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## Effect of temperature on the life-history patterns of selected indigenous anurans of Western Ghats

Josephine Chandy

### Abstract

Amongst the vertebrates, being cold blooded and having very sensitive skin, amphibians are excellent indicators of environmental health. Environmental pollutants which are released into microhabitats affect its temperatures and this makes the anurans vulnerable to these changes on account of their bimodal life and permeable skin. This vulnerability is reflected in the distribution and life history patterns of the anurans. Therefore any change in the amphibian population/life-history should alarm conservationists.

Hitherto, diverse life-history patterns of two specific tropical anurans *Rana curtipes* & *Polypedates maculatus* have been studied under captivity and were also compared with the metamorphic pattern of their counterparts studied in the wild in order to draw wealth of information on temperature related changes on the metamorphic pattern of Indian anurans. Advancement of metamorphosis as seen in *Polypedates maculatus*, which inhabits rain fed open fields of Virajpet, Kodagu district is an adaptive response to the threat of desiccation, while the extended larval duration of *Rana curtipes* that inhabits the cooler streams of the forests of Virajpet, Kodagu district is to be regarded as a case of unusual neoteny.

The short time of development as seen in *Polypedates maculatus* under captivity in warmer waters in comparison to that reported for the typical temperate species *Rana pipiens* (78 days) is probably due to tropical climate, but this short duration as compared to the exceptionally longer larval duration ( 9-11 months) of another tropical anuran *Rana curtipes* which shares the same habitat could be due to species specific diverse life-history patterns exhibited by the two anurans under the impact of the microhabitat that they occupy. With the threat of global warming and increasing temperatures, this observation could pose problems for the survival of the species that may metamorphose earlier probably under unfavorable conditions.

**Keywords:** Amphibians, Western Ghats, Diversity in life-history patterns, *Rana curtipes*, *Polypedates maculatus*, Temperature.

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## Effect of malathion on the seminal vesicle of *Glossogobius giuris* (Ham) – an *in vitro* study

Sitavi Yathiender, Usha Anandhi D and P.S. Murthy

### Abstract

Organophosphorus chemicals in the aquatic environment are reported to be antiandrogenic and cause reproductive disturbance in fishes. *In vitro* studies revealed cytomorphological changes in the seminal vesicle which includes thick interocular connective tissue sheath, clumped necrotic sperms and atrophied secretory cells in fishes exposed to 0.05 and 0.5 ppm of malathion for 24 hours. At higher concentration and 96 hours of exposure, a significant decrease in size of the locules with cysts of sperms and hypertrophied secretory epithelial cells was observed. Further, depletion of PAS, HgBP and sudanophilic granules was also seen in the locules. The intensity of these reactions was more in the intervesicular connective tissue sheath than in the lumen indicating minimal activity in the seminal vesicle which in turn affects sperm motility and alters the reproductive potential of the fish.

**Keywords:** Pesticide, *Glossogobius giuris*, Seminal vesicle.

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## Changes in Histochemistry of Proteins in *cyprinus carpio* fry and fingerling during stress and recovery from ambient ammonia stress

Vijaya Reddy and Neeraja

### Abstract

Histochemical changes of Protein of *cyprinus Carpio* fry and fingerling were studied at sublethal concentration of ammonia and recovery from stress for 14 days. Histochemical analysis revealed the congestion during stress for both the stages of the *cyprinus carpio*. The gill region were stained with bromophenol blue (BPB) to observe changes in Protein content. On 14 days exposure, in gill of fry intensity of dye was found to be increased in Primary rachis and Primary and secondary gill lamellae. During recovery fry showed decreased intensity of colour with disruption and desquamation of cells, but no congestion. The above changes are indicative of animal limping back to normalcy during recovery.

**Keywords:** Congestion, sub lethal concentration desquamation, ammonia, desquamation, recovery.

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# Factors Influencing Career Certainty in Indian Adolescents

Rupashri Murthy and Sudha Bhogle

## Abstract

This study investigated whether students who have decided on a career (choice group) and the students who were undecided (no-choice group) differed on individual variables (sense of family obligation, gender and birth order etc.) and contextual variables (family involvement). Two hundred and ninety six First year pre-university students participated in the survey and filled out questionnaires regarding the variables of study. Results reveal significant difference between choice and no-choice group on family involvement and sense of family obligation. Significant differences were also found between the two groups on satisfaction with their major and concern about ability to perform well in board examination. Gender and birth order differences were also found. Males were more likely than females to make a career choice; first-borns were more likely to decide on a career path than later born and only children.

**Keywords:** Career certainty, family support, family obligation, birth order, gender differences.

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## Rural Tourism and Community Development

Shweta Gaur

### Abstract

India's Travel & Tourism economy is ranked first in the long term (10 years) growth in world. Following the same approach, a new venture was undertaken by the Government of India to tap the potential of tourism industry in the 'Rural India'. Ministry of Tourism (MoT) has planned to introduce tourism in the rural area to fight against the problems of rural poverty and regional backwardness. This initiative tried to replicate the successful Pro Poor Tourism models of 'rural tourism' in the European nations. However till now there has been no proper mechanism to analyze and quantify the socio-cultural impacts of tourism on locals especially the rural population in India. An attempt has been made through this paper to understand the ability of tourism to initiate the development process in rural areas. The paper proceeds with a brief concept note on rural tourism and community participation in it, followed by the issues of impacts of intermingling of the rural society with the foreign tourists for a prolonged duration. One of the main purposes of this paper is to illustrate the impacts of tourism related activities in poverty reduction at the rural destination and its influence on generating their self esteem.

**Keywords:** Rural tourism, community-participation, development, impacts.

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# “Paradigm Shifts in Service Quality of Retail Stores”

R. Vijaya Lakshmi and Dr. Hanuman Kennedy

## Abstract

The performance of the retailing sector for the past few years has been outstanding and witnessing a huge revamping exercise, significantly contributed by the growth of the organized retailing. Rapid urbanization, exposure to large number of foreign brands and changing lifestyle and preferences has contributed to the growth of retailing in India. The quality of service that has been perceived by the customers irrespective of the brand or make is what ultimately results in a customer walking back to the store once again. The paper provides insights into the service quality prevalent in the retail stores as perceived by the customers and how some of the factors are related with that of the socio economic status. The sample was taken from the visitors of TOTAL mall, a Hyper market from **Jubilant group** at Airport Road in **Bangalore**. A structured questionnaire was administered to collect primary data. Statistical tools such as Factor analysis, ANOVA, and Chi- Square Test were used. The factors namely, Reliability, matching Customer needs and products, Customer handling, Customer convenience, Store layout, Merchandise availability, Parking space and Quality of staff were identified through Factor Analysis. Depending on the sex, customer handling and the corresponding quality of service varies. It has been found that if the customers' perception on service quality is high at retail stores, it results in higher customer loyalty. This is a case discussion on a hypermarket which deals with the perceptions of customers on both tangible and intangible factors affecting the service quality.

**Keywords:** Service quality, Customer expectations, Customer convenience, Hypermarkets.

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# Bank Credit to Women Entrepreneurs – A Study

Anupama Bhat

## Abstract

An Entrepreneur is one of the most important inputs in the economic development of a country or regions within the country. Entrepreneurial competence makes all the difference in the rate of economic growth.

A woman who becomes an entrepreneur is said as women of commitment and who is independently employed.

Loans are generally granted for capital and working capital requirement such as purchase of land, construction of factory building, purchase of machinery, modernization and renovation of plant, purchase of raw materials, meeting peak period requirement, starting new ventures or business etc. These loans prove a boon to building young entrepreneurs.

The study focuses on the financial assistance being provided to women entrepreneurs under various schemes by bank and their effective use for the business. All respondents had obtained concession under Stree Shakti Scheme. It was observed that women entrepreneurs usually repay the loan and are not defaulters.

**Keywords:** Women Entrepreneurs, Self Help Group(SHG), Term Loan, Cash credit, Stree Shakti Schemes.

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# Is the Apple iPad a Game Changer: A Strategic Analysis

Supriya Murthy and Aditya Ramamurthy

## Abstract

Apple has maintained its strong premium brand image and reputation for innovation in the design of its products. The first decade of the 21<sup>st</sup> century has witnessed a shift in Apple's product strategy away from an exclusive focus on computers, to **developing innovative portable devices for the consumer entertainment market**. This fundamental change in strategy has **enabled Apple to diversify its product offerings, increase its profitability, and enter the portable devices market**. Apple achieved its success in the market by redefining, how customers consume and interact with mobile multimedia. Through great product design and innovation, Apple's revolutionary iPod, the iTunes store, and the iPhone have established the company as a dominant and trend-setting player with a strong presence within the market.

Through the release of the iPad, Apple is again attempting to **revolutionize portable media consumption by giving consumer yet another way to access multimedia content, e-books and newspapers via the tablet**. **Apple has used a myriad of strategies to become a dominant player in the market** all focused on redefining how the user consumes multimedia content: movies, music, the internet, and now books and newspapers with the release of the iPad. Thus, the creation of the iPad as the newest portable consumer device offering is another strategic move to cement the company's leading position within the portable device market segment.

In this paper, we analyze strategies driving Apple's success in the market place and the evolution of the strategic decisions made by Apple. We focus on understanding the core competencies and structural advantages afforded to Apple because of the aforementioned strategies and use that analysis as a framework for concluding whether the iPad is really a game changer in the industry. This is a case presentation of the newly introduced iPad by Apple Inc. which lays out the strategies for its success.

**Keywords:** Innovation, Product Strategy, Portable Multimedia Device, Organizational Capability, Steve Jobs.

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