, 56 regional rural banks, 1,589 urban cooperative banks and 93,550 rural cooperative banks. The present study is an empirical study. The researcher has made use of both field and documentary data to arrive at necessary conclusions. The present study is confined to Indian Banking Industry with special reference to Public and Private Sector Banks. A total of 400 managers representing senior, middle and junior management cadre working in the branches of NCR Region has been surveyed. This study reveals that the HRD Practices has positive impact on Organisational Performance. The study adds up to the less evidences exist at present in context of emerging economies like India that too in context of industry which is witnessing greater transformations in contemporary time. Not all banking organisations representing all banking formats have been included. Sample size could be increased to derive more relevant generalisations.

Key words: HRD, Job Satisfaction, Organisational Performance

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JOB INVOLVEMENT AS THE PREDICTOR VARIABLE OF JOB SATISFACTION: A STUDY OF INDIAN BANKING SECTOR

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ABSTRACT

Job Involvement and Job Satisfaction are among the major indicators of an employee behavior at work. Job involvement is the degree of importance of one's work in ones total self image and job satisfaction is the extent to which one feels good about the job. Today banks are grappling with its HR issues which make it vital to study the involvement and satisfaction level in Indian banking sector. The key findings of the study reveals that level of satisfaction for public as well as private sector was found to be on same front while the level of job involvement of private sector employees was found to be relatively higher in comparison to the public sector banks. The relationship between both the variables was found to be positively correlated and job involvement significantly contributes in determining the predicting ability of job satisfaction among banking sector employees.

Keywords: *Job involvement, Job satisfaction, Indian banking sector.*

INTRODUCTION

Modern business scenario has completely changed since the genesis of the concept of business and industry. Employees have become the most valuable asset for the modern business organizations and role of employees in a service organization is priceless. Today, no business can grow even survive ignoring its HR aspect. HR issues are placed on top priority of board room meetings. Attracting and retaining the best talent becomes a major challenge for the organizations. Above all, attrition rate in India is much higher



Sustainable Society: Banking on the 'Past' in Securing the 'Future' of 'Present'

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ABSTRACT

Educational goals over the years have been evolving from mere academics to a concern for the overall quality of life adjustment. Possibility of such type of learning outcomes rests upon planning, designing and executing educational endeavours that emerge out of the insightful reflections. Interdependence of Home, School and Society is integral in sharing this responsibility for nurturing the young ones to develop as contributing members of the society. Experiential learning of the elders presents enormous opportunities to suitably articulate learning situations for the betterment of children. This paper attempts to revisit the role played by elder members of a powerful institution 'family', from an Indian perspective, in impacting the educational outcomes in general and inculcation of values in particular among the young ones to play their roles effectively in establishing sustainable societies.

KEY WORDS: Family Environment, Value Education, Educational Attainment, Sustainable Society.

It is satisfying to note that concerted efforts are being made, by individuals as well as institutions, to nurture the young ones to adjust qualitatively in life. Educational goals over the years have been evolving from mere academics to a concern for the overall quality of life adjustment. Possibility of such type of learning outcomes rests upon planning, designing and executing educational endeavours that emerge out of the insightful reflections. Understanding education as a shared responsibility of home, school and society, a closer look at the current scenario indicate towards the all-important role played by elders in the communities as a missing link, in bridging the gap, to accomplishing the well-intended objectives of planners and executors to enable the present generations to learn for life to secure their future. This paper attempts to revisit the role played by elder members of a powerful institution 'family', from an Indian perspective, in impacting the educational outcomes in general and inculcation of values in particular among the young ones to play their roles effectively in establishing sustainable societies.

Advancements in science and technology along with phenomenal explosion of knowledge have influenced the lives of one and all. As a result there is a palpable shift in ideas, life style, thinking, teaching strategies, teaching style, desires and ambitions of people. In other words it can be mentioned that advances of this knowledge society and easy access to the same have led to human being assuming central place in the universe. The self within the human being has immense potential laced with motives, needs, interest and aptitude. Along with material prosperity, we also witness people under the grip of frustration, immorality and self-centeredness. Some time back a meaningful and thought provoking message was forwarded to me by a well-wisher that goes like, "The paradox of our time in history is that we have taller buildings but shorter tempers, wider freeways, but narrower viewpoints. We have bigger houses and smaller families, more conveniences, but less time. We have more degrees but less sense, more knowledge, but less judgment, more experts, yet more problems, more medicine, but less wellness. We have multiplied our possessions, but reduced our values. We talk too much, love too seldom, and hate too often. We've learned how to make a living, but not a life. We've conquered outer space but not inner space. We've done larger things, but not

Between Schooling and Education, Learning 'Matters'

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ABSTRACT

Importance of Education has always been accepted by one and all. Developmental graph of mankind, over the years, presents a testimony to the multi dimensional efforts of one and all in understanding the nature of education and devising ways and means to carry forward the process of education with an objective of equipping young ones with skill to lead happy life and contribute towards the welfare of society. Massive efforts have been invested, both public and private, in financing and managing the education systems to build up a human capital that reflects itself in shared prosperity. However, one is confronted with a paradoxical situation with impressive levels of industrial and technological progress, successful space missions and large mass of illiterate population living below poverty line representing two ends of the spectrum in India. Global acknowledgement and recognition of IITs, IIMs and other institutes of higher learning is a well deserved pride for India but existence of a multitude of ill equipped and impoverished primary schools is a reality too. World Development Report-2018 mentions that 'In rural India, just under three-quarters of students in grade 3 could not solve a two-digit subtraction such as $46 - 17$, and by grade 5 half could still not do so' and emphasizes that schooling is not the same as learning. This paper attempts to put in perspective efforts geared towards schooling, available evidence to highlight the role of teacher and propose measures to act on the evidence in order to bridge the gap between schooling and learning.

Keywords: Schooling, Effective Teacher, Experiential Learning, Collaboration.

Importance of Education has always been accepted by one and all. Developmental graph of mankind, over the years, presents a testimony to the multi dimensional efforts of one and all in understanding the nature of education and devising ways and means to carry forward the process of education with an objective of equipping young ones with skill to lead happy life and contribute towards the welfare of society. Indian philosophy advocates the nurturing of inner abilities human beings to live; to help others live and to provide what one can for the future generations. Guided by this thought a massive effort has been invested, both public and private, in financing and managing the education systems to build up a human capital that reflects itself in shared prosperity. It would not be out of place to assume that diligent efforts of the policy planners and executors over the years, would present us with a thriving society. A society that is

inhabited by young adults loaded with life skills and working for shared prosperity. In reality, however, one is confronted with a paradoxical situation. Impressive levels of industrial and technological progress, successful space missions and large mass of illiterate population living below poverty line represent two end of the spectrum in India. Global acknowledgement and recognition of IITs, IIMs and other institutes of higher learning is a well deserved pride for India but existence of a multitude of ill equipped and impoverished primary schools is a reality too.

World Development Report-2018 mentions that 'In rural India, just under three quarters of students in grade 3 could not solve a two digit subtraction such as $46 - 17$, and by grade 5 half could still not do so' and emphasizes that schooling is not the same as learning. National Policy on Education (NPE 2016), being formulated after three decades, 'recognizes the

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Factors Affecting Low Academic Performance of Elementary Students in Social Studies-A Case Study

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Abstract: The objective of the study was to explore the factors affecting low academic performance of elementary students in social studies in Rajkiya Pratibha Vikas Vidyalaya, Narela Delhi. With the prior approval of Head of School, result of 4 previous sessions of classes 6th to 8th was collected from result record. Marks of Unit Tests, Common Problem Solving Assessment, Mid Term Examination and Annual Examination were tabulated. Self-constructed Opinionnaire were also used to collect more information from students, social studies teachers, school's Principal and guardians. Simple percentage, mean and t-test were used for analyses of the data. It was found out from the study that Quality Index (Total marks Obtained in the subject/ Number of students) in social study subject is lower than other subjects taught at elementary level except Science and Mathematics. QI is ranging from 40 to 50 in each session covered in the present study. It indicated that there was low academic performance of students in social studies. Vast curriculum/syllabus, non-utilization of instruction material in classroom, enrollment of Hindi and English medium students in the same class were found to be determining factors for low academic performance in social studies.

Keywords: Performance, Common Problem Solving Assessment, Opinionnaire, Quality Index.

I. INTRODUCTION

Over the past few years, there has been huge public investment in the school system especially at the primary and secondary school levels of education in Delhi. Rajkiya Pratibha Vikas Vidyalayas (presently 21schools) are one of the dream projects of Govt. of Delhi to provide English medium education to economically weaker students studying in Govt./Govt. Aided schools of Delhi. These schools are flexible in selection of medium of instruction. Two medium of instructions, Hindi as well English are offered as per the requirements of the then students. Since the establishment of these schools, academic performance of admitted students is remarkable in comparison to other Govt. schools. But when the subject wise analysis is made, few subjects do not have satisfactory Quality Index. So, there is a dire need to understand the factors affecting low academic performance of learners. Before going in to the discussion of related literature, it seems necessary to know the pattern of education system at elementary level in Delhi.

After acquiring primary education, students get admission in middle classes i.e. 6th to 8th. Many subjects are taken at this level. Students have to select six core subjects. Among these core subjects is the study of social studies. The other core subjects are Hindi and English Languages, Mathematics, and Science and any third language offered. Students are promoted to next class after obtaining passing score in all the core subjects. However due to 'Non Detention Policy' students is even failed provisionally promoted to next class. No doubt, parents invest a huge part of their income on the education of their wards but performance in the social studies is not satisfactory. Determinants of students' performance have been the subject of ongoing debate among educators, academics, and indeed policy makers and implementers (Harb & El-Shaarawi, 2006). According to Harb and El-Shaarawi, there have been many studies that sought to examine the issue of determinants of students' performance and the findings point out hard work and discipline, previous schooling, parents' level of education, family income and self-motivation as factors that could explain differences in students' grades. Present paper cannot identify all the determining factors of low academic performance in social study but an attempt to open the path that will lead to explore deep rooted cause of low academic performance in social studies. In most of the cases, teacher is held responsible for low performance of students by parents and administrators.

In this connection Barber and Moursbed (2007), concluded from their study that "the quality of an education system cannot be higher than the quality of its teachers". According to them, "evidence is accumulating from around the world that the single most significant means of improving educational systems is through excellent teaching". But Arain (2010) argues that, teacher profile and characteristics are not weightless because student achievements are heavily teacher dependent. According to Kane, Taylor, Tyler and Wooten



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शुंगकालीन मृण्मूर्तियाँ : हरियाणा के सन्दर्भ में एक अध्ययन

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शोध आलेख सार

शुंगकाल मृण्मूर्ति कला के निर्माण में सभी युगों में एक शानदार युग था। इस काल में निर्माण शैली की दृष्टि से मृण्मूर्ति कला का एक नवीन अध्याय प्रारंभ हुआ। इस काल को भारतीय मृण्मूर्ति कला का उत्कृष्ट काल भी कह सकते हैं। इस काल के कलाकारों ने साँचे का व्यापक रूप से प्रयोग किया तथा मूर्तियों के निर्माण में प्रयुक्त डौलिया शैली को छोड़कर साँचे द्वारा मूर्ति निर्माण शैली को अपनाया। साँचे का प्रयोग कर अब छोटे से फलक में भीदृश्य दिखाना संभव हुआ जोकि मॉडलिंग में संभव नहीं था। इस परिवर्तन द्वारा मृण्मूर्ति कला में एक स्वाभाविक निखार दिखाई देने लगा। शुंग काल में कलाकृतियाँ राजकीय सहयोग की अपेक्षा जनसामान्य के योगदान से बनने लगी। मौर्यकाल में स्वदेशी कला ने साम्राज्य के गौरव को बढ़ाया लेकिन कला में समाज की अपेक्षा धार्मिकता को अधिक महत्त्व दिया गया। इसके विपरीत शुंग काल में धार्मिक पक्ष के साथ-साथ सामाजिक पक्ष का भी चित्रण किया जाने लगा। मौर्य कला राजकीय कला के रूप में तथा शुंगकला लोककला के रूप में विख्यात है। कौशाम्बी, अहिच्छत्र, मथुरा, राजघाट, भीटा, ताम्लुक आदि शुंगकालीन मृण्मूर्ति कला के प्रमुख केन्द्र थे। शुंगकालीन मृण्मूर्तियाँ हरियाणा के सुघ, अग्रोहा, नौरंगाबाद, अमीन आदि पुरास्थलों से भी प्राप्त हुई हैं। इन पुरास्थलों से मातृदेवी, अर्ध-नारीश्वर, विष्णु, यक्षी, नटी, पुरुष, मिथुनाकृतियाँ, तख्ती लिखता बच्चा की मृण्मूर्तियाँ प्राप्त हुई हैं।

मुख्य शब्द: शुंग वंश, साँचे, डौलिया, अर्ध-नारीश्वर, यक्षी, कौशाम्बी, अहिच्छत्र, मथुरा, सुघ, अग्रोहा, नौरंगाबाद, अमीन, कलाकृतियाँ।

मौर्य राजवंश के अस्त होने के साथ ही जिस नवीन राजवंश का उदय हुआ उसे पुराणों में शुंग वंश कहा गया है। अंतिम मौर्य सम्राट बृहद्रथ की हत्या कर पुष्यमित्र शुंग ने 184 ई. पू. में इस नवीन राजवंश की स्थापना की। इस सत्ता परिवर्तन से कला का क्षेत्र भी प्रभावित हुए बिना नहीं रह सका। साहित्यिक ग्रंथों पतंजलि के महाभाष्य¹, वाचस्पत्य की हर्षचरित², मालविकाग्निमित्र, ज्योतिष ग्रंथ गार्गी संहिता का युग पुराण³ तथा आर्यमंदुकीमृतकल्प



THE ECONOMIC CONDITION OF PEASANTRY IN EARLY MODERN INDIA

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Abstract

The people of India developed village communities and lived under Polygars and Zamindars, Jagirdars and Talukdars because they needed them? East India Company was also special for its strong naval presence, as a successor. The coastal shift in the business while the Company passed to the colonial state. Land trade in India decreased during this period with the increase in maritime trade. The maritime trade represented only a small part of the economy. Some parties, with internal interests lost, while others successfully went to work with European companies. The strongest statements on both sides, the evidence underlying the arguments are often weak due to insufficient or unreliable economic data. It offers a measured assessment of the salient transitions in this important period of Indian history that begins with the death of Emperor Mughal Aurangzeb in 1707 and ends in the early 1800s when the British East India Company came to control vast territories, including most of coastal India.

Introduction

The agricultural population of India now works on very meager resources which, if we consider the well-being of the peasants themselves, are very poorly distributed¹. The early days of modern India are characterized by debates about the decline of the Mughal Empire, the rise of the East India Company and the times when India fell behind Europe. The strongest statements on both sides, the evidence underlying the arguments are often weak due to insufficient or unreliable economic data. It offers a measured assessment of the salient transitions in this important period of Indian history that begins with the death of Emperor Mughal Aurangzeb in 1707 and ends in the early 1800s when the British East India Company came to control vast territories, including most of coastal India. The political turbulence at the summit between the various warring factions led to a general decline in public goods, but did not substantially weaken the property rights of peasants. In India, many people could claim the final agricultural production that ranged from military nobles and tax collectors on top of the landowners in the middle and finally to the farmers who cultivated the land below.

The people of India developed village communities and lived under Polygars and Zamindars, Jagirdars and Talukdars because they needed them? East India Company was also special for its strong naval presence, as a successor. The coastal shift in the business while the Company passed to the colonial state. Land trade in India decreased during this period with the increase in maritime trade. The maritime trade represented only a small part of the economy. Some parties, with internal interests lost, while others successfully went to work with European companies. This change in orientation is also reflected in urbanization models. Agra, Delhi and Lahore among other internal cities of the Mughal empire decreased when the coastal cities of Bombay, Calcutta and Madras came to dominate the urban landscape. The latter were new industrial hubs, which was so important in accounting for their rise as their status as colonial cities. That said, there was no trend towards long term urbanization. Many old production centers linked to the Mughal Empire suffered a decline, but this was offset by the rise of Bombay, Calcutta and

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Queuing analysis of Geo/Geo/1 queue with catastrophes using Matrix Geometric technique

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Abstract

Catastrophic models and analysis have ample applications in computer science, telecommunications, financial management, insurance sector and many more areas. We consider Geo/Geo/1 with catastrophes. This model is solved by Matrix Geometric technique. Numerical study has been done for various values of parameters.

Keywords: Catastrophes, Matrix Geometric technique

Introduction

Queuing models with catastrophes have gained importance during last few decades due to their applications in many areas viz. computers and telecommunications, financial management, insurance sector, disaster management and many more areas. Whenever a catastrophe occurs at the system, all the customers are forced to leave the system immediately, the server becomes inoperative instantaneously and it becomes operative as soon as a new customer arrives.

Continuous Queuing models with catastrophes have been investigated by many researchers in the past. Indra and Rajan (2017) [1] analysed Markovian queues having two heterogeneous servers with catastrophes using Matrix Geometric technique. Atencia and Moreno (2004) [2] studied Geo/Geo/1 queue with negative customers and disasters. Jeyakumar and Gunasekaran (2017) [3] analysed Geo/G/1 queue with disaster and single vacation.

Matrix Geometric technique was conceptualized by Marcel F. Neuts in 1974. Many researchers used this technique in their respective papers.

In the current paper, we are presenting a simple analysis of Geo/Geo/1 queue with catastrophe using Matrix Geometric technique. The rest of the paper is organized as follows: In section 2, description of the model is presented. In section 3, Expression for probability generating function (PGF) of system-size for Geo/Geo/1 for LAS-DA is presented followed by computation of the system-size steady-state probabilities. In section 4, Expression for PGF of system-size for Geo/Geo/1 for EAS is presented followed by computation of the system-size steady-state probabilities. Finally, in section 5, numerical study has been done for the analysis of the model for various values of the parameters.

Section 2

Model description

Let the time axis be marked by $0, 1, 2, \dots, m, \dots$. In the queue Geo/Geo/1, it is assumed that inter arrival times I are independent and geometrically distributed as $a_n = P(I = n \text{ slots}) = (1 - \lambda)^{n-1} \lambda$ with mean inter arrival time $= 1/\lambda$. The inter service times S are independent and geometrically distributed as $b_n = P(S = n \text{ slots}) = (1 - \mu)^{n-1} \mu$ with mean inter service time $= 1/\mu$. The traffic intensity (ρ) is $\rho = \frac{\lambda}{\mu}$. It is assumed that the customers are served individually according to the first-come, first-served (FCFS) discipline. In late arrival system with delayed access (LAS-DA), the potential arrivals occur in (m^-, m) . After getting service for n slots ($n \geq 1$) a customer leaves in (m, m^+) . While in an early arrival system (EAS), a potential arrival occurs in (m, m^+) and a potential departure occurs in (m^-, m) .

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Article

Reliability modelling and study of failure mechanism of distillery plant using supplementary variable technique

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**DIGITAL REALM OF LAW : A VOYAGE AROUND THE NEW WORLD OF
ELECTRONIC EVIDENCE**

**By : Dr. Shalju, B.A. (Hons.) (Medalist), LL.M., Ph.D., Assistant Professor, Institute
of Law, Kurukshetra University, Kurukshetra**

Digital technology has decreased the role of paper-based documents and has thereby made drastic changes in the way people transact business. With the substantial growth in digital payments and transactions, one has to acknowledge the higher risk of online financial frauds and the consequent plans of the government to make the digital payments regime more secure.¹ In view of the recent hacking of many websites, the Punjab government has ordered cyber security audit of all government portals to protect websites of various departments.² However, if properly guided by law, information technology makes the systems function faster and more effectively. A revolution is occurring in the way the evidence is produced before the court.

**FUNDAMENTALS OF THE LAW VIS-A-VIS
CHALLENGING SHIFT FROM PRIMARY
TO SECONDARY EVIDENCE:**

Though in electronic evidence, the medium in which it is presented changes, there is no change in the basic rules of the law. Essential concepts of law of evidence remain valid for electronic evidence as well. Section 3 of the Indian Evidence Act, 1872³ recognizes two categories of evidence, oral evidence and documentary evidence, in the definition of the term 'evidence'. It is one of the basic rules of law of evidence that the best evidence must be given in proof of facts. Oral evidence must, therefore, in all cases whatever, be direct.⁴ The best evidence in case of documents is primary evidence, that is, the original document.⁵ Documents, therefore, must be proved

1. "Govt plans norms for e-wallet firms to prevent online frauds", *The Times of India, Chandigarh*, September 24, 2017, p.9.
2. "Cyber attacks: State orders cyber security audit of all govt portals", *The Times of India, Chandigarh*, August 25, 2017, p.3.

3. Hereinafter referred to as the Act.
4. The word "direct" means that if it refers to a fact which could be seen or heard, it must be the evidence of a witness who says he saw or heard it. Sections 59 – 60 of the Act deal with Oral Evidence.
5. Section 62 defines "Primary evidence" as follows: "Primary evidence means the

Analysis of Two Anti Plane Shear Collinear Cracks in a Porous Piezoelectric Layer Bonded between Two Elastic Half-Spaces

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(Received April 03, 2018)

Abstract: In this paper, an analysis of two collinear anti-plane shear cracks in a porous piezoelectric layer bonded with two similar elastic half-spaces is done. The impermeable crack face conditions are considered. Using Fourier transform, the problem is reduced to three pairs of integral equations. The displacement and electric potentials are expanded as a series of Jacobi polynomials and then the integral equations are solved by making use of Schmidt's method. The analytic expressions for the intensity factors at the right and left end of the crack are obtained. A particular case for the piezoelectric layer is also discussed in which the expressions for the intensity factors for the cracks in a piezoelectric layer are derived. Numerical calculations are made to show the effects of geometry and position of cracks on the stress intensity factors and electric displacement intensity factors.

Keywords: Crack; Porous; Piezoelectric materials; Shear; Integral equations; Intensity factor.

2010 AMS Classification Number: 74A45, 76S05.

Bioenhancers from mother nature and their applicability in modern medicine.

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Author information ▶

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Abstract

Concept of bioenhancers or biopotentiators was first time reported in 1929 by Bose. A bioenhancer is an agent capable of enhancing bioavailability and efficacy of a drug