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Study of a Polluted Water Body (Varthur Lake, Bangalore)

Manjula Subash and Josephine Chandy

Abstract

Lakes are dynamic inland aquatic ecosystems that support and maintain a balanced food web of organisms. Lakes are one of the most productive ecosystems in the biosphere- they recycle nutrients, purify water, recharge ground water, maintain stream flow, attenuate floods, helps in soil conservation, prevents erosion by acting as a buffer for shore lines, supplies drinking water, fish, fodder, frel, habitat for flora and fauna and recreation for people.

Bangalore through centuries has been blessed with number of water bodies. But due to uncurbed anthropogenic activities in the form of urbanization, the number of lakes in Bangalore had been drastically reduced. Majority of the city's lakes are used for indiscriminate disposal of effluents. This paper focuses to identify the immediate threats to the ecology of the lake and to evaluate the restoration efforts that is needed for the lake reclamation by chemical analysis of water quality and socio-economic survey. The results of chemical analysis of water shows that the lake is highly eutrophicated. It is enriched with nutrients due to inflow of untreated sewage of the Bangalore city. The lake showed high concentration of organic matter. It recorded high BOD and COD values with low DO values. The ammonia content was found to be very high resulting in the reduction in the diversity and number of animal species in the lake. With decaying organic matter the lake shows the presence of pathogenic bacteria, increased mosquito population and bad odour. As the lake is shallow, it is susceptible to increasing silt loading within the catchment area. Silt loading reduces the quality of water, obstructs the rainwater infiltration in to the aquifer and reduced recharging of ground water. The socio-economic investigation revealed that the Varthur lake provides economic benefits to the local population in the form of irrigation, fishing etc. Respondents of the survey complained of the dairy animals falling sick when the animals consume lake water and also decline in fishing activity. Malarial and dengue infections are high among the local people.

Ancient human societies have traditionally recognized water resources in practical as well as in symbolic ways. Failure by modern societies to deal with water as a finite resource is leading to unnecessary destruction of water bodies. The failure in turn is threatening all options for the survival and security of plants, animals, humans etc. The degradation of Varthur lake seriously affects the ecological balance of the lake as the quantity of the pollutant entering the lake is beyond the neutralizing ability of the lakes. The analysis reveals the urgent need to restore the quality of the lake by taking stringent strategies like desilting the lake, prevent pollution, removal of macrophytes, watershed management, provision for educational research, community participation and public awareness programmes.

Key words: Urbanization, restoration, eutrophicated, desilting, watershed management.

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A Brief Study on Quality Control of Immunosuppressants

R. Ramachandrappa, Latha M.S and Sudheer Chivakula

Abstract

The study contains a brief description of human immune system, disorders of human immunity, immune deficiencies and about transplant of organs to the body. It also describes briefly the circumstances leading to the rejections of the transplanted organs and was actually the immunosuppressant drugs play an important role. In this study immunosuppressive product Mycophenolate Mofetli has been selected for extensive quality control study. The various analytical methodology as apart of quality control of this product is studied elaborately with relevant data.

Key words: Mycophenolate Mofetli, HPLC.

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Application of M.E.J Newman Community Detection Modularity Algorithm to Obtain Communities and to assess overrepresentation Of Gene Ontology categories in Biological Networks

Ashok M.V and Raj kumar

Abstract

Detecting and characterizing the communities in social or metabolic network is a problem of considerable importance.

In this paper, M.E.J Newman Community Detection algorithm based on modularity is applied on the bio-data set *Saccharomyces cerevisiae*(yeast) to identify and classify the communities. The communities thus obtained were analyzed to determine which gene ontology terms are significantly overrepresented based on the p-values in a set of genes. The overrepresentation signifies the conservation of the characters through generations which generate a good phylogeny.

Category: Data mining.

Key words: Community Detection, modularity, overrepresentation, p-value, phylogeny.

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The Business Process Outsourcing Shiftwork Rating Scale – Development of a Tool

Shireen Ratna Solomon and Veena Easvaradoss

Abstract

The Business Process Outsourcing Shiftwork Rating Scale BPO-SRS was developed with a view to: (1) assess the impact of working in shifts on the health of BPO employees in the IT/ITES sectors and (2) assess their current coping strategies to these problems, if any. The scale is a battery of five self-report scales that address the most pertinent and unique issues within shiftwork concerning general health, sleep and fatigue, eating habits, anger and coping strategies. It uses a 5-point Likert rating format and provides a global score for Health and Coping Strategies as well as individual scores for each scale.

Extensive review of literature and personal interviews were conducted to identify the main problems that BPO shiftworkers in the IT/ITES sectors face. Based on the information that emerged, a preliminary self-report rating scale containing a total of 164 items was developed. 52 questions that were ambiguous, irrelevant and had similar meanings were omitted. The modified scale containing 112 items was then administered on a pilot sample of 300 BPO shiftworkers to establish construct validity (through factor analysis) and reliability.

Content validity, face validity and construct validity were established and found to be very good for all the scales. The internal consistency of the scale was found to be very high.

This scale may be an excellent indicator of health problems and coping strategies among BPO employees in the IT/ITES sectors and may also help with further intervention procedures.

Key words: Shiftwork, rating scale, BPO, reliability, validity.

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Entrepreneurship and Empowerment of Women with Special Reference to the Soligas

Nalini Sekaran

Abstract

Malai Mahadeshwara Hills, shortly called as M.M. Hills is located in Chamarajanagar district of Karnataka. This place derives its name from the renowned deity Malai Mahadeshwara. This place has Reserve Forests which cover approximately an area of 39,361.45 hectares. This Forest – agricultural ecotone is an area that adjoins forests and zones of intensive agriculture. This place is critical for conservation of biodiversity and for the maintenance of livelihoods of people who inhabit this area. The Soliga Tribes, the inhabitants of M.M. Hills are people who live in close association with nature. ‘Soliga’ means ‘people of Bamboo’ a name based on their belief that their ancestors originated from the Bamboo. Bamboo served as the main raw material for their crafts and occupation. But with the depletion of bamboo, the Lantana craft has enabled tribal artisans to earn a livelihood from the widely available weed Lantana. This has come as real boon for the Soligas, especially women who while practicing this entrepreneurial activity are able to sustain the environment.

This paper entitled “Entrepreneurship and Empowerment of Women with Special Reference to the Soliga” focuses on the life of Soliga women of the region. It also focuses on the major entrepreneurial activity, i.e. the Lantana Craft which has empowered them as well as enabled the conservation of the environment.

Key words: M.M. Hills, The Soliga Tribes, Entrepreneurship, the Lantana Craft.

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Effect of Selected Yogasanas on Anthropometric Measurements and Body Composition of Secondary School Obese Boys

Rameshappa G. and M.B. Keerthinarayanaswamy

Abstract

Obesity in children is gradually becoming a major health problem in many developing countries including India. Due to the change in life style, the children of today face so many problems related to health. To cure these problems everyday requires yoga practices, exercises, pranayamas and health are the integral part of human life fitness and wellness of a person are correlated to each other. In fitness, body proportion and composition are important parameters. Yogasanas give a tremendous helps in making their body into good physic and also reduce the body fat and weight. Therefore the present study was undertaken to effect of selected yagasanas on anthropometric measurements and body composition of secondary school obese boys. A sampling of 60 obesity boys were selected from selected secondary schools of Vijayapura, Devanahlli Taluk, Bangalore, Karnataka by using the BMI formula by considering purposive sampling technique. They were in the age group of 14 to 16 years. The researcher was select two groups viz. control and experimental groups. The experimental group was given training in yogasanas and control group were undergone day to day activity. The duration of experimental group is for twelve weeks. The standard procedures were followed to assess the skinfolds measure to find out the body fat percentage. It was statistically concluded that the yogasana training programme has a good effect to reduce the body fat, body weight, arm girth of obese boys.

Key words: Yogasanas, Anthropometric measurements, Body Composition, Obese boys.

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Cultural Intelligence: Need to Socialize

Sheeja Krishnakumar and Roopa T.N.

Abstract

Cultural Intelligence like other intelligence, emotional quotient and intelligence quotient, it is the intelligence or the capability required to understand the diverse cultural heritage and to deal with people from different cultural background effectively. The cultural intelligence approach goes beyond the emphasis on knowledge because it also emphasizes the importance of developing an overall repertoire of understanding, motivation and skills that enables one to move in and out of different cultural contexts (Ang & Van Dyne, 2008). Understanding the culture and behaving accordingly is a capability in the individual that varies from one to another to socialize. Successful adaptation to new and unfamiliar cultural setting is not only an issue related to expatriates. It is a serious issue when an employee moves from organization to another. Understanding the socialization process in a unique way to study the new culture and behaving accordingly is the challenge in front of every new entry to the organization. This paper is to understand importance of cultural intelligence not only as a requirement for international assignment but also to socialize with people in the group within an organization. This is highlighted as a requirement not only within the organization but also to deal with people outside the organization.

Key words: intelligence, culture, challenge, organization, adaptation, environment, socialize.

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An Empirical Study on the entrepreneurship prospects in Cochin City

Babu Savio

Abstract

The present study titled “An Empirical study on the entrepreneurial prospects in Cochin City”, was an empirical in nature conducted among 100 entrepreneurs in the City of Cochin in Ernakulum District, Kerala. The purpose of the study was to measure the scope of entrepreneurship and to see the future prospects of entrepreneurship in India. Stratified sampling techniques procedure was used to collected data through a questionnaire. The findings of the study revealed that there are ample opportunities in businesses in India and such opportunities will transform India in the coming future. For such transformation to happen there needs to be support both at the governmental and societal level. For the government it is important to realize that the goal of small business owners will be to remain self-employed.it also suggested that Entrepreneurship development is the key factor to fight against unemployment, poverty and to prepare ourselves for globalization in order to achieve overall Indian economic progress.

Key words: Entrepreneurship, Prospects, City of Cochin, envision, Driving Forces, sustainable self-employment and competency.

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