PROCEEDINGS OF THE NINETY EIGHTH SESSION OF THE INDIAN SCIENCE CONGRESS

CHENNAI, 2011

PART II

SECTION OF ANTHROPOLOGICAL AND BEHAVIOURAL SCIENCES (including Archaeology and Psychology & Educational Science and Military Sciences)

President : Prof. K. Saratchandra Singh

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98th Indian Science Congress

January 3-7, 2011, Chennai

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PRESIDENTIAL ADDRESS

President

Prof. K. Saratchandra Singh

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An Anthrpological Profile of North-East India with special reference to Manipur

President : K. Saratchandra Singh*

SECTION OF ANTHROPOLOGICAL AND BEHAVIOURAL SCIENCES (including Archaeology and Psychology & Educational Science and Military Sciences)

Respected Chairperson, distinguished delegates, learned fellow members, senior and young scientists, ladies and gentleman. With great pleasure, I welcome you all to the deliberations in the Section of Anthropological and Behevioural Sciences, including Archaeology, Psychology, Educational Science and Military Sciences of the 98th Indian Science Congress, being held at the beautiful campus of SRM University, Chennai, a 350 year old city and known for its rich cultural heritage. Let me, at the outset, take the privilege to express my deep sense of gratitude to the members of my academic fraternity who have unanimously elected me as the President of this grand Section, for the year 2010-2011.

We all know that the focal theme of the 98th Indian Science Congress is *Quality Education and Excellence in Scientific Research in Indian Universities* which is indeed an appropriate theme which commensurates with the nick of the time, when the world has entered the dawn of twenty first century. As the world is now in the realm of civilization, globalization and modernization, human life has also concurrently become more complex and critical in varied ways. It is high time now to introspect and assess our past tract of learning systems and to restructure and recast the components of the present day education curriculum in order to equip our young generation with excellent knowledge to withstand the increasing tough competitions and challenges. Human beings are ever dynamic biologically and culturally. India is a vast country having multiethnic groups with diverse cultures. There is a need to find time to bring these heterogenous groups of people into closer proximity both physically and emotionally. I humbly feel that both physical and human sciences should be developed equally

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for a healthy and ideal nation.

At present, let me take the opportunity to speak about the anthropological profile of North-east India with special reference to Manipur.

The North-eastern region covering an area of about 255,000 sq km comprising nearly seven percent of the vast Indian Union, has been known for its unique physiographic features and for her wide ethnic diversity. North-east India is popularly known as the land of seven sister states, namely Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura before the inclusion of Sikim as the eighth and the last sister state. The composite region lies between 22° and 29°8' North Latitude and 89°40' and 97° 22' East Longitude forming a distinctive geographical front surrounded by the foreign territories of Bhutan and China on the north, Myanmar on the east and south, Bangladesh on the west except a chickenneck corridor between Nepal and Bangladesh on the west which connects this region with the rest of India. The entire land is almost a frontier track. The hills, mountains and plateaus account for nearly 70 percent of the land, while the remaining three fourth is the plains area which is formed by the vast valley of the Brahmaputra, the Barak valley of Assam and the Imphal valley of Manipur. The region lies at the trijunction of the Indo-Chinese, Indo-Malayan, and Indian sub-regions of the orient. The region has a grandeur of its dense tracts of tropical forests with rich bio-diversity. The entire landscape covers the patchwork of paddy fields and lush tea gardens and thick bamboo groves. The mighty Brahamaputra, one of the longest rivers of the world runs through the valley of Assam from the east to the west. Assam is the home of the famous one-horn Rhino and it could be seen in the well known Kaziranga National Park.

The lofty Himalayas spreading the entire northern front of India has created a gigantic wall segregating the two great countries of India and China. This has contributed in shaping the population formation and equally truly the histories of both the countries. While the Himalayas was the spring of early Indian civilization, it has also provided highland habitations to millions of people since ancient times.

Structurally, according to Spate (1954) all the natural divisions of India excepting the coastal plains are present in this part of the country and geologically the Archaens, the Tertiaries and the Quaternaries are well represented here (Krishnan 1960). Godwin-Austen (1975) observed some parts of this area over the high ridge (about 6000 ft) in the Shillong peak and Jatinga valley as having had experienced glacial action of the Pleistocene period. Climatically North-

east India falls within the sub-tropical monsoon rain forest belt and the World's heaviest rainfall area falls in this region over the Meghalaya plateau.

Since when the greater Assam was annexed to the British empire in 1826, many British scholars in different fields were deputed to carry out systematic investigations into the natural resources and human variabilities in this region. J.H. Hutton and J.P. Mills who were here on administrative duties in the third decade of twentieth century carried out ethnographic and archaeological researches and made valuable contributions. The first report on polished stone axes was made in 1867 by Sir John Lubbock of the University of London based on some polished stone axes of jadeite collected by Capt. E.H. Steel of Royal Artillery from the house of a tea planter in Upper Assam. Since then occasional reports on stray finds of stone implements mainly of celts from Naga hills (Lt. Barran 1872), from Mishimi hills (John Anderson 1871), from Dibrugarh (H.B. Medlicott 1875), from Khasi hills (H.H. Godwin Austen 1875, J. Cockburn 1879) began to appear. These prehistoric antiquities collected so far from different parts of Assam, Naga hills and Khasi hills consisted of only one class of material, viz., the ground and polished stone tools which were regarded as representing the Neolithic phase of prehistoric culture. From the analysis of the Neolithic materials of India to highlight the Neolithic problem in the prehistory of India, E.C. Worman (1949) pointed out that Assam was the corridor through which celt-making techniques entered India. He also observed that the Indian smoothed stone celts of Neolithic type, regardless of the cultural affiliation, appear to be derived from the eastward and further argued that the eastern half of India belonged to a fairly large Southeast Asiatic area throughout which the evolution of post-pleistocene prehistoric cultures were apparently more or less similar. As per his estimation the earliest Neolithic stone tools probably appeared in India not earlier than 3500-2500 B.C. and they remained in general use in Northeastern India until about 1500 B.C. When A.H. Dani (1960) examined the Neolithic stone tool materials collected by the British scholars from different parts of North-east India and preserved in the Pitt Rivers Museum of Oxford University, he expressed that the Assamese neoliths showing close similarities with the type found in South- east Asia and China are of late origin and their chronology is linked up with the dates of the developed neoliths in the countries of South Asia and Southern China.

Discovery of the first prehistoric site at Daojali Hading of the North Cachar hills District, Assam by M.C. Goswami with the able assistance of T.C. Sharma of the Anthropology Department, Gauhati University, yielded stone tools, mullers, pestles, grinding stone or hewns,

cord-marked pottery, bone fragments and pieces of tortoise shell. After a subsequent study T.C. Sharma linked Assam with South-east Asia in the Neolithic period.

Stone artifacts collected from Nagaland (J.H. Hutton 1921, J.P. Mills 1922, Von Furer Haimendorf 1939 etc.) and from Arunachal Pradesh (John Anderson 1971) showing jadeite materials in quite a number of celts is a matter of great significance. As jadeites are not locally available, these could have reached here either from China or Myanmar.

Archaeological prominence of North-east India has been due to rich megalithic remains of this area. J.P. Mills (1933) writes that *Indeed it is one of the few places in the World where monuments of this type are still erected*. It has been agreed by all that the custom of erection of megaliths prevailed in North-east India from the prehistoric period (Clarke 1874). Structurally, the menhirs and dolmens of this region are similar to those found in other parts of India, South-east Asia and Europe (Clarke 1874, Gordon 1914).

The ice breaking discovery of one fossil skull cap from Hathwa, Madhya Pradesh, on the northern bank of Narmada, was the first physical proof of the presence of early man in India. The specimen has been termed as Homo erectus narmadensis (De Lumle and Sonakia 1985). Ghose (1983) observes that this specimen belongs to the same genus and species as those from Java and China. Other subsequent fossil materials of hominids belonging to different varieties unearthed from the Siwalik range of Northern India further ascertain the presence of hominids in India between the phases of Miocene and Pliocene periods. The major forms are Dryopithecus, Ramapithecus, Sivapithecus and Gigantopithecus. Ghose was of the opinion that due to the outcome of climatic interruptions in the form of glacial episodes, the hominids were compelled to migrate and it could have taken place either along the east or west, towards the east the ultimate points as far east as China or South- east Asia and Indonesia. Apart from the present theory of eastward flow of hominid movement, another theory of westward movement has already been suggested. According to the earlier school, India in the early time was connected with South-east Asia by land bridge and the same type of animals were roaming about all over the vast region (Sharma 1979, Bhagabati 1993, Das 2004) and that fossil remains of this region may broadly be divided into two categories: Sino- Malayan having similarities with China and Malaya, and Siva-Malayan having affinities with Siwalik region of India and Malaya (Das 2004). It has also been pointed out by many that the Neolithic culture appears to have spread from Eastern Indian through North-east India (Sharma 1980, Dani 1960). Finding of

celts of jadeite materials of Myanmarese or Chinese origin in North-east India has also been a clear indication of cultural link among these regions since palaeolithic days.

In another view, it is stated that the North-western region of China lying in between the Huang Ho and the Yangtze Kiang rivers is regarded as the earliest homeland of the ancestors of the Tibeto-Burman speakers. It is said that in a remote time they moved southward to arrive at north of Burma (Myanmar), wherefrom different groups propelled in different directions. One such group moved westward along the lower hills of the Himalayas and extended upto the Western Himalayas. Another group proceeded southward to reach South-east Asia spreading to other adjoining territories. A third group entered North-east India and made their establishment.

It is of the opinion that those early men who had accustomed to mountain passage already acquired their adaptation to high altitude ecosystem. It also provided opportunity for ready availability of raw materials for their stone made weapons.

There is a strong composition of Mongoloid population in North-east India. All the peoples living on the hills of this region are the indigenous tribal groups who have striking mongoloid features and later on classed under the Indo-mongoloid racial groups. Most of the people living on the foothills of the sub-Himalayan ranges and many other plain tribal groups, too, are found to have mongoloid characteristics. It supports the view that peopling of this region was predominantly the immigrants who carried the mongoloid physical traits from the north and the east. The linguistic affinities shared among these tribes who speak either subfamilies of the Siamese-Chinese or the Tibeto-Burman of the Sino-Tibetan linguistic family also lend support to the theory of the route of their migration. The Tai language which was the language of the Ahoms who ruled Assam for nearly 600 years, represents the Siamese-Chinese family. Some smaller communities of upper Assam like the Tai-Phakes, the Turungs etc. speak languages akin to the Tai languages. Under the Tibeto-Burman Languages, (1) the Tibeto-Himalayan branch is spoken in the western part of Kameng District of Arunachal Pradesh adjacent to Bhutan, (2) the north Assam branch is spoken by the Padam, Pasi, Minyong, Mishmi, Nishi, Apatani tribes etc., and (3) the Assam-Burmese branch is widely represented in North-east India specially by the (a) Bodo, (b) Naga and (c) Kuki-Chin groups. The Bodo group of languages are spoken among some tribes of Tripura in the west and many tribal groups of the Brahmaputra valley, such as the Rabha, Koch, Bodo-Kachari, Lalung, Dimasa, Sonowal Kachari, Chutiya etc. The populations of the plains of the Brahmaputra and Barak valleys speak

Assamese and Bengali, sister languages of the eastern group of the Indo-Aryan family. The Assamese language has absorbed many language elements of the surrounding tribes specially of the Bodos (Majumdar D.N. 1979).

All the languages spoken by the tribes of Nagaland, such as the Ao, Angami, Sema, Lotha, Chakhesang etc., are classed together as the Naga group. But the languages spoken by different tribes of Nagaland are so different from one another and, thus, they converse in a language known as Nagamese, which is a pidgin of Assamese. The Kuki – Chin language group is spoken among the Kukis of Manipur, Mizoram and Nagaland.

Another important language component of North-east India is Austro-Asiatic branch of the Austric family which is spoken by the Khasi and Jaintia tribes of Meghalaya. It is significant to note that Khasi and Jaintia belong to the Mon-Khmer group of the Austro-Asiatic branch; some other languages of this group are found in Myanmar, Thailand, Malayasia and Nicobar Islands.

Even in later historical period, groups of people having different ethnic strains continued to enter this land from the east and west. A significant example is the Ahom of Thai or Shan origin who entered Assam by the north eastern route under the leadership of Sam-long-Pha in 1228A.D. and invaded the land. They continued to rule Assam till the time of the annexation by the British in 1826. But this ruling race gradually abandoned their Thai language and got absorbed into their Hinduised or Hindu Assamese – speaking subjects at a later period (Sunitikumar Chattarjee 1970). Some other immigrants were the Khamti, Tai Phake, Khamyang, Aiton, Turung etc. who followed the route of the Ahoms. Most of them are now Buddhists. The Man, a less known endogamous community living in the western part of the Garo hills of Meghalaya are considered to be a section of the Burmese soldiers who continued to live here after an invasion in Assam during the first quarter of the 19th century.

While the Mongoloid groups entered North-east India from the east, people of Caucasoid groups also entered from the west through the plain routes of the Ganges and Brahmaputra valleys since early times. They are now a section of the Indo-Aryans who are confined mostly in the Brahmaputra plains and the Barak valley. When the Mediterraneans entered India from the west in successive waves of migration, a section of them is believed to have reached the North- east Indian region at a very distant past (Das 2004). According to Sarkar (1962), the Dravidians (Mediterranean) appear to have evolved out of the Australoids (Pre- Dravidian)

through various ecological and biological factors. Das feels that the presence of Nesiot element among the Nagas may be an evidence of the entering of Mediterranean people in North-east India at a very ancient time. The Muslims who entered Indian subcontinent from the west in very early time reached Assam in the thirteenth century as invaders (Bhuyan, 1926) and a section of them stayed on in Assam. The Sikhs of Assam are another group who have come from the west as disciples of Guru Tegh Bahadur in 1670 A.D. and settled in Assam at Dhubri and Chaotala. Subsequently some batches of the Sikh also entered Assam and took up different occupations. They speak Assamese and identify themselves as Assamese. The variations of the Man from their parental stock, i.e., the Shans of Burma, but showing closer affinities with the Bodo and other allied populations due to gene flow, as a process of microdifferentiation has been pointed out (Chakraverty 1982, Das 2004).

There is a conjecture that the Khasis and Jaintia people who speak Austric language are supposed to have had certain contact with the Proto-Australoids. Haddon (1909) tentatively suggested an ancient dolichocephalic – platyrrhine (Pre-Dravidian) type which is found strong among the Kuki, Khasi, Manipuri, Kachari etc. but weaker among the Naga tribes. Das (2004) opined that the term Kirata which one comes across in the ancient literatures like the Vedas, the Mahabharata, the Ramayana and the Puranas means the Indo-Mongoloids who are easily distinguishable by their physical features from the Nishada, another pre-vedic population group of India. He further referred that upto the late medieval period the Mongoloids of Eastern India or the Kiratas were the dominating people of the east.

Manipur

In North-east India, Manipur has carved out its own uniqueness mainly due to its physiographical features, rich bio-diversities and multiethnic compositions. The eastern wings of the Himalayas forming part of the mild mountain ridges begin turning southward from the east of upper Assam, where it is known as Patkai Bum, towards the south to form Naga hills and then forming Manipur hills which continue till Arakan Yomas through Mizoram and Chin hills. Manipur is separated from the Brahmaputra valley by its Western hills and from the Chindwin valley of Myanmar by the eastern hills.

Manipur covers an area of 22,327 sq. km. of which an approximate area of 2,238 km constitutes the soucer-shaped central alluvial valley of Manipur or the Imphal valley having

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an altitude of 790 mts above MSL. It has an approximate population of 23 lakhs (2001 Census).

The North-east region was formed as a part of the Himalayan orogeny in the early Tertiary period of the earth's history. Manipur belongs to the Alpine system of young folded mountains, which came into existence as a result of Tertiary foldings of the sedimentary strata formed in the shallow Tethys sea, some 40 to 90 million years ago (Singh R.P., 1982). It is pertinent to note that the Tipam group of stone deposited in the Upper and Middle Miocene periods, is a contemporary of the Lower Siwalik system of the Himalayas. It covers a small area in the Barak Basin on the western flanks of the state of Manipur. The Manipur valley slopes down towards the south. Most of the rivers and rivulets, such as the Barak, Imphal, Iril, Thoubal, Nambul, Kongba etc. are drained towards the south. The valley is lavishly covered with marshes, swamps and lakes of variable sizes, and the Loktak, the largest fresh water lake in North- east India is located towards the south western end of the valley extending over an area of more than 75 sq. km and more so during the rainy season.

Manipur in the early days was known by different nomenclatures. Some scholars of history (Roy, J. 1958; Acharya 1985 etc.) have referred to Sanskrit literatures which have recorded Manipur among other eastern states of Kamarupa (Prajyotisha), Tripura, Srihatta, Hidamba etc. Mention of Manipur as *Marcura* in Klandios Ptolemy's (150AD) *Geographical account of India in the second century A.D.* is remarkable. To the neighbouring territories, Manipur in earlier days was known by different names. The old Assamese called it *Moglai*, the Ahoms called it *Makeli*. To the Cacharis it was *Magli*. The Shans knew Manipur as *Kase*, while the Burmese called it *Kathe*. A section of the Manipuris alleged that their land was anciently called *Kangleipak* – the land of the Kanglei people.

Manipur experienced the full light of history with full sovereign splendour for nearly two thousand years before her merger to the Indian Union in 1949. After a long historical journey, its grandeur of sovereignty was lost in 1891 following aftermath of the Anglo-Manipuri war, popularly known as *Khongjom* War. Consequently, Manipur became a princely state and formed a part of the British India.

The first landmark of archaeological studies in Manipur was made by W. Yumjao Singh, a local scholar in 1929, when he collected some potsherds and a few miscellaneous objects from the site of an old palace. His important collections made from Kameng in 1935 include many coins belonging to different centuries ranging from 2nd century to 18th century,

wherein are found inscriptions of archaic Manipuri and also some Shan, old Bengali, Sanskrit and Assamese scripts. Other collections include copper plates, terra-cotta plates and cups, image of Budha, 13 cannons, one sharinda (a kind of musical instrument) etc. O.K. Singh's (1967) collection of Neolithic antiquities from Khangkhui cave, Ukhrul, may be taken as a more serious investigation into the prehistoric (1983) archaeology of Manipur. Singh's (1983) other subsequent finds from the sites of Napachik located on the right bank of the Imphal river include (i) edge-ground knife of the Hoabinhian character, (ii) the fully ground celts and hand- made cord marked pottery and tripod wares of the Neolithic period; and from Nongpok Keithelmanbi on the right bank of the Imphal river include - (i) Hand axes, (ii) Haobinhian tools, (iii) Corded ware and curved paddle- impressed ware cultures, (iv) Scrapers, (v) Points, (vi) Blades, (vii) Burins, (viii) Borers and (ix) Flakes. These materials broadly represent the relics covering Paleolithic to Neolithic cultural phases. O.K. Singh (1979) is of the opinion that the Khangkhui stone tools are comparable with the Sangiran and Tjabenge flake industries of Java and Celebes, respectively. Further also suggested that the ground and polished tools consisting of hoe - blade, should red celt, quadrangular axe and adze, triangular axe, chisel and the ceramic antiquities are characteristic features of the Neolithic culture of China, Malaya, Indo - China, Thailand, Burma and Indonesia. These are the clear evidences of the appearance of early men in Manipur since Paleolithic times. Moreover, the widespread exhibits of megaliths in the surrounding hill tracts of Manipur may be regarded as the most prolific early cultural remains in Manipur.

In the form of Homo-sapiens, early man developed natural adaptation to almost the total range of terrestrial environments. Culture as the extra – somatic dimensions of defense mechanism of man has prompted to fashion tools according to the types of its utility. From the available prehistoric artifacts, whatever paucity it may be to reconstruct elaborately the early human culture, still, there is enough evidence of man's deliberately shaped lithic relics which are the products of skilled craftsmanship of the early man in Manipur. However, in respect of human fossil finds, Manipur is still *terra incognita*.

Following the general populating pattern of the North-east, Manipur has two broad sections, such as the Hill dwellers as the tribes and the valley dwellers as the non-tribals at large. However, there are pockets of tribal settlements dotted in different parts of the valley. As many as 33 tribes of Manipur are under the scheduled list (Gazette of India No. 10 of 2003) and they are (1) the Aimol, (2) Anal, (3) Angami, (4) Chiru, (5) Chothe, (6) Gangte, (7) Hmar,

(8) Kabui, (9) Kacha Naga, (10) Koirao, (11) Koireng, (12) Kom, (13) Lamgang, (14) Mao, (15) Maram, (16) Maring, (17) Mizo, (18) Monsang, (19) Moyon, (20) Paite, (21) Purum, (22) Ralte, (23) Sema, (24) Simte, (25) Sukte, (26) Tangkhul, (27) Thadou, (28) Vaiphei, (29) Zou, (30) Tarao, (31) Kharam, (32) Poumai, and (33) any Kuki tribes.

Ideally, a tribe in Manipur may take its suitable habitation in any part of the hills surrounding the valley. However, certain tribes mainly having common affinities appear to occupy specific geographical zones. Tribes like the Angami, Kabui, Kacha Naga, Mao, Maram, Sema, Tangkhul, Poumai etc. who are classified under the Naga nomenclature, are normally found settling in the hill ranges covering the north-west, north and the eastern parts of Manipur, while sub-tribes of the Kuki-chin-Mizo group like the Aimol, Anal, Chiru, Chothe, Gangte, Hmar, Koirao, Koireng, Kom, Lamgang, Maring, Mizo, Monsang, Moyon, Paite, Purum, Ralte, Simte, Sukte, Thadou, Vaiphei, Zou, Tarao, Kharam etc, many of whom are the Kuki constellations concentrate in the south west, south and south eastern hills. Apart from the exceptional cases, such a pattern of distribution, although arbitrary, suggests the probable direction of migrations of these ethnic groups into Manipur.

Although there is still no definitive indication of the ethno-historical account of the original settlers of Manipur valley, it is certain that the Meitei, a major community, inhabit the parts of the valley since very early days. One speculation is that tribes of Asiatic origin like the Kang(ba), Kou(ba) and Kong(ba) settled on the northern part of the valley, while the Shelloy-Langmais settled on the hill west of the Kongba river at about 800AD (Singh 1986). Further also pointed out that tribes like the Funan, Maring and the like also arrived in the 11th century. It is also believed that in remote days, some diverse communities called the Khuman, Luwang, Mangang, Moirang, Meitei, Chenglei, Chakpa, Khaba-Nganba, Angom etc. Dun 1886, Singh 1986 (etc.) took their settlements at different parts of the valley in different ages and later on these smaller principalities were amalgamated under the Meitei supremacy. These subjugated groups have become components of the Meitei as 7 exogamous clans. It is without no reason to presume that the Meitei community was a hard nucleus group who ruled the land meticulously and had solely contributed in State formation. It is relevant to point out another school of thought that the word 'Meitei' is derived from the Kachin word Moi and Siamese Tai (Hodgson 1853). It is quite reasonable to think that the Meitei had strong link with the people like the Moi /Man, Tai, Shans, Myanmaries and Chinese. Frequent references in early literatures (Acharya 1985) about the Manipur route through the Chindwin valley as was to be an important highway

for passage and communication of peoples, commodities and ideas between the Indian subcontinent in the west and China and other parts of South-east Asia in the east since ancient days have been made. Mention is also made in Kautilya's Arthasashtra regarding the supply of agallochum and sandle wood from China and her adjoining regions, viz, Indo-China, Malayasia, Timoy, Sumatra and Java through Manipur to India and the western world. It is also referred that it was through the Manipur-Burma route that the Chinese-silk came to Bharu Kacha (Barygaza) which later on was imported in the emporia of Seleucia and Alexandria (Acharya 1985). These few accounts, at least, suggests Manipur to be a strategic meeting junction of diverse racial groups who carried on different trades and commerce specially between the east and the west since very early days. It is sensible to presume that people having different racial backgrounds either on choice or by accident took their settlements in this fertile land. Some villages, viz Phayeng, Andro, Leimaram, Sekmai, Kameng, Khamrang etc. which are occupied by the Chakpa Loi (scheduled caste) groups are said to be of Chinese origin, and Khurkhul, another Loi community, is identified as a section of the Shans (McCullock 1859). In some of these villages, their age old occupation of silk culture tradition still continues. Some more other Loi groups are the Susakameng, Chairen, Sugnu, and Kakching who are scattered in different parts of the valley. Pottery is the secondary occupation of the Andro, Sekmai (Nongpok or eastern Sekmai) and Chairen Lois, while cultivation is their main occupation. The Lois speak dialects of Meitei or Manipuri language. Brewing of yu (wine) is a part of their customs. Roy, J. (1958), a historian was of the opinion that at different periods, the Nagas, Kukis, Shans and Chinese came and settled here and merged themselves into Manipuri community. Further also said that some Aryan and Dravidian features are also found in them.

Though the possibility of a regular pathway of the Caucasoid people through Manipur from western direction was often recorded in earlier literatures, reports of Indo-Aryans entering Manipur for their settlements were made after nearly three forth of its historical era. The Brahmins of Manipur are believed to have begun to settle in Manipur valley during the reign of Kyamba (1467-1508 AD) in the 15th Century. Under the patronage of the Manipuri kings, batches of these Brahmins entered this land and took their first settlements concentrating on the southern boundary of the royal palace (Singh 1963; Nobinchandra 2001 Etc.). They were mostly males who later on married Meitei girls and thereby became Meitei Brahmins or Manipuri Barhmins. Their number is now quite large and they are found distributed possibly in all the Meitei villages where they are to carry out the task of a priest often required by the villagers. The Brahmins form one endogamous group. Another big section of the Meiteis are

the people of Khangabok, Heirok, Ningthoukhong, Nachou villages etc. who are given the name 'Bishnupriya' by the scholars (Sinha undated, Chaudhuri and Gupta 1975). They represent one of the immigrant populations from the west specially from parts of Assam, Tripura and Sylhet in the recent past (Hodson 1908, Singh Khelchandra 1969 etc). The chief occupation of the Bishnupriya in earlier days was supply of grass for the royal stable (Grierson 1923). They would maintain matrimonial contracts among themselves and preserve the character of an endogamous group. Now, they are a microcosm of the larger Meitei communities. Besides, it is understood with certainty that certain sections of Assamese and Bengali immigrants from the west have also been absorbed in the Meitei population. The Britishers also brought with them some Bengali literates to assist them in their administrative works. Now, one finds Bengali settlements in parts of the valley. Some pockets of Bihari settlements are also found in and around Imphal city. Influx of Nepalese took place after the II World War and as such a good number of Nepali settlements are concentrated on the hill slopes and foothills mainly on the northern part of the valley. Immigration scenario has further changed in the post II World War, as people belonging to different communities of Indian origin (Indo-Arvan), such as the Punjabis, Tamils, Keralites, Marwaris, Nepalis, Muslims etc. retreated from Myanmar resorted their settlements at Imphal and Moreh, a small border town of Manipur, India. They continue to operate their cross border trades and commerce from this town.

The Muslims constitute the second largest community of the state. They are locally known as *Pangan* or Manipuri Muslim to differentiate them from the general Muslims. It is said that the name *Pangan* is a corrupt form of Bengal (Hodson 1908). They are said to have migrated from Sylhat (now in Bangladesh) and Cachar district of Assam in large bands, sometime in the year 1606 (Singh and Khan 1973) during the reign of Khagemba (1597-1652). Early Muslim settlers are recorded to be 4500 individuals in the east of Imphal (Brown 1873). Now a days, Muslims in Manipur are scattered in different parts of the valley and their regular settlements are found nearby the rivers and lakes. Cultivation is the mainstay of the Muslims. In early days, the Muslims served as buglers and drummers who were attached to the raja's army (Brown 1873), besides other occupations of gardening, turning, carpentry, pottery etc. The Manipuri Muslims belong to Sunni sect (Dun 1886) and Hanifia sub sect of it (Shah, 1990). They speak a dialect of Manipuri language.

 Sl.
 Linguistic group
 Communities with habitat

 1.
 Naga-Bodo group
 (i) Kabui (north & west),(ii) Khoirao (north)

 2.
 Eastern Naga group
 (i) Maram(north), (ii) Tangkhul (east), (iii) Maring (south)

 3.
 Kuki-Chin-group :
 (i) Hmar (South), (ii) Aimol (South),(iii) Chiru (north),

 (iv) Kharam (south), (v) Purum/Chothe (south east)
 (iv) Kharam (south), (v) Purum/Chothe (south east)

(vi) Vaiphei (south)

(ii) Paite(south)

(b) Northern Chin

The tribes of Manipur speak different sub-families of Tibeto-Burman language family and their linguistic affinities are indicated below.

Of the total population of about 22,93,896 (2001 Census), the tribals constitute nearly 34 percent. The tribals lived in an animistic life for several years, before they gradually got converted into Christianity since the early part of 20 th century.

(i) Thadou Kuki (north & south)

A popular belief among the Nagas of Manipur is that all the Naga groups after a long tracking took a sojourn at a place known as Makhel at Mao Maram area of northern Manipur, and afterwards they dispersed from there in different directions.

Most of the tribes in Manipur are obsessed with the belief that they started their primordial living after they emerged out of the caves. A tribal village is organized and governed by a chief with his council members. A chief is the sole authority in all the village affairs. He is the custodian of the village land and the customary laws. Following a new trend, now a days, village chiefs are elected by abandoning the traditional systems.

Tribes like the Tangkhul and Ruangmei (Kabui) are found to dwell in the neighbouring state of Nagaland, and beyond that the Tangkhul settlements are reported from the Somra tract of Myanmar. Many of the Kuki tribes, the Hmars, in particular are also found in Mizoram, Assam, Tripura and Myanmar.

Having rich rainfall, rice cultivation is favourable and rice is the staple food for all the communities of Manipur. Wet cultivation is practised in the valley, but jhum cultivation is

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common in the hills. One will find terrace cultivation on the northern hills of the state adjoining Nagaland. Characteristic of their kinship and marriage, the tribes of Manipur customarily prefer Mother's Brother's Daughter as their spouse. *Mankat i.e.* payment of bride price is still followed among them.

In physical features, most of the tribes in Manipur have *lower medium* stature (160.0 – 163.9cm) and in average *short* statured tribes are also observed. The Tangkhul Nagas have *lower medium* (x = 163.88cm) stature with *broad* (brachycephalic) type of head form. But the Kabuis, another Naga tribe have *short stature* (x = 159.3cm) and medium (mesocephalic) type of head. Among the Kuki tribes, the Koms who are known as an old Kuki group show *short lower medium* stature (x = 161.3cm) and *medium* type of head (Romeo, L., 2002). Most of the tribes have brown to light brown skin colour.

Among the valley populations, the Meiteis (x = 164cm) and the Andros (x=164.3cm) have *medium* (164.0-166.0cm) type of stature. But in head form, the Meiteis (C1 = 81.35) have *broad* (brachycephalic) type of head, while the Andros (C.1. = 80.74) have *medium* (mesocephalic) type of head. The Khangabok group of Meiteis show *lower medium* stature (x = 162.54cm) and they have *medium* (mesocephalic) type of head form (C.1. = 78.20). It is worth noting that the Kwatha Meitei community which is an isolate group of the valley Meitei sedant population, have a mean stature of 160.72cm (lower medium) which is quite comparable with the mean stature of many tribes of the state. Moreover, they also show O blood group in the highest frequency with 48.91% (Renu, K., 2003) unlike their parental stock. 'O' type is the preponderant blood group among many Naga tribes of Manipur. Quite similar to other Manipuri populations, the Manipuri Muslims also have *lower medium* stature (x = 162.4cm, 160.0 – 163.9cm) and *broad* type of head like the Meiteis. Medium brown is the normal skin colour among these groups of people with variations in frequencies (Meitei 98.38%, Andro 95%, Khangabok 65.09% and Muslims 62%).

Some of the Naga tribes represented by the Tangkhul (46.6%), Kabui (41.98%), Koireng (51.39%), and Chiru (53.77%) show 'O' blood group in the highest frequencies ranging from 42% among the Kabuis and 54% among the Chiru at an average. 'A' blood group is in the next highest frequency in all these Naga tribes with an exception of the Chiru who have 'B' type as the next highest frequency of blood group. On the contrary, among the Kuki tribes, incidence of 'A' type of blood group is in the highest frequency. The Thadou – a major Kuki tribe show 'A' type in 46.96% and the Koms, another Kuki tribe show it in 35.04% as the highest frequency.

'O' type is in the next highest frequency in both the above two tribes (Thadou 23.48%, Kom 34.25%). Therefore, a definite distinction in the distribution pattern of blood groups between the two major groups of tribe is evident – 'O' group being the preponderant blood group for the Naga tribes, and 'A' type for the Kuki groups. Yet, for a definite conclusion, studies on other constituent tribes of these two fraternal groups are necessary.

Blood group studies among some valley populations, specially among the few endogamous groups, have shown 'A' group to be in the highest frequencies having 32.38% among the Meiteis, 40.37% among the Manipuri Brahmins, 39.37% among the Phayengs and 39.84% among the Khurkhuls. But in another two valley populations, the Ningthoukhong Meiteis and the Manipuri Muslims, unlike the above populations, 'O' group occurs in the highest frequencies (NM 40.98%, MM 45.33%). It may be recalled that these two populations are the immigrants from the west and are of Caucasoid origin.

Absence of A_2 sub-type of A blood group among the Meitei, Phayeng and Khurkhul populations of the valley and also among the Paites is very much in conformity with the theory that A_2 is absent among the Mongoloid populations. As an exception, trace of A_2 type among the Manipuri Brahmins, is one way to confirm the Caucasoid background of this group and their migration from the west. Incidence of HbE among the Meiteis (19.23%), Meitei Brahmins (5.6%) (Singh *et al.* 1986), Phayengs (38.46%) and Khurkhuls (16.26%) of Manipur (Singh & Singh 2008) in conformity with the various populations of South-east Asia including North-east India, has been explained with its association with malaria, fertility and migration. The same picture applies to the Austro-Asiatic language groups. A reference may also be made that the Assam Meiteis and the Assam Muslims show 'A' blood group and 'O' group, respectively in the highest frequencies like their counterparts in Manipur (Singh, J.S. 1991).

Human populations are not static units. Changes take place owing to various factors. The Meitei population is an embodiment of a miscegenous group which has been subjected to fusion processes. There are legends which refer to some gene inflow to the Meitei population from various Naga and Kuki ethnic groups. At the same time, the process of fission has also been taking place among them and among tribal populations due to migration, isolation and marriage mechanisms. Such circumstances have brought about micro-evolution within the same population. However, most of the indigenous populations of Manipur are homomorph groups because of natural acclimatization. Changes of the human societies socially and culturally are natural processes. Since the 16th century, a large section of the Meiteis who had their traditional

belief in Sanamahi religion, got converted into Hinduism and highly Sanskritised. Johnstone (1896) observed that in Manipur, where Hinduism became the principal religion of the Manipuris (Meiteis) of the Imphal valley by a royal edict in 1705, the inhabitants of a village could be elevated *en masse* to the status of pure caste Hindus if the raja (king) so decided.

In the neighbouring state of Assam, Bhagabati (1996) observed the classic example of social transformation of the Ahoms who ruled over Assam for nearly 600 years (1228 to 1826A.D.), i.e. till the advent of the British occupation of the land. They represent a case of wholesale integration of an immigrant Mongoloid tribe in the Hindu socio-economic order. He quoted Suniti Kumar Chatterjee (1970-10) that "..... The Ahoms, a Shan tribe (of upper Burma) who came into Assam in 1228 and gave to Brahmaputra valley its ruling race for six centuries, this ruling race, which gave the province or state its present name of Aham or Asam (Assam), being itself absorbed into their Hinduised or Hindu Assamese – speaking subjects towards the end of the long period".

The Manipuri Rajas' constant effort obviously was to protect the boundary of their kingdom and maintain peaceful co-existence among the different communities of the hills and plains giving them freedom to maintain their own socio-cultural identities. The British, unlike their predecessor rulers, introduced certain socio-economic and administrative measures to suit their political and administrative convenience. In the plains, they undertook cadastral mapping of the land and established a system of revenue collection. Although such a mapping was done in certain areas of the hills, too, instead of collection of land revenue, a system of house-tax collection was introduced. These are the new administrative paradigms which, however, created disparities among the different communities of the state.

The tribals of Manipur after their conversion into Christianity under the patronage of the British administration have undergone a dramatic change in their way of life; they have almost relinquished their old beliefs and practices. In another episode of the plains, the Meiteis' conversion into Hindu Vaisnavism, this time, under the patronage of the rajas, has also brought in an impact on their socio-cultural life. The Meiteis, however, cautiously preserved their old beliefs in *Sanamahi deity* and *Pakhangba cult*, and their traditional medicine, ways of curing etc. In this respect, the Meitei belief system is more or less a synthetic one, similar to that of the Japanese Budhism and Sinto belief system. In any case, in the two contrasting situations, both the tribes and the Meiteis have gained their future course of cultural and social formation

system in their respective own ways. The unique cultural heritage of Manipur specially in the form of arts and sports may be said to have emerged out of the blending of the South-east Asian cultural elements with the ones from the west specially from the soil of India.

Another remarkable measure adopted by the British administrators is the introduction of the Inner Line regulation in 1873, under which an outsider i.e., a non-tribal requires to secure a permit to enter the hill areas. It has virtually cut off the prospect of contacts and interactions of the hill tribes with the outside world. By and large, many of the good administrative merits of the colonial rule was shadowed by certain demerits of negative impact in the long run.

Forces to influence population dynamics are many and varied, of which socio-economic, migration and cultural factors are crucial. In this fast changing world, population formations are taking place rapidly everywhere mainly due to migration, hybridization, genetic drift, isolation and socio-cultural factors. Manipur – a place where population admixtures and new social formations have been the regular features since very early days, may further stimulate new wave of population dynamics consequent upon the introduction of India's 'Look East Policy'.

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ABSTRACT OF

PLATINUM JUBILEE LECTURE

PLATINUM JUBILEE LECTURE

Vision and challenges of applied anthropological studies in 21st century

Prof. R. K. Pathak

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Quality in Higher education has assumed great significance in recent times, particularly in the context of increase in competition due to role of the market forces in higher education. Increasing cross-border education opportunities, technological development resulting in new modes of educational provisions and emergence of 'knowledge society' are other challenging demands. In view of the rapid advancement of knowledge and rapid growth of complexity of technological endeavor, the future will need greater competencies and as a consequence, higher education must provide improved and speedy methods to meet today's needs and face tomorrow's challenges.

Professional anthropologists have traditionally worked in higher educational institutions, teaching and researching, but today there are many other career options for trained anthropologists. While the job market for academic anthropologists is relatively steady, demand for anthropologists is increasing in other areas, stimulated by a growing need for analysis and researchers with sharp thinking skills who can manage, evaluate and interpret the large volume of data on human behavior.

Anthropology is the study of human behavior. That exploration of what it means to be human ranges from the study of culture and social relations, to human biology and evolution, to languages, to music, art and architecture, and to vestiges of human habitation. It considers such fascinating questions as how peoples' behavior changes over time, how people move about the world, why and how people from distant parts of the world and dissimilar cultures are different and the same, how the human species has evolved over millions of years, and how individuals understand and operate successfully in distinct cultural settings. Anthropology includes four broad fields—cultural anthropology, linguistics, physical anthropology and archaeology.

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Each of the four fields teaches distinctive skills, such as applying theories, employing research methodologies, formulating and testing hypotheses, and developing extensive sets of data. Over the years the four fields have developed many sub-fields that cater to the challenges of modernization, globalization and impact of technology, etc. The vision of anthropological studies in the 21st century should be to meet these challenges.

In this presentation I will restrict my vision only to two very basic tools of anthropological investigations that have great relevance in the 21st century to meet the challenges posed by the demands of the society or the national or international policy programs. One is anthropometry – the measurement and study of the human body and its parts and capacities, and the second is ethnography - that provides scientific description of individual human societies.

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III

ABSTRACT OF

YOUNG SCIENTIST AWARD PROGRAMME

YOUNG SCIENTIST AWARD PROGRAMME

Opportunity of Natural Selection and its Socioeconomic Variability : A Study among the Missings of Upper Assam, India

Mithun Sikdar

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In this study I put forward a formula to evaluate the explicit contribution of the force of natural selection at infant, early childhood as well as late childhood stage. It has been computed for the Missing population of Northeast India to see the impact of variable environmental setting, secular change and other socio-economic factors on the opportunity for natural selection. Substantial impact of variable environment as well as income group has been found on the selection pressure particularly at the infant stage. Variation in selection pressure is also worked out at the level of population structural measures in the studied villages.

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ABSTRACT OF

SYMPOSIUM/INVITED LECTURE

PROCEEDINGS OF THE NINETY EIGHTH SESSION OF THE INDIAN SCIENCE CONGRESS

CHENNAI, 2011

PART II (Symposium/Invited Lecture)

SECTION OF ANTHROPOLOGICAL AND BEHAVIOURAL SCIENCES

(Including Archaeology and Psychology and Educational Sciences and Military Sciences)

President : Prof. K. Sarat Chandra Singh

Psycho-Socio-Cultural analysis of the Discontent in the North Eastern States

Bhanuprasad Parikh

Vice Chancellor (Retd.) Veer Narmad South Gujarat University, Surat

This paper titled Psycho-Socio-Cultural analyses of the discontent in the North Eastern States is written from the social scientific point of view. The analysis has been based on the data collected about various aspects of life and behaviors of the people in all Seven States from sources like; personal visits, talks and interviews with people from various strata of life, the literature about this region, websites on internet, observation of the people in different situations etc.

The north East part of India has been not only geographically distant (because of creation of East Pakistan) but there is a great psychological distance between North East and rest of India. There has never been emotional integration of the people of this region with the people of Indian continent.

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For these typical phenomena there have been historical reasons which are in the background and have colored the attitudes of the people towards Indian Union and people of India. Even before the dawn of Independence people of the Greater Assam then have craved for secession from India as an independent state. To this historical fact the Ethnic, Social, Cultural, Linguistic and Racial as well as psychological factors have strengthened the feeling of alienation and therefore independence. During the period of 1947 to 1972 the Greater Assam has been divided into Sven states like Assam. Meghalaya, Nagaland, Tripura, Mizoram, Manipur and Arunachal Pradesh on the basis of mainly the Tribal-Ethnic specialties as a measure to satisfy the need for Identity and social political status. Yet the people of all these states feel that their Identity, Status and social cultural as well as Tribal independence have not been satisfied. In addition to these factors the geographical conditions and the economic factors have added to the feeling of isolation and discontent among all the people. There are some local factors typical to each state which have aggravated the problems of discontent among the people. For example, in Assam the problem of migration of Muslims from Bangla Desh in a very large number plus the Bodo problem have added fuel to the fire of discontent. Similarly the Christian Missionary influence is Ethnic centricism are serious factors for alienation among the Nagas, Mizos and people of Manipur and Meghalaya. Tripura is troubled by the overriding number of Bangla Desis and Bengalis.

The discontent in all the states has reached to such a very serious level that now people out of frustration and excessive aspirations have turned to violent actions which has now taken a very serious form of terrorism. The Political parties for the sake of their narrow interest for power go to the extent of even patronizing and supporting the unreasonable demands of the people. At present the discontent in all the Seven states has reached to such a high degree that to day it has become a danger to the sovereignty and security of the nation. And these are such factors which can never be compromised for arriving at the settlement with the warring groups.

Indian Government is making all sided efforts to mitigate the discontent of the people. But it is not an easy task. It is an irony that it is not only One group or party in each state which is fighting for redressal of their demands. In all the states there are several groups and even these groups may be fighting with each other. Hence the solution for redressal of discontents of the people in this region needs separate treatment, negotiations with each state and which should also involve the participation of all the ethnic, political groups and the administration. It needs to bring in whatever available skills for management of human relations. The condition is so serous that the solution is not within sight in near future.

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ABSTRACT OF

ORAL/POSTER PRESENTATION

PROCEEDINGS OF THE NINETY EIGHTH SESSION OF THE INDIAN SCIENCE CONGRESS

CHENNAI, 2011

PART II : (Abstracts)

SECTION OF ANTHROPOLOGICAL AND BEHAVIOURAL SCIENCES (Including Archaeology and Psychology and Educational Sciences and Military Sciences)

President: Prof. K.Sarat Chandra Singh

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PROCEEDINGS OF THE NINETY EIGHTH SESSION OF THE INDIAN SCIENCE CONGRESS

CHENNAI, 2011

PART II (Abstracts)

SECTION OF ANTHROPOLOGICAL AND BEHAVIOURAL SCIENCES

(Including Archaeology and Psychology and Educational Sciences and Military Sciences)

President : Prof. K. Sarat Chandra Singh

I. ANTHROPOLOGY

1. A Study on Food Consumption Pattern and Nutrient Intakes of Lactating Women of Nalanda District (Bihar)

KumKum Kumari¹ and Arvind Kumar Sharma²

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Key words : Recommended Dietary Allowances (R.D.A.), Food consumption pattern, Food attitude, Nutrient Intake, Food Intake

The success of lactation and health of the infants depends entirely on the type of diet consumed by the lactating women. Thus, the study of food consumption pattern and nutrient intakes of lactating women assumes significance in understanding relationship between dietary behaviour and lactation among their economic status of lactating women. It also goes a long way in deciding their level of food intake, nutrient intake and attitude towards various food items. The study has shown that the lactating women have a healthy dietary pattern comparable to the Recommended Dietary Allowances standards formulated by Indian Council of Medical Research. Food consumption pattern and nutrient intake were significantly correlated with their economic status.

2. Effect of Social and Environmental Factors on Occurrence of Diarrhoea in Children

KumKum Kumari¹ and Arvind Kumar Sharma²

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Key words : Slum children, Patna, Disease, Drinking water, Socio-economic background

Diarrhoea is one of the most prevalent gastro-intestinal killer disease among the under five years children in India. In sanitary living conditions and contaminated drinking water is the major cause of diarrhoeal infection. Children of low income families are more vulnerable to this infection than those of higher income group. The present study conducted on diarrhoeal infection among slum children of Patna has revealed the effect of social and environmental factors on its occurrence and prevalence specially among poor children. The study also shows that lack of proper personal care and domestic hygiene and sanitation among low income and large size families among render children more vulnerable to diarrhoeal infection.

3. Factor Analysis of Hypertension and Type 2 Diabetes Risk

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Key words : Adipose tissue distribution, Bengalee, factor analysis, Hypertension, Type 2 diabetes, Anthropometry, Waist stature ratio

Clustering of risk variables of non-communicative diseases like Hypertension (HT), Non-

Insulin dependant Diabetes Mellitus (NIDDM) or Type-2-Diabetes Mellitus (T2DM) is known to be associated with the excess adiposity vis-à-vis obesity. Accordingly, Adipose tissue distribution measure is imperative to understand the risk factors for hypertension (HT) and type 2 diabetes mellitus (T2DM). To find out the best adipose tissue distribution measure associated with greater risk of hypertension (HT) and type diabetes mellitus (T2DM) among adult Bengalee Hindu men, 203 Bengalee adult males aged 20-67 years, anthropometric measures, systolic and diastolic blood pressure, fasting and 2 – hour postload glucose levels were assessed. Statistical analysis includes Pearson correlation analysis, Principle Component Analysis (PCA), stepwise multiple logistic regression analysis and Receiver Operating Characteristic curve (ROC) analysis. Central adiposity component was the best significant predictor of both HT (OR 1.97; 95%Cl 1.08-3.62) and T2DM (OR 2.08; 95%Cl 1.24-3.50). Waist stature ratio (WSR) was the best measure of central adiposity component in assessing both HT (AUC.70; 95%Cl.56-82) and T2DM (AUS.66; 95%Cl.55-76). Present study demonstrated that WSR is the best central adipose tissue distribution measure associated with the greater risk of HT and T2DM.

4. Waist Stature Ratio as a Measure of Obesity and Body Fat Composition in Asian Indians

Arup Ratan Bandyopadhyay¹ Jayita Roy Tapadar², Madhumati Chatterjee¹ and Jyoti Ratan Ghosh³

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Key words : Anthropometry, Adiposity, Fat composition, Females

Clustering of risk variables associated with the excess adiposity vis-à-vis obesity and non-communicable diseases like cardiovascular disease (CVD), Type-2-Diabetes Mellitus (NIDDM) begins before the onset of menopause. However, studies of the factors underlying this have focused only on age variations in adiposity and body fat composition among the preand post menopausal women. To identify simple, surrogate measures to estimate total body fat and excess adiposity in adult Asian Indian females in Eastern India, a total of 210 (mean age 43.06 ± 3.4 years) healthy adult Bengalee women has been taken into the consideration. Anthropometric measurements (i.e. height, weight, waist circumference, hip circumference) were measured. Waist-to-hip ratio, waist-to-stature ratio were calculated. Percent Body Fat was measured. Waist Stature Ratio (WSR) demonstrated the strongest positive correlation (r = 0.88, P<0.001) with Percent Body fat compared to other adiposity measures such as Waist Circumference (WC) (r = 0.78, P<0.001) and Waist Hip Ratio (WHR) (r = 0.72, P<0.001). The present study vindicated that Waist Stature Ratio (WSR) could be the best measure for Percent Body Fat among the middle aged Asian Indian women at the onset of menopause.

5. Association of Food Patterns with Body Composition in Children and Adolescents of Four Selected Tribal Communities in West Bengal

Sanjib Kumar Bala and Arnab Ghosh

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Key words : Body composition, Food patterns, Nutritional status, Tribes, West Bengal, India

The present community based cross-sectional study was aimed to compare anthropometric and body composition characteristics with association between food patterns among the four selected tribal communities such as Santal (boys 190, girls 162), Kora (boys 170, girls 162), Lodha (boys 153, girls 140) and Mahalee (boys 171, girls 189) belonging to 1-16 years of age group. Anthropometric measures namely height, weight, circumferences of minimum waist, maximum hip, mid-upper arm, maximum calf and skin folds at biceps, triceps, subscapular, suprailliac were collected from each subject. Body composition variables namely body mass index (BMI), sum of four skin fold (SF4) arm muscle circumference (AMC), arm muscle area (AMA), arm fat area (AFA) and trunk extremity ratio (TER) were subsequently computed. Appropriate statistically methods have been applied in order to find out variations among the populations. The results revealed that all anthropometric and body composition variables had positively associated with cereals and millet, other vegetables, nut and oil, fish, meat and egg for all ethnic groups. It seem reasonable to argue that weekly food frequency patterns have had played vital roles for nutritional status and body composition in the study.

6. Water borne morbidities; a case study of Karang village, Manipur

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Key words : Water borne, Morbidity, Diseases, Karang village, Environment, Socio-economy

The present paper attempts to study the water-borne morbidity pattern of Karang village an islet village located in the Loktak lake of Manipur based on sample survey of 636 individuals of 100 families. Findings reveal that 31.29% of the population are infected by water-borne morbidities. Diarrhea (31.66%), common cold (29.65%), jaundice (18.59%), scabies (15.08%) and dysentery (5.03%) are the common ones prevalent within the village. Findings further reveal poor sanitary and hygienic practices among the villagers to be the most important contributing factor causing the morbidity apart from other environmental and socio-economic factors.

7. Stature Reconstruction from Cephalometric Measurements among Male Manipuri Muslims of Manipur

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 Canchipur, Imphal, Manipur

Key words : Forensic anthropology, Stature, Reconstruction, Cephalometric measurements, Corelation, Multiplication factor, Regression equations

Stature as is one such important anthropometric parameter which helps in personal identification of an individual, the present study attempts to reconstruct stature from some selected cephalometric measurements among 200 male Manipuri Muslims of Manipur by using standard measurement techniques. Data analysis reveals significant co-relation between stature and various cephalometric measurements under study. Total Facial Height shows the highest correlation co-efficient value (r = 0.381) while Upper Facial Height the least (r = 0.112).

Multiplication factors are found to vary from other populations so far studied thus revealing inter- population variation within the state. Simple regression equation is also formulated for this particular population for estimating stature.

8. Pattern of subcutaneous fat distribution in different variants of UCP 1 among North Indian population

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Key words : Subcutaneous pattern, UCP 1, Regional fat

The objective of the present study was to find the association of fat distribution pattern with variants of UCP 1 gene (AA, AG and GG). The total sample of 65 subjects (35 males, 30 females) was taken for the study. Various skinfold thicknesses along with height and weight were taken for all the subjects. Body mass index and grand mean thickness were computed. For genetic analysis, DNA was extracted from 50 Π blood. The polymorphic variant (GG) of UCP1 gene showed maximum deposition of fat in trunk region (suprailiac skinfold site) among both males and females as compared to wild (AA) and heterozygous (AG).

9. A study of the Lung function among male Textile Workers in Uttar Pradesh

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Key words : Occupational health, Respiratory functions, Textiles Workers, Working environment

Reduction of respiratory function among Textile workers in the textile industry has been observed since 1970s. A contaminant of raw cotton fiber and cotton dust, has been proposed as an affecting agent that may deteriorate the respiratory function. Present study aimed to find the factors associated with the deterioration of respiratory function among male Textile workers consisting of 243 men of above 20 years of age and who had worked for at least 3 months and above and another 235 non-textile workers of the same area. All the respondents were interviewed by a pretested questionnaire to gather information regarding the

chest symptoms, certain personal characteristics and occupational history. Statistical analyses like Chi-square and odds ratio was done to determine the significant difference between male Textile Workers and male Non Textile Workers. Univariate analysis of the factors for symptomatic byssinosis showed that dusty worksites, heavy smoking and duration of service years were significant. Logistic regression analysis showed that working in the scouring (odds ratio 11.0), spinning (odds ratio 4.7) and weaving sections (odds ratio 2.6), heavy smoking (odds ratio 12.4) and more than 10 years of service (odds ratio 2.8) were independent significant risk factors. Efforts to reduce dust levels in the working environment and to discourage smoking among textile workers need to be strengthened to minimize the risk of developing byssinosis.

10. Food Habit and Folk Beliefs of the Kharam Tribe of Manipur

Kshetrimayum Vedmani Devi

Sagolband Salam Leikai, Thangmeiband, Imphal

Key words : Kharam, Manipur, Rites and rituals, Kharam tribe, Folk beliefs, Food, Food habits

The Kharam tribe of Manipur, has established norms of eating food and partaking of country brew with specific reference to their socio-cultural and religious life. This is particularly reflected in the observation of the several rites and rituals during the periodic and the annual ritualistic festivals and other social occasions. Ritual worships and sacrifices in Kharam Pallen are usually held at the sacred Laamtol Bathel grove in the heart of the village. Traditionally, animals such as pigs are sacrificed at the site, and their spleen is examined by the village chief or an elder to read possible signs for the ensuing year. The viscera of the pig are distributed among the village council elders. The choicest part of the pig, for example, the thigh with the fat muscle is given to the chief. The other three legs, nose, ears of the pig are given to the other members of the council according to their hierarchy. The Kharams perform a number of rites and rituals on different occasions, such as to herald the coming of the agricultural season or the first beating of the village drum or the death of an individual, etc. Such rites and rituals are also associated with communal feastings. Despite the influences of a new religion and thinking process, much of the elements of traditional life in the Kharam society still exist in their original form and aesthetic.

11. A Study of the Current Knowledge of IDUS on HIV/AIDS and STDS in Urban Manipur

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Sagolband Salam Leikai, Thangmeiband, Imphal

Key words : AIDS, HIV, STDs, IDUs, Knowledge, Muslim, Mother, Child

Acquired Immuno Deficiency Syndrome (AIDS) caused by Human Immuno Deficiency Virus (HIV) is now commonly distributed in much parts of the world. The deadly proximity of HIV/AIDS with Sexually Transmitted Diseases (STDs) has acquired today a renewed importance and urgency. So, by considering this the study has been done with an objective to find out the current level of knowledge of IDUs on HIV/AIDS and STDs in urban areas of Manipur, that is, Imphal East and Imphal West Districts, based on the cross-sectional information gathered from 30 IDUs of age group from 21 to 50 years selected randomly among the IDU clients attended in the ICMR Project Unit on HIV/AIDS and Drug abuse at Lamphelpat, Imphal. The mean age of the participants counts to be 33.07 \pm 4.79 years. The mean age of drug initiation has been figured out to be 22.07 years with standard deviation (SD) of \pm 3.9 years. It means that the investigation was carried out after about 11 years of their drug injection ordeal. A high percentage of 46.7% of the study population interviewed was in the age group of 26-30 years. By religion, the Muslim community (33.3%) recorded the highest percentage frequency. After about 10 years of drug injection ordeal, the knowledge of IDUs related to safe injection practices is very high as indicated by 93.3% saying correctly "HIV as a communicable disease". However, comparatively poor knowledge of IDUs on other routes of HIV transmission like from positive mother to her child (80%) and sex with strangers (76.7%) reflects the un-uniformity or unacceptance or lack of perception on the types of health education and counselling given to them. This study inferred that HIV/AIDS and STD awareness among the IDUs is not enough and hence all out efforts should be made to educate the IDUs about HIV/AIDS and STD so as to have a thorough knowledge on it before a successful candidate vaccine is produced by the scientific community at large.

12. Study of effects of zinc in human diet

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Key words : Micro nutrient, Zinc management, Immune system, Balance diet

Zinc is an important mineral required for a huge range of functions of human organs and is found in every tissue in the body. It is also important for the functioning of the immune system, growth and development and the anti-oxidant system. Moreover, zinc finds recognition as an important micronutrient not only for the physical growth and development of children but also for immunity as a whole. Nowadays zinc as micronutrients are used indiscriminately in agricultural, husbandry purposes, in baby foods and multivitamin supplements. As such zinc management in food is essential to contain the obesity related diseases.

13. Pollution and Serious Problem for the Humanity

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Key words : Pollution, Hindu idols, Synthetic paints, Water bodies, Festivals, Government

Pollution has now become a matter of most serious concern for the humanity. This articles discusses amongst other things, causes of pollution, impact of pollution and measures to control pollution. Lakhs of Hindu idols coloured in synthetic paints and embellished with meal ornaments are immersed into the water bodies such as lakes, ponds, reservoirs, rivers and canals in a ceremonial farewell at the end of some Hindu festivals. Consequently, different types of chemicals, paints and organic matters are added o these water bodies and cause acute water pollution. The role of the government and each individual is discussed in the present article o control and abate such water pollution.

14. Energy requirement in the development of children

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Key words : Requirement, Energy, Children

Energy requirement vary from one person to another depending upon the following factors- Age, Sex, body composition (height and weight), working condition, physical activity, physiological state and climate etc. All these factors lead to difference in food intake. Due to the rapid growth of the younger children, they require proportionately more energy for each kilogram of body weight than adults. When a child's food intake is below normal, her growth slows and if it persists, adult stature will be reduced. A problem arises in recommending the intake of energy in communities where a large number of children are underweight because of malnutrition. Intake of energy should be based on the age rather than weight in these communities for catch – up growth during childhood. The ICMR standards are based on age, and not on body weight (except during the first year of life). Children above the age of 13 years require as much energy as adults because they show a great deal of physical activity, almost equal to hard work done by adults. This is also the age when puberty sets in and there is a spur in growth and increase in metabolic rate.

15. Trends of Growth and Adolenscence Among Sindhi Girls of Lucknow

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Key words : Growth, Growth rate, Development, Adolescence, Anthropometric measurements, Mean, standard deviation, Annual increment,

Growth is a continuous and slow process. But, its speed and intensity may differ from community to community. Thus, it becomes an important aspect to study the trends and correlations of growth and adolescence In this paper, an attempt has been made to show the age changes of the measurements and an approximation age at which adolescence begins. 240 girls between the age group 6-18 years (20 in each group) of Sindhi caste were selected to know the

trends of growth and adolescence from the different places of Lucknow (UP). Mean, Standard Deviation, Annual Increment & the Growth Rate / annum have been reported for weight, stature, sitting height, head length & breath, Bizygomatic Breath, Head Circumference, Chest Circumference, Hip Circumference, and Calf Skinfold.

16. Where we are, where should have been : The condition and challenges to Anthropology in India

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Key words : Anthropology, subject, University, Proper place, Scope

The emergence of Anthropology as a subject is generally traced since long. The formal appearance of the subject took place in 1884 in Britain and then in 1888 in USA. Anthropology as a subject, in India was first started in 1918 in Mumbai University under the department of Sociology. Then in Kolkata University in 1919, it was established as a separate subject. This subject introduced some features like bio-cultural approach, holistic approach, ethnocentrism view, Method of Field Work etc. which are important for the theoretical applied aspect for the welfare of mankind. Despite of all this Anthropology is taught in just 33 Universities in India. Out of them, only 30 universities have PG in Anthropology. As of now practical aspect of this subject in India is still very limited. It means, it is sure that this subject could not find its proper place as it should have been. In the background of the above facts this paper critically examines the situation of Anthropology in India. It also attempts to provide solutions and recommendations for making better position of this subject in India.

17. Changes in some linear dimensions and BMI among adolescent boys and girls

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Key words : Adolescence, spurt, Body mass index, Cormic index

The cross sectional data at a yearly interval from age 11 through 17 years on 414 adolescent boys and 412 adolescent girls volunteered as subjects in the present study. Weight, stature and sitting height were recorded on each subject. Although a gradual increase in stature among both boys and girls was found, difference in the rate of growth of its components; sitting height and total leg length varied in both the sexes in different adolescent years. The rate of increase and age at which adolescence spurt occurred varied from variable to variable. There is a pattern of fluctuation of both BMI and Cormic index in both boys and girls; reflecting BMI's limitation as an index of obesity.

18. Revisiting the impact of Displacement through the framework of Social Justice : An Anthropological Insight

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Key words : Development, Displacement, Social Justice

In a constantly changing world order, the issue of development vis-à-vis displacement has come to acquire special significance. While 60 years of Indian independence have seen numerous urban development and hydroelectric projects and industries coming up, not enough attention has been paid to the costs paid in terms of increasing deforestation, diminishing agricultural lands, dwindling natural resources, depleting flora and fauna and the resultant degradation in the lives of people, not to mention the increasing disempowerment and impoverishment of the poor. In an effort to better understand the plight of those displaced by

development projects, in this paper, the issue of resettlement and rehabilitation will be explored keeping in mind the issue of social justice. Moreover, there would be an attempt to identify the challenges in handling such crucial aspects like evolving appropriate methodologies for resettlement and rehabilitation by social scientists in general and anthropologists in particular, in a way contributing to the formulation of citizen-centric policies which would help in making development a reality rather than a planned calamity making people more poor than before.

19. Age Related Physiological and Anthropometric Variation Among the Adults of Macchi Community of Nani Daman

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Key words : Health, Blood Pressure, Pulse Rate, Anthropometric Measurements, Variation .

The study was undertaken to evaluate health status with the help of physiological and anthropometric measurements. It is based on cross-sectional sample of (100) Tandel, (80) Mangel, and (60) Mithna villages aged between young adults of 20-24, 25-28, 29-32, 33-36, 37-40. Body measurements, which have direct bearing on health and nutritional status, like Blood pressure, Pulse rate, Body weight, Triceps Skinfold Thickness, Subscapular (vertical) thickness, Subscapular (lateral) thickness, Biceps Skinfold Thickness, Median calf Skinfold Thickness and Abdomen Skinfold Thickness were taken into consideration. Variation in the blood pressure and pulse rate were seen in the advancement of age. It occurs in any form that is normal or high or low. Hence anthropometric measurements are useful criteria for assessing nutritional status. A large number of anthropometric measurements have been suggested by different workers. Here weight and skinfold thickness was considered in the anthropometric context. Skinfold Thickness was found to be better predictor of body fat. A wide variation in skinfold thickness could be attributed to the varied health status, physical activity level and energy expenditure.

20. A Report on Some Metrical and Morpho-Genetical Traits of the Kom Tribe of Manipur

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The Koms are one of the Scheduled tribes of Manipur whose habitations are found mainly in the South-Western parts of the State. With a mean stature of 161.3cm, they belonged to lower medium type (47.01%) and they have mesorrhine type of nose. As per Robusticity Index (RI=19.25), the Koms are found to have a good status of health. 'A' type of blood group is most predominant amongst them with 35.04%, although 'O' group follows very closely with 34.25% and thus they show quite close to the Meiteis, the Kabuis and the Tangkhul populations of the State in its distribution. 2.92% of the Koms have colour blindness, 87.55% are the PTC tasters. This paper has attempted to give a detail report on metrical and morpho-genetical characters of the Kom tribe.

21. Interfaces between Indian Family and Corporate Culture

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Key words: Indian family, Corporate culture, Globalization

After outset of Liberalized, Privatized and Globalized policies in India during early 1990s, India was flooded with the Multinational Companies and soon it became the main centre of business process outsourcing. The westernized corporate culture of these companies is influencing almost all walks of life and family is not an exception. In this paper, an attempt has been made to come up with some of the basic issues of Indian family in the milieu of corporate culture brought by these multinational companies and which has become an instrument of globalization in the rapidly shrinking world. Through the ethnographic study of families, an attempt is made to surface out the basic nuances of interactional universe comprising of families of those professionals who are in the process of acculturation with the culture of MNCs at one hand, and have been brought up in the environment dominated by Indian traditions and customs,

on the other. Finally, this paper examines the classical notion of family, which includes common residence and economic cooperation as its essential component in the Indian context considering globalization as its backdrop.

22. A cross sectional study of Growth in some somatometric traits of Preschool children of the Mishing community of Sadiya of Tinsukia district, Assam

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Key words : Growth, Somatometry, Preschool children, Mishing, Assam

In 2009, 244 preschool children (127 boys and 117 girls) aged 2 to 5 years from 8 Mishing dominated villages of the 12 members Amorphus Gaon Panchayat of Sadiya subdivision were sampled for measurements of the statures, sitting height and lower extremity length. The purpose of the present study is to investigate the growth patterns of preschool children of the Mishing of the Sadiya sub-division of Tinsukia District, Assam.

23. Vision and Challenges of Anthropological Studies in the Era of Globalization: An Appraisal in the Perspective of Humanity

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Key words : Anthropology, Job, Career, Applications, Prospects

The principal objective in this paper is to discuss job and career prospects in anthropology. How anthropologists can understand and help solve human problems emerging from the global change? Following a brief overview on epistemology and foundations of anthropological knowledge (i.e. scientific methodological tradition), paper will discuss contemporary human problems emerging from global change and assess how socio cultural anthropology can contribute to understandings of gender and health issues in development. It will assess emerging development problems with a critical anthropological approach, considering how anthropological viewpoints can contribute to solving these problems. Further, the paper will contextualize how anthropological knowledge generated from socially-grounded methodological traditions can be applied to solve the problems of the contemporary humankind. Finally, following changing foci within academic anthropological discussions, paper will examine the prospects of anthropology as an agent in both understanding and serving humanity.

24. Ecological Adaptation for Sustainable Socio-economy in High Altitude by the Transhumant Bhotia

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Key words : Ecology, Adaptation, Sustainable, Socio- economy, High Altitudes, Transhumant, Bhotia

While Social Scientist have investigated social boundaries, international boarder have recently attract widely world wide by Scholar. In the course of this steadily growing interest, it has been argued that border regions are "Crucial Key" for understanding the cultural predicaments of the present Century. The Bhotia of Uttarakhand is such examples who are closely related to International border of Tibet, China & Nepal living in Indian Trans-Himalayan zone. Many high altitude regions on the earth are occupied by traditional community, whose livelihood is closely associated with the ecological niche of the place. The intricate and complex relationship between ecology and transhumant Bhotia in high altitude of Central Himalayas has started changing due to environmental change. For generations the high altitude transhumant Bhotia practice seasonal migration from low altitude to high altitude for a period of six month and whatever they earned in high altitude were their main source of livelihood in in-hostile climate. But this practice gradually discourages to them because of environmental depletion and the Bhotia are bound to changing their old age practice and adopting daily wage labours for sustaining.

25. Forensic Evidence Management for Quality Justice to Rights

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Key words : Evidence, Management, Education, Science

Forensic Science is the Science of Justice. It provides the SMARTEST service of intelligence to the Judiciary. It encompasses all the disciplines that explore the activities of and interactions used for Courts Law as a vital part of the entire justice and regulatory system. Forensic examinations of exhibits render scientific aids to the Justice delivery system in terms of Evidence Acts. The present communication delineates the inferences of experimental observations in 2000 Medico Legal cases for 8 years that provides opinion based conclusive results. The most sophisticated modernization of crimes and pro-criminal activities have sharply advanced to an inconceivable extent. Accordingly the extreme development of knowledge, skill, and efficiency of Forensic Expertise and Justice are urgent to keep pace with and to balance the Crime Economy in perspectives for its meaningful uses in practice. Quality Forensic Reports help to resolve the criminal / civil dispute in case trials. Forensic Research is exclusively necessary for absolute maintenance of Evidence Management for effective Prosecution Witnesses. The Behavioural / Social Science system administration on perceptive framework and structural adjustment as a part of decision / communication sciences logical would be well advanced on Forensic Education for the ends of Scientific Justice to Rights.

26. Levels of Livelihood Security and Human Development Applying BCOPS Framework in a Micro Context of Kerala

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Key words : Livelihood security, Sustainable development, BCOPS Levels of livelihood, Livelihood indices

In the long journey of human race lasting almost a million years, the human beings have

been creating and recreating multiple and diversified ways of life in the process of their continuous interaction with natural resources and ecological setting. While this interaction had been symbiotically sustained for a major span of time in human history, the last few centuries, which constitute only a fraction in the long history of mankind have severely affected this symbiosis to the extent of even threatening the very human existence itself. This has also resulted in keeping a majority of humanity at the level of a vulnerable existence. Sustainable livelihood is concerned with the capacity of the people, in making a living by surviving the shocks and stresses, and improving their material conditions without disturbing the sustainability of the livelihood options of others, either now or in future. The sustainable livelihood approach emerged as an alternative to the current unsustainable patterns of production and consumption, both in the developing and in the developed worlds. The present paper is an attempt to develop appropriate parameters and identify concrete indicators to understand and assess the levels of livelihood, based on the ground-level realities, using the BCOPS levels of livelihood within a sustainable development framework.

27. Resource Mobilization in the Subsistence Pattern of the Kabuis (Rongmeis) of Tamenglong District of Manipur

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Key words : Resource mobilization, Subsistence pattern

Resource mobilization in the subsistence pattern of the Kabuis may not only provide the basis for the maximization of life chances of the people but also believed to have ethnological and ethnographical bearing. Even it may be linked with a strong ethoarchaeological basis. The present paper aims at studying how the resource mobilization in the subsistence pattern of the Kabuis of Tamenglong District may be applied to the study of the prehistoric data of Manipur. It is also a fact that gathering, hunting and fishing are a part of their livelihood though they live with a producing economy. Moreover, their material culture, settlement pattern and food habit are suggestive of a very simple practice which might be continued from the early cultural period.

28. Estimation of Stature from Percutaneous Limb Bone Measurements among the Tangkhuls of Ukhrul District, Manipur

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Key words : Estimation of stature, Percutaneous long limb bones, Tangkhuls, Manipur

An attempt has been made to examine correlation and to formulate regression equations for estimation of stature using percutaneous dimensions of limb bones among the Tangkhuls of Ukhrul district, Manipur. A total of 170 individuals (90 males and 80 females) belonging to age range of 18-50 years were measured for stature, upper arm length, radial length, ulnar length and tibial length. t-test show statistically significant variations in between the two sexes in and above four measurements. Out of four limb measurements, stature and tibial length exhibit highest correlation in both sexes. The stature and tibial length r value of male is 0.74 and for female is 0.66.

29. Incidence of Taste Sensitivity to Phenylthiocarbamide, Red – Green Colour Blindness, ABO and Rh (d) Blood Groups and Cerumen Type Among the Kwatha Community (an Isolate of the Meiteis) of Manipur

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Key words : PTC, ABO and Rh(D) blood groups, Red– Green colour blind, Kwatha community, Manipur

This paper reports the incidence of taste sensitivity to phenylthiocarbamide, red-green colour blindness, ABO and Rh (D) blood groups and cerumen type among the Kwatha community, an isolate of the Meitei of Manipur. The frequency of non-tasters in the population is 38.29 % with an allele (t) frequency of 0.6189. The incidence of red green colour blindness is almost negligible. Only a single male (1.06%) is found to be colour blind of

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strong protan type. In ABO blood group distribution, O represents the most frequent type (48.91%) followed by A and B blood groups in equal frequencies (23.37%). As regards Rh (D) blood group, not a single individual is found to be Rh (D) –ve. In cerumen type, the frequency of dry type is quite high (59.29%) in this population.

30. A Study on Mortality of the Anal Naga Tribe of Lambung Village, Chandel, Manipur

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Key words : Mortality, Prenatal, Neonatal, Infant, Anal Naga, CDR, IMR

The Anal Naga Tribe is one of the Schedule Tribes of Manipur. They are confined mostly in Chandel District, Manipur. In the present study, Lambung Village is taken into account as being one of the biggest villages of the Anal Tribe. The main aim of the present study is to draw the mortality status of the Anals of Lambung Village. Data were collected from the entire 200 households of the village. Various measures of mortality were noted so as to reveal their mortality status. They are prenatal mortality, post natal mortality, Crude Death Rate(CDR), Infant Mortality Rate(IMR), Maternal Age vis-à-vis Infant mortality, Causes of the offspring mortality. The Crude Death Rate and Infant Mortality Rate of the Anal Tribe are found to be 2.9 and 90.9 respectively. Of the deaths, prenatal mortality was highest (77.6%). Infant mortality was found to be higher among women of older age-groups. Death due to jaundice and AIDS (12% each) reveals the highest of the causes of offspring mortality.

31. Morphometric Variation Among Bhoksas of Cis Himalayan Region

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Key words : Morhometric Variations, Bhoksas, Cis- Himalaya, Cephalo-facial, Somatic measurements, Rajput ancestry

The present paper is based upon 34 cephalo-facial and somatic measurements taken on

the two isolates of the Bhoksa tribal community i.e. Tarai and Foothill Bhoksas. Analysis of the data delineates similarities and differences present among them. Statistically significant intergroup variations are noted in few of the measurements observed. Indices calculated on the basis of these measurements are also found in support of them. The Morphological difference is worked out by employing T^2 method as suggested by Sanghavi (1953), which is shorter among females (5.9150) than males (9.9398) of the two Bhoksa groups. At end, the comparisons of the two groups particularly and Bhoksa generally are also made with other caste and tribal populations of its Himalayan region and neighbour areas to test the Bhoksa's claim of Rajput ancestry and to understand their ethnic associations.

32. Physiological profile of Male Elite and Non-Elite Middle Distance Runners of Manipur

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Key words : Anthropometer, Body composition, Elite and Non-Elite, Middle-Distance Runners(MDR)

The present study aims at determining the variation in physiological characters of elite and non-elite male middle- distance runners (MDR) of Manipur and also to find out the influencing factors in their performance. Forty three middle distance runners who are actively professing in 800 and 1500 meters running events, representing four different Districts of Manipur constitute the sample of the present study. Out of them, 27subjects are categorised as non-elite players and the remaining 16 as elite players on the basis of their achievements. Altogether data on15 parameters were collected using standardized techniques. Based on the statistical analysis using SPSS soft ware, significant differences are observed in age, triceps skin fold, % fat, and resting heart rate (RHR). The results suggest that these four predictive parameters can be considered as potentials indicators of higher performance in middle distance running.

33. Ethnomedicinal Accounts of the Kabui (Rongmei) Nagas of Manipur

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Key words : Ethnomedicinal, Kabui Nagas, Manipur, Ailments, Herbs, Evil spirit

The paper aims to explore the blief and practices of traditional medicines and its value perceived in the present context by the Kabui (Rongmei) community. 400 individuals including

9 traditional practitioners were interviewed from villagers of Tamenglong district (2010). Based on our study report maximum percentage (34.5%) resorted to medical pluralism while modern medication the least (14.25%). About 63.5% utilised local herbs as a means of remedy in most of the ailments, while about 52% utilised different herbs to prevent/ward off the evil spirit. The reasons behind adopting traditional medicines as their first option were – the strong belief inherited which is attributed in many ways of their life, inaccessibility coupled with less awareness of modern medical facilities, poverty, etc. Interestingly, in spite of new scientific advancement made, the Kabui (Rongmei) continue to belief in their additional medicine and its importance in healing and preventing themselves from different ailments.

34. Physical Anthropological Profile of The Sherdukpens of Thongre Village, Arunachal Pradesh

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Key words : Sherdukpen, Blood group, Finger ball pattern, Stature, Morphological and Behavioural traits

An attempt has been made to know the physical anthropological profile of the Sherdukpens of Thongre village, which is one of the minor tribes of Arunachal Pradesh. The maximum

stature of males and females are found in the very short and short category of Martin. Nasal index is of mostly mesorrhine type; the average maximum head length and head breadth of the males are 18.38 cm and 14. 88 cm and for that of females these are 17.68 cm and 14.30 cm respectively. The trend of finger ball patterns for both the genders are loop > whorls > arches for both the two hands. ABO blood group frequency for both the genders are of A > B > O > AB. An attempt is also being made to know the morphological and behavioural traits of the people.

35. Adolescent Growth of Poumai Boys and Girls of Manipur

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Key words : Growth, Poumai boys and girls, Cross-sectional, Stature, Girth measurements, Adaptive radiation

The present study deals with the growth pattern of the Poumai boys nd girls of Senapati District, Manipur. The study was based on a cross-sectional methods of growth study altogether 682 subjects ranging from 10-20 years of age which 348 were boys and 334 girls on the basis of stature, sitting height vertex, maximum head length. Maximum head breadth, arm girth, chest girth, calf girth and body weight. The study shows that the boys have higher mean values than the girls at all ages. When compared with the Metiei and Kabui boys of Imphal valley the Poumai boys are shorter but possess higher sitting height vertex. Both boys and girls exhibit a longer head length but smaller breadth. It is noteworthy that the Poumai boys and girls dominate the others in chest girth, calf girth and body eight in particular. This may be taken as adaptive radiation in the hill.

36. A study of menstruation of adolescent girls of Barnala and Mansa (Punjab)

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Key words : Menarcheal age, Maturation, Cyclic rhythm, Duration of flow, Adolescent, Punjab

The present cross-sectional study was carried out on 417 girls residing in urban areas of

Barnala and Mansa districts of Punjab during the months of January to April 2010. The menarcheal status (whether experienced or not) has been taken as the criterion of maturity. Out of the total sample, 247 were the post menstruations. The aim of the study was to assess the age at menarche, duration of flow and cyclic rhythm in female adolescents. The median age at menarche of Punjabi girls as computed by probit analysis was 13.25 0.65 years. The results indicated that greater percentage of girls had duration of flow between 4-5 days and cyclic rhythm between 28-30 days at all ages during their post menstrual years.

37. Primitive Tribal Groups: Status, Vulnerability and Policy (A case of divided Bihar)

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Key words : Primitive Tribal Groups, Livelihood, Forest Rights, Policy, & Development

Primitive Tribal Groups (PTGs) are known as the 'poorest of the poor amongst the Scheduled Tribes'. After bifurcation of Bihar, it was assumed, that PTGs are not inhabited in the State of Bihar, but this study examine the statistical reliability of PTGs, in 2001 census enumeration. In the present study an attempt has been made to present a brief account of PTGs in Bihar. Census report of 2001 mentions that Asur, Birhor, Hill Kharia, Korwa, Mal Pahariya, Pahariya, Sauria Pahariya, Sawar tribes accounts to 9361 persons are inhibiting in the state. There are 9 districts which have the number less than even 10. The study is carried out in 26 districts to investigate the real situation of PTGs. PTGs were found only in Banka, Bhabhua, Bhagalpur, Gaya, Katihar, Kishanganj, Madhepura, Nawadah, Purnia, and Supaul districts of Bihar. The study finds only Birhor, Korwa, Mal Pahariya, Pahariya, Sauria Pahariya, and Sawar tribes in the state. Rest of the PTGs are supposed to have migrated to the neighboring Jharkhand state which they suppose a better state in terms of forest cover as well as better delivery mechanism functioning of tribal welfare programmes

38. The Body Mass Index (BM) Among Dhurwa Tibe of Bastar (C.G)

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Key words : Body Mass Index (BMI), Dhurwa tribe, Bastar (C.G.), Normal

Body Mass Index (BMI) scale tells us, if one is overweight, obese or under weight. BMI is calculated from the person's body weight and height. The objective of the present study is to assess the nutritional status of the Dhurwa tribe of Bastar (C.G.) district by taking sample from 35 households selected at random and following cross sectional method. It has been observed that the highest number of individuals (male-90.90%, female- 77.84%) in both the sexes belonged to normal group as per nutritional status.

39. Palmar Main Line Formula Among Dhurwa Tribe of Basar (C.G.)

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Key words : Dermatoglyphic, Main Line formula, Dhurwa tribe, Bastar (C.G)

The present study reports the incidence of mainline formula among the Dhurwa tribe of Bastar (C.G) by considering 50 individuals (25 meales, 25 females). Bilaternal palmar prints were collected following Cummins and Midlo (1960). Formula 11.9.7 was found to be in the highest frequencies in both the sexes being 24% in both the sexes.

40. Nutritional Study among Dhurwa Tribe of Bastar

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Key words : Nutritional study, Dhurwa, Bastar (C.G.)

The nutrition status of the tribal people is shaped by variety of factors, some of which

are cultural in nature such as food habits, poor sanitation and personal hygiene and housing pattern. Food is the basic necessity of life. Food gives energy and heat, promotes growth, repairs tissues and nourishes our body. The aim of the present study to analyse the nutritional status among Dhurwa tribe of Bastar considering calf and skin fold measurements. It was observed that the skinfold measurements increased with age in both the sexes.

41. Socio-cultural Approach of Anthropological Studies in 21st Century

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Key words : Socio-cultural Approach, Human variability, 21st Century, Indian population, Research

This paper is concerned with a Socio-cultural approach to the study of human variability. The basic premise is that the Socio-cultural approach is essential for anthropological study of the survival and well being of human populations in the 21st century. A function of responsiveness and adaptation to the environment with a special focus on the role of socio-cultural environments. The major concern is the lack of conceptual framework and meaningful-research questions in many research works relating to the biological and or socio-cultural aspects of Indian populations. If we are interested in reporting only the frequencies of certain traits as pointed out by Basu (2004), our research question is nothing but mostly related to this question: Is the study, Population/group of individuals higher or lower than the other population(s) /group(s) of individuals with respect to certain traits?

42. Growth pattern in selected Somatometric measurements and Nutritional status among School going Teli Girls (6- 12 years) of Raipur Slums

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Key words : Teli, Raipur slum, Somatometric measurements, Nutritional status.

Growth and development are characteristic features of organic life. Growth is the

increase in body size while development implies attaining functional maturity over period of time. Rate of increase is not uniform process but a differential one. Velocity of growth is slow to very fast at different phases of growth. In the present paper an attempt was made to study the growth pattern in some selected somatometric measurements and nutritional status of school going Teli girls ranging in age 6-12 years. Anthropometric measurements were taken on 179 school going Teli girls following standard techniques (Weiner and Lourie, 1968) to evaluate the growth pattern and nutritional status. In addition, information on their demographic and socio-economic background was also collected on pre-tested schedule. All the measures show gradual increase from 6 to 12 years however; the magnitude of annual increase varies from year to year. Analysis of nutritional indices (BMI, Height deficit, Weight deficit) revealed that Teli girls are suffering from various degree of malnutrition. These findings were correlated with their socio-economic condition micro-environment of the house and dwelling area.

43. The Dynamics of HIV Circulation in an Urban Setting of Manipur

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Key words : HIV, Manipur, Cross sectional, IDUs, Sex, Drug

The epidemic of HIV infection in Manipur and its precipitating effect has been greatly felt among the child population born to the infected mothers. So, this study had been taken up as a preliminary step to know the dynamics of HIV transmission in an urban setting of Manipur. Using cross-sectional method in a sample of 111 male IDUs selected randomly from Imphal city of the state within a radius of 5kms (high prevalence zone), HIV infected IDUs were screened for the presence of HIV antibody after providing them pre-test counseling services. Data on demographic factors, education, occupation, economy, ethnicity and marital status of the study subjects were collected along with history of sexual exposure, type of sex partners, condom usage, and current sexual relationship with the spouses (wives) through face to face interview. Of the total sample, 52.3% were found positive for HIV. It was known that 80% (n=89) of them had experienced sex while the other 20% (n=22) were never exposed to any kind of sex. Among those who had sexual experiences, marital sex were claimed in 70.79% (n=63) and pre-marital sex in 29.21% (n=26) with either commercial sex workers (CSWs) or girl friends. Extra-marital sex was also reported in 30.16% of the married IDUs showing illicit

sexual affairs that was all the more risky for circulation of HIV in the general population. Proper use of condom is only 17.39% in married IDUs and 33.33% in unmarried IDUs. It has been observed that HIV +ve IDUs prefer more to unprotected sex as compare to HIV -ve IDUs (OR=0.67, 95% CI). Marital status, age, types of drug use, education, ethnicity, etc. have no influence on avoiding unprotected sex.

44. A Study on Finger Pattern in Cancer Patients of Bengalee Caste Hindu Population

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Key words : Dermatoglyphics, Finger pattern type, Cancer, Bengalee population

Dermatoglyphic patterns in fingers; palm has been studied for the association with various diseases and disorders related to inheritance patterns. Since Cancer is the second most common disease among the populations of the developing countries, therefore, relevance of prognosis by dermatoglyphics pattern seems to be useful for Cancer identification. In view of the above, bilateral rolled finger prints of 15 histopathologically confirmed Cancer patients were compare to age matched 20 controls from Bengalee caste Hindu population. No significant bilateral asymmetry has been found between the fingers in both patients and control population. But the first homologous finger in both hands demonstrated significant (p < 0.05) differences in Cancer and control population due to excess ulnar loop.

45. Some aspect of the Anthropology of Art, including the visual and performing Arts

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Key words : Art and culture, Aesthetic sense, Anthropology, Archaeology, Perform, Visual, Theme

Human beings are interested with Art and Culture from the beginning. An esthetic sense of beauty among human beings is quite natural and they believe that a sense of beauty is a joy forever. Anthropology and Archaeology helps in the study of primitive arts which provides

information on the origin of modern arts and culture. Anthropology of Art, including visual and performing Art is a theme of life.

46. The study of Palmar Flexion Creases of Gadba Tribe, Bastar (C.G.)

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Key words : Palmar flexion creases. Gadba tribe, Bastar (C.G).

The material for the present study consists of bilateral Palmar Prints of 158 individuals of Gadba tribe (male – 76, female 82) collected from different schools during September to November 2007. It was observed that the highest frequency of SRBC was observed in both the sexes (male 52.82%, female 51.89%). The higher frequency of DRBC (male 40.81%, female 44.69%) as compare to the TRBC (male 6.09%, female 3.28%) was also observed in both the sexes.

47. A Retrospective Study on the Prevalence of Etiological Factors and Pregnancy Outcome Among Infertile couples through Assisted Reproduction

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Key words : Etiological factors, In Vitro-Fertilization, Embryo Transfer, Subsequent cycle, Reproductive technology, Procreation, GTB, IVF-ET, CPE, PCR

A retrospective study was conducted among 138 couples who suffer from number of etiological factors e.g. fallopian tube blockage, male defect, genial tuberculosis (GTB) treated

patients, unexplained infertility, polycystic ovaries (PCO), endometriosis and poor ovarian reserve (POR), who are unable to conceive came for IVF (In Vitro Fertilization) treatment. Among the distribution of etiological factors e.g. tubal factors (23.91%), are predominant and male factors (22.46%) are almost similar to tubal factors. Factors related to the metabolic disorder e.g. endometriosis (11.59%), PCO (6.52%) and POR (5.07%) and others (7.97%) are documented. The present study revealed that the overall pregnancy is on higher side in CPE transfer compared to IVF-ET in the mid-age group. However, our study is limited by virtue of small sample size. The results of the present study demonstrated some differences, though they were not significant. A much larger sample size could highlight significant differences.

48. Science and Primitive Mentally : Looking at the Toda of the Nilgiri Hills, Tamil Nadu

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Key words : Primitive mentality, Toda, Modern Science, Eco-Philosophy, Welfare Science

Science is considered to be the progressive discovery and more and more objective knowledge about reality. Primitive mentality, differs qualitatively from the mentality of advanced or civilized people, is prelogical and dominated by the belief in cultural forces. This paper seeks to examine the primitive mentality and its close bearing on the contemporary science among the Toda, a primitive tribal group, inhabiting only on the upper plateau of the Nilgiri District in Tamil Nadu state of India. The study has observed that the Toda early stage mentality has not accepted the modern science on their habitat because their explanatory meanings on the hill life are more open and faithful in the world of Toda belief system. The study concludes that science as a discovered knowledge should not be away from the reality of eco-philosophy. Toda youth believed that simple way of thinking will promote positive mentality on their much misused habit. They also believed that welfare science will certainly rejuvenate their hope of good living.

49. Micro-finanace and Women Health: An Anthropological Perspective

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Key Words : Micro-finance, Empowerment, Women Health

Microfinance as a tool of empowerment has been well recognized in almost all developing areas of the world. Its role in giving credits to improve financial status has proved to be a boon in the field of empowerment in general and for women in particular. This paper is an attempt to look into the direct and indirect influences of micro-finance on the society especially in the context of changing role of women in Indian society with especial reference to health. This would further elaborate the various aspects of micro-finance like socio-political participation, empowerment and identity apart from mere giving of small credits. The Anthropological enquiry of the concept has been taken into account in order to understand the women's status, role in decision making and health. The whole analysis is based on empirical study carried out on SEWA (Self-Employed Women Association) working women in Bikaner, Rajasthan (India).

2. ARCHEOLOGY

50. Kushana Expansion From Sanghol (Punjab) to Sisupalgarh (Orissa) : An Archaeological Study on the basis of the Remains from the Newly Excavated Sites in the Ganga Valley

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Key words : Kushna expansion, Sanghol, Sisuspalgarh, Archaeology, 1st Century, Burnt bricks, Ganga valley, Peaceful occupation

Evidences from recent excavations in North India, more specifically in the sites of Ganga valley yielded significant identified as the remains of Kushana expansion beginning from about

the early part of first century A.D. Some prominent features of such settlements include large use of burnt bricks, town planning with well laid out houses built on both sides having roads, streets and lanes, provision of brick drains, closed or open brick-built entrance steps, well laid out brick floors in rooms and provision of platforms within the houses for storage purposes. On the basis of the Kushana township at Sanghol which has been exposed in detail a comparative study has been attempted of the settlements in Ganga Valley identified as Kushana expansion with the possible conclusion that the occupation was not by force but more of persuasion extension and subsequent participation. Such peaceful occupation was not achieved either in medieval or in modern times including by the British in India.

51. New human fossil findings from central Narmada Valley

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Key words : Narmada valley, New human fossils, Osteolithics, Evolutionary continuity

Standing unique in South Asia, the central Narmada valley is known for the earliest human fossil remains of a partial Calvaria (Sonakia, 1984), and two Clavicles and a 9 th Rib (Sankhyan, 1997, 2005). But our recent palaeoanthropological explorations and excavations conducted for five years during 2005 to 2009 have accredited us another two rare human fossils- a humerus diaphysis and a distal femur shaft, coming from two different bio-stratigraphic and Palaeolithic cultural levels.

The femur fossil was found in association with Middle Pleistocene fauna and 'largesized' Middle/ early Late Acheulian handaxe-cleaver industry, and exhibits archaic intermediate morphology between *Homo erectus* and *Homo neanderthalensis/ Homo heidelbergensis* as seen in the Calvaria characterising a 'large-bodied' hominin, datable to around 250 Kya. The humerus was found in association with the Upper Pleistocene fauna and later Middle/Upper Palaeolithic industry, especially the 'Osteolithics' (bone tools), for the first time discovered in Narmada valley. It comes from the Surajkund/Baneta interface, predating the YTA datum ~75 Kya, and

therefore the earliest fossil evidence of the anatomically modern *Homo sapiens* ever recovered in South Asia, hitherto known from Sri Lanka ~ 30 Kya. Interestingly, the humerus size goes fairly with the previous postcranial findings indicating a 'short-bodied' hominin, of the size of the Andaman-Nicobar Island pygmy. The totality of our stratigraphic, palaeontological, archaeological and palaeoanthropological evidences indicate *Homo erectus/Homo sapiens* transition in South Asia, generally thought to be an African event, and favour 'Continuity' rather than the 'Replacement' hypothesis.

52. The Lower Palaeolithic culture of Sagileru Basin, Giddalur, Andhra Pradesh.

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Key words : Lower Palaeolithic, Sagileru Basin, Handaxe, Cleaver

Several exploratory studies have been carried out in Sagileru Basin and reported the presence of rich deposit of Palaeolithic culture. An extensive exploration was undertaken by the present author in 2009 and 2010 and found that Sagileru basin of Giddalur has rich evidence of Lower Palaeolithic. The artifacts were made on pebbles, cores and flakes. The raw material largely consists of quartzite. Handaxes and cleavers are dominating tool types of this basin. The pebble tools are represented in this basin; both chopper and chopping tools are found. The characteristic mark of chopper and chopping of this basin is that, they are prepared on long elongated pebbles. The handaxes are found in various sizes, varying from larger one to the smaller one. A common observation in the handaxe of this basin is that, it is dominated by triangular shape cross section. Some of the handaxes are small in size (i.e. around 5cm in length). The cleaver also comes in various shapes and with different technology. Flake cleavers are dominate tool types of this basin. One interesting type of cleavers found with positive bulb of percussion on both sides, which is accepted to be technologically more advance form of flake cleaver, and is known as *Kombewa Flake Technology*. Thus, Sagileru basin of Giddalur

53. Applications of satellite remote sensing for research and heritage management in Indian prehistory

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Key words : Satellite, Remote sensing, Indian archaeology, Lower palaeolithic, Microlithic, Tamil Nadu, Culture resource management

The enormous potential of satellite remote sensing and GIS has still to be appreciated in Indian archaeology for both research and heritage management purposes. In this paper we present results of our studies on satellite remote sensing, field investigations and GIS, in the context of Palaeolithic archaeology of Tamil Nadu. Rich sites ranging in age from the Lower Palaeolithic to the microlithic characterize landscapes of Tamil Nadu, and we consider here sites within a study area of around 8000 km². Satellite images of different spatial resolutions were interpreted to address both regional and site specific research questions. Thematic maps relating sites to a range of geomorphological and geological variables were generated from satellite data were refined with intensive field investigations and were used for investigating the distribution of sites through time and demarcating sources of raw material. Satellite data and field studies also aided in mapping impacts on sites resulting from modern landuse patterns. The paper also discusses the development and testing of a model to detect potential areas where new sites may be rapidly located. The paper situates these studies in the light of recent work conducted in the field of satellite remote sensing in India and elsewhere and highlights further ways in which these studies can be used to address problems in research and in culture resource management.

54. Systems Paradigm and Ceramic Ecology of the Andro of Manipur - An ethnographic search for an archaeological application

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Key words : *Pottery, Cybernetic model, System paradigm, Andro, Local climate, Women oriented craft*

The present study aims at explaining the relationship of the pottery of Andro (of Manipur) with their culture as well as the environment, in the light of the cybernetic model rooted in systems paradigm. A series of feedback mechanisms can be identified that *favours* or *limit* to the origin, development and continuity of pot making among the people. The environmentally determined negative feedbacks - such as the local climatic conditions, scheduling conflicts of pottery making with the subsistence activities, etc, are seen to have channelized by the culturally determined value system of the Andro society – that subsequently led to the development of the Andro pot making into a seasonal, part-time and a women-oriented craft.

An attempt is also being made to draw a model of ethnographic generalization of the aforesaid relationship that can be applied to the prehistoric past, an important arena of ceramic ethnoarchaeological significance.

55. An Account of Archaeological Features and Significance of Feroz Shah Fort in Hissar, Haryana, India

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Key words : Archaelogy, Feroz Shah fort, Hissar, Middle Ages, Hindu temples

Haryana states' territory, as in case of other parts of India, also experienced the influence of foreign rulers and those of coming across the Khyber-Pass from Afghanistan in particular in the times of Middle ages. The imprints of these influences are visible even today in the form of mixed spoken Hindustani dialect, customs, rituals, religion and imarets i.e., buildings. The

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Feroz Shah Palace in Hissar is a very significant archaeological site reminiscent of the bygone era. It has been restored to its original glory under the careful expertise of archaeological Survey of India in the recent past. Prior this it was in an utter state of degradation and deterioration. Hissar was initiated as a town in AD, 1356 by Feroz Shah Tuglak. Th palace was having a unique villa known as Koshak in Persian language and it was unparallel in its archaeological beauty. Precisely speaking, Feroz Shah Tuglak Fort in Hissar (In Haryana) proves that invaders from across Afghanistan could establish their supremacy by subjugating remote area like Hissar in 13th Century. It also verifies the fine tastes of these invaders in the art of building palatial mansions within forts for their pleasure in personal life. The Feroz Shah Fort and the Palace within precincts support the tradition of the invaders to demolish Hindu temples for generating primary masonry material for constructing their forts and Palaces. Further, the architecture is attractive similar to the ones seen in the four corners of India in the thousands of structure build by Khiljis, Mughal Tuglac, Suris, Lodhis etc. He material and the civil engineering used for erecting these middle age buildings is puzzling as ever before.

56. Under water Archaeology

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Key words : Marine archaeology, Arabian Coast, Bay of Bengal, Capital of Srokrishna, Dwaraka

In India the Marine Archaeology is getting increasingly popular. The tremendous discoveries both in the Arabian Coast in the Coramandel coast of Bay of Bengal heralded a new chapter in Indian archaeology. Marine archaeological operations were carried out by the Marine archaeology centre in association with the National institute of Oceanography, Goa at the places like Dwaraka, Kucch and Coastal Gujarat, Konkan, Orissa coastal areas as well as coramendal coast at important, places like Pumpuhar, Nagapattinam, Korkai etc. The discoveries of the ancient city and capital of Srikrishna, Dwaraka off the coast of Gujarat and a Kaveipumpattinam the famous port-city of the Cholas of the Sangam period has given a new look to the archaeology of India. The discovery of the vestiages of the submerged portions of the city, Kaveripumpattinam is indeed a landmark in the annals of Tamilian underwater archaeology.

3. **PSYCHOLOGY**

57. Assessing Quality of Life of Adolescent Girls in Protective Homes

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Key words : Quality of life, Human capabilities, Happiness level, Social rewards, Optimism in adolescents, Parental authority, Decision making, Maslow's hierarchy of needs

In the present study an attempt was made to assess the Quality of Life of adolescent girls residing in government protective homes. Dimensions of decision making and happiness were identified taking into consideration their unusual circumstances, their life records, beliefs, attitudes about self, etc. The study was conducted in the State Protective Home established under Immoral Traffic Prevention Act 1956, which houses girls under IPTA and also children in conflict with law. The study revealed that of all respondents only 5% of the respondents were optimistic. The level of happiness experienced by girls was found to be low for 84% of the respondents.

58. Positive Generalizations And Irrational Beliefs Among Resilient

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Key words : Positive generalization, Irrational beliefs, Resilient, Post graduate students, ANOVA

Several studies have reported association between negative cognitive styles and depression. Positive generalization following success experiences was found to be related to risk for mania among undergraduate students (Eisner, Johnson, and Carver, 2008). The present investigation is stimulated by the following questions : (1) Whether irrational beliefs thwart resilience (2) Whether positive generalizations foster resilience. Specifically, the present study investigates the link irrational beliefs and positive generalizations have with resilience. The sample consisted of 220 postgraduate students, both males and females, in the age group 18 to 20 years of age. The B U Resilience Scale (Annalakshmi, 2009), Beliefs Scale (Annalakshmi, 2010) and Positive

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Generalizations Scale (Eisner et al., 2008) and were used to assess resilience, irrational beliefs and tendency to use positive generalizations. Three different aspects of positive generalization studied include lateral generalization, upward generalization and social generalization. High, Moderate and Low Resilient Groups were formed using the quartile scores of the distribution of scores of the subjects on B U Resilience Scale. ANOVA was used to compare the criterion groups on irrational beliefs and positive generalizations. Findings show that resilience was found to be linked to less use of irrational beliefs: The highly resilient used the least irrational beliefs, while the moderately resilient used moderate level of irrational beliefs and the less resilient used irrational beliefs related to punishing wrong doer, being competent, and in wanting to have control over things. The groups did not differ from each other with regard to use of positive generalizations. It seems that having a tendency to generalize from one positive experience to the broader sense of self does not foster resilience.

59. Effect of Impulsivity on Concentrated Work

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Key words : Concentration, Impulsiveness, Attention, Concentrated work, Consciousness

In the present study, investigators aimed to study the role of impulsivity on concentrated work. Rai and Sharma's (1988) Impulsiveness scale and present researchers' concentration schedule were selected for this study. There were 30 questions/items in impulsiveness scale and 50 questions/items in concentration schedule. Sixty people (age range: 11-15 years and class: 8-10 standard) were selected through incidental cum purposive sampling method from Rusera Ghat, distt.-Samastipur (Bihar). Result indicated that impulsivity adversely significantly affect concentrated work. On the basis of this result it may be concluded that impulsiveness is a barrier for attentive work especially when is taken into major consideration.

60. Electrochemistry of Psychoanalysis

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Key word : Brain, Molecules, Neurons, Sensors, Psychoanalysis

Much of the signaling with in the brain uses small molecules as chemical messengers (dopamine) i.e., neurotransmitters between neurons. By following the temporal fluctuations of the signaling molecules, electrochemists can play a major role in explaining the processing of sensory information , determining its various control points and evaluating all of its complexities to help us better understand our own behaviour. This emerging area of *psycho electro analytical chemistry* have recently begun to explore the issues of ongoing neuro chemical process with an electrochemical sensors that can detect the neurotransmitter dopamine. The brain is a challenging environment for chemical sensing because low concentrations of analytes must be detected in the presence of interferences while disturbing the tissue as little as possible. Thus to make meaningful measurements, one must understand the property of the sensor and the general characteristics of the biological system. This paper reviews several perfect sensors which will be highly sensitive selective with fast response time based on electrochemical principle. Dopamine, its electrochemistry, detecting, estimating and monitoring its concentration is discussed.

61 A Study of an Age, Tenure of experience, Type of supervision and Nature of family of non-technical employees among different types organizations

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Key words : Organizational health, Job-involvement, Engineering Organization, Pharmaceutical Organization

The main aim of this research paper was to study the age, tenure of experience, type of

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supervision and nature of family of non-technical employees among different types organizations by using tools namely organizational health inventory (OHI) constructed by Miles, M.B.,(1973) and Job-involvement scale (JIS)constructed, measured and developed by Lodhal and Kejner (1965).in order to examine the effect of organizational health and job involvement. For the present study a sample of 200 middle cadre executives was selected at random from different departments of two (1.Engineering organizations and 2. Pharmaceutical organizations) large scale organizations. The average age of non-technical executives was 46.50 years. The average experience of 200 executives was 19.60 years. The data were analyzed by using with statistical techniques of coefficient co-relation and LSD were applied to check the difference in significance between the various variable problems of the non-technical executives. The internal effect has also been discussed.

62. Prediction of self –Esteem with Architecture of Lips: A New Direction of Science of Education for Understanding Human Beings

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Key words : Facial geometry, Lips (Architecture and Scaling), Psyche (Manifested, Manipulated, that should be or real)

Psyche is the determinant of total face and body determinates but self- esteem of human beings will be designed and action by architecture of lips. The objective of this research paper is to make prediction of self esteem of human beings with architectural analysis of lips. This is a laboratory based study. Both permanents and mobile labs were designed and established for the smoothness of works. Mobile laboratories were designed and established due to securities and conveniences of the identified sample .These are temporary laboratories and their termination was based on the completion of works. Each human subject was examined on various stages of psycho-physical parameters but laboratory examinations were based on biometric measurements governing three directional photographs; camera facing, right tilt and left tilt. For maintaining perfection two cameras (Nikon 10 mega pixel and one video camera) were used. Photographs were taken from 7feet distance and position of left and right tilt was 60 ° of the subject. These photographic images were analyzed on the basis of 189 geometrical points (the face identity was geometrically determined by these geometrical locations). Earlier this number was diagnosed

270 but on the statistical standard of reliability and validity the rest identified points were eliminated and reserved for the future analysis. Finding was validated by the large sample (N=400) of students, teachers, central government and state government employees of Allahabad Uttar Pradesh population. Convicted prisoners (prisoners were studied with the permission of IG Jail UP) were also taken as the sample for study. Reason behind this is that all prisoners are not criminal and all criminals who released from the courts with the protective measures of rules are not under strength of quality of **psyche that should be.** Thus, this study will help to understand the self esteem of an individual as well as real psyche. The output of the finding can be used for training, promotion and use of national utility in the right manner.

63. Length of Unemployment and Secular Attitude

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Key words : Unemployment, Secular altitude, Employed, Length of service, Chapra, Bihar

Secular Attitude Scale constructed and standardized by Mehra and Sinha (1992) along with self-made Personal Data Sheet was administered on 100 employed and 100 unemployed adults of Chapra Town, Bihar. The age range of employed and unemployed adults was from 28 – 35 years. All subjects were educated at least up to graduation level. Three categories of employed and unemployed adults were made on the basis of length of unemployment or employment – 2 years, 5 years and more than five years. Inter-group and intra-group comparisons of secular attitude scores revealed that the third group of employed adults (unemployed for more than five years) was significantly higher than the third group of unemployed for less than two years) was significantly higher than the first group of employed for less than two years). The second group of employed and unemployed adults did not differ significantly. It was found an increasing trend of secular attitude with the increase in the length of unemployment.

64. Alcohol Consumption among College Students of Rohtas's District

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Key words : Alcohol consumption, Acceptance, Rejection, Belief, Attitudes, Habituation, Tolerance

The Present study aims at examining alcohol consumption related beliefs among college students of four constituent colleges running at Rohtas the District head quarter. The sample comprised of 236 college students of different part of the district, rural or urban areas. The age group of the sample ranged between 18 to 24 years. Personal information Data sheet, Scale were used for collection of data. Data collection were conducted in group session in the college campus. Data were analyzed using statistical techniques such as t test and Pearson's Product moment correlation. Results revealed that family structure, alcohol use in family and alcohol use among friend circles influences significantly on the students.

65. Job Stress among Female Primary Teachers: A Study from Rural Primary Schools

Bhagat Singh¹ and Ajay Kumar¹

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Key words : Anguish, Stresses, Work roles, Psychological, Physiology, Primary schools

The aim of the study was to study the job stress among female primary teachers of government run Primary Schools of rural areas. Thirty five female subjects aged 25 to 35 years were selected for the study. Indore Teacher's Stressors Scale (ITJSS) developed by Dr. Meena Buddhisagar and Dr Madhulika Verma was used to collect the data. On the basis of the results it can be concluded that female primary teachers of government run Primary schools in rural areas have high job stress. Overloadedness and role –conflict are the main factor of job stress

among primary school teachers. Overloadedness, role-conflict, powerlessness, role ambiguity, motivelessness and frail interpersonal relationship are significantly correlated with job stress. It can also be concluded that primary teachers who have more responsibility of the school have significantly higher job stress than the primary teachers who do not have much responsibility of the school.

66. Altruism as a Function of Self-Actualization and Gender

Bhagat Singh¹ and Ajay Kumar¹

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Key words : Anguish, stresses, work roles, psychological, primary schools

The aim of the present study was to study the effect of self-actualization and gender on altruism. Primarily there were 200 respondents. Finally 80 adolescents (40 male and 40 female) aged 18 to 21 years were selected for the study. Primarily self actualization Inventory was administered to 200 subjects. On the basis of scores, 80 adolescent were selected and they were divided into two groups- high self actualized and low self actualized group. Then both the groups were administered Altruism Test. Results showed that there was a significant difference between self actualization and altruism. (F-ratio = 11.97 with df1, 76). There was no significant difference between gender and self actualization (F-ratio = 0.70, with df 1, 76). It can be concluded that person who have high need of self actualization become more altruistic than the persons with low need of self-actualization. One can say that high self-actualization promotes altruistic behaviour. Male and female do not differ in their prosocial behaviour i.e. altruistic behaviour.

67. An Investigation of the Effectiveness of Multiple Psychotherapeutic Interventions in the Treatment of Adjustment Disorder with Prolonged Depressive Reaction in a Teenaged Girl

Sudarshan R Kottai

Ph.D. Scholar Department of Applied Psychology Pondicherry Central University

Key words : Depression, Psychotherapies, Adolescents, Adjustment, Anhedonia, Father figure

A number of psychotherapies have evolved as an alternative to psychoanalysis to counter the criticism that psychoanalysis seemed too long drawn out and time consuming and often unaffordable. There is research evidence indicating the effectiveness of these different psychotherapies when used independently. However research literature is not too voluminous on the effectiveness of multiple psychotherapies in the treatment of depression over a short period. The present study uses case-study method to understand the role of multiple psychotherapies administered over a short period of 3 months and 6 days in bringing relief to an adolescent client suffering from prolonged depressive reaction. The psychotherapies included supportive psychotherapy and interpersonal psychotherapy. Under the cognitive behavioural therapy 4 specific techniques were employed. They are cognitive restructuring, relaxation training, behavioural activation and self monitoring.

68. Cultural Parenting and Ego Strength-A Theoretical Framework on Homosexuality

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Key words : Homosexuality; Cultural parenting; Egostrength, Psychic pain, Psychological Trauma, Monozygotic

Homosexuality has been a puzzling topic in human psychology that has got little research attention. In a country like India where homosexuals are victimized, tortured and the consequence of which lead to a life of psychological trauma that even resulting to even suicide among the

youth. It is high time psychologists devised interventions to prevent people identify as homosexuals to enable them live a conflict free life. This article has put forward a theory on homosexuality which emphasizes on the lack of appropriate socialization in childhood that deprives the children the opportunity to learn the culture-appropriate behaviours. Cultural parents like the parents, family and teachers are responsible for inadequate socialization. This will have a debilitating effect on children by reducing their ego-strength leading to such culture-inappropriate behaviours. So it is very essential for the society to teach younger generation the cultural norms, standards and provide for them enough exposure to equipt them and inculcate behaviours that are approved by the society through strengthening the ego which will help them effectively balance the demands of both the id and the superego and experience well-being.

69. Study of Educational Achievement of High School Students on the Time Orientation

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Key words : Time orientation, Educational achievement, English medium, Hindi medium, High, achiever, Low achiever

It has been mentioned that the discipline, the clearity, the lucidity and transparency of language discipline the behaviour and style of life of the students The variables medium of instruction (English) establish some meaningful facts as the student of English medium school where higher on four dimensions of time that is sufficient – insufficient, structured – unstructured, accuracy – inaccuracy and self related – other related. The purpose of the present study was to see the time orientation and educational achievements of high school students of English and Hindi medium students between the age group 14 to 16 in Madhubani GMSS High School and Indian Public School, Madhubani. For the above mentioned purpose 200 students of both sexes in equal number from Hindi medium and English medium schools have been included in order to establish the significant relationship of the desired goal.

70. Identity Style of Adolescents as related to perceived Parental acceptance - Rejection

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Key words : Informational, Diffuse/Avoidant, Normative, Parental Acceptance, Parental Rejection

In the present research 100 adolescents who perceived maternal acceptance and 100 adolescents who perceived maternal rejection were identified on the basis of Hindi version of Rohner's Parental Acceptance-Rejection Questionnaire (PARQ). An Indian adaptation (Srivastava, 1995) of Berzonskey's (1989). Identity style inventory (short form) was administered upon these two groups of participants for assessing their identity style. The findings reveal that maternally accepted adolescents had significantly more information and norm oriented identity style than maternally rejected adolescents. However, the maternally rejected adolescents had significantly more diffuse/avoidant oriented identity style than maternally accepted adolescents. Results also suggest that the experiences the individual had in his life at home with his family, in general and his mother, in particular are major determinants of behaviour subsumed under the realistic personality and psychopathology. Results also lend credibility to parental acceptance - rejection theory's contention that experience of parental rejection is irreducible cause of social, emotional, behavioural, and social-cognitive problems in the development of children, adolescents, and adults. These findings may have some implications for human service approaches to combating these negative outcomes. Reactive interventions that focus on changing behaviour often fail. However, proactive factors like parent education and family support programmes may be more useful in preventing these outcomes.

71. Relationship Between Problematic Internet Use and Self Control

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Key words : Problematic internet use, Self control, Emotional intelligence, Delinquency, Parental efficacy

Problematic Internet Use (PIU) is still a matter of public concern. The objectives of the

present study were : 1. To find whether there exist any relationship between problematic internet use and self control. 2. To find out whether there exist any significant difference between internet users with low and high self control on problematic internet use. For this purpose the data were collected from 512 internet users randomly using Problematic Internet Use Questionnaire and Self Control Scale. The statistical techniques used were correlation and the t-test. Pearson product-moment correlation results of the study indicate the existence of a significant negative relationship between problematic internet use and self control. The t-test results reveal that problematic internet use was found to be high among internet users with low self control. Internet users with high self control had lower level of problematic internet use when compared to those with low self control.

72. Impact of Internet usage on Self-esteem of the IT students

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Key words : Internet usage, Self-esteem, Cyber space, Withdrawal symptoms

Internet has occupied a pivotal place today. The usage of internet gets increased in a high speed level. And the usage of internet has systematic impact on the human behaviour. The present research specifically focuses on the impact of internet usage on the self-esteem of the IT students comprising of 100 Internet users identified from the IT department, Bharathiar University, Coimbatore. The subjects are the students perusing their M.Sc. and MCA. Degrees belonging to 20-24 years of age. The Internet User general questionnaire developed by Pratar Elli and Browne (1999) and the Self-esteem Questionnaire developed by Priya Daniel (1994) have been used to collect the relevant data. The data were subjected to one way Analysis of variance test. The findings revealed that high internet users found to have low levels of Self-esteem.

73. Effect of Technology on Euthusiasm for Learning Psychology Post-1991

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Key words : Enthusiasm, Psychology, Motivation, Software, Curriculum

Students have grown up today, in a technological world with electronic parapharmalia

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and they are accustomed to receiving and processing information through multi-sensory sources. The present study aims to investigate the effect of the electronic technology on students' enthusiasm for learning psychology in the Post 1991. In the study, the attitudes of as many as 130 students – toward learning psychology at the beginning of the school year, during the study period and at the end part of the study period – were generated by way of using five different scale. And, the pre- and post – study attitudinal survey show an increase of students' enthusiasm for learning psychology through the incorporation of computers and multimedia software.

74. Study of Electromagnetic Hypersensitivity due to Cellular Telephones

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Key words : Land mobile, Radio cellular systems; Electromagnetic, Radiation, Headache, Fatigue, Hypersensitivity.

Electromagnetic hypersensitivity has been reported to be caused by exposure to electromagnetic fields emitted from cellular telephones and cell-phone base stations. The prevalence varies considerably with geographic location. A particularly vexing challenge n studying this phenomenon is that the symptoms reported by electromagnetically hypersensitivity individuals, such as headache and fatigue, are common and nonspecific; they may have many causes. The evidence now available suggests that while the reported hypersensitivity and subjective symptoms may be real, the question of whether they are associated with cell –phone use must await more comprehensive studies.

75. Mirror Neuron System: A Conceptual Overview

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Key word : Mirror neuron System, Neuro- behavior, Imitation

Mirror neuron is considered as the scientific 'BIG BANG' of the 21 st century, which represents a scientific breakthrough. Mirror neuron system provides a motor copy of the observed actions. This review paper is an attempt to summarize the researches on mirror neuron system.

The research findings suggested that, human's mirror neuron system is involved in immediate repetition of action done by others. But how the Motor Neuron System interacts with other neural systems and how controlled and modulated to suppress unwanted imitation or to create a sequence of imitative motor acts in complex forms of imitation are unanswerable till now.

76. Development of B.Ed. Trainees' Stress Questionnaire

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Key words : Stress, B.Ed. Trainees, Factors of Stress, Psychological, Item Analysis, Reliability, Validity

The present study tries to develop a stress questionnaire to measure the level of stress among the B.Ed. Trainees, the sample of which consist of 50 B. Ed. Trainees belonging to the age group of 22 to 35. The present study adopted a survey method and in order to provide a comprehensive understanding and measurement of stress experienced by the B.Ed. trainees the investigator had developed B.Ed. Trainees Stress Questionnaire (BETSQ). The tool was developed through item analysis which consisted of 48 items and grouped under five factors, namely, psychological, academic, family, economical and social dimensions. It is revealed that proper understanding of the level of stress among the B.Ed. trainees may be of immense help for their guidance.

77. Neuro-physiological Basis of Learning and Memorising Processes

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Key words : Neurons, Neurotransmitters

When a person learns and memorizes something, he or she undergoes some neurophysiological changes in the brain. There are innumberable neurons present in the brain. Neurons are the structural and functional units of the nervous system. A neuron is a nerve cell with is processes i.e., Dendron and axon. Connections between neurons are called synapses. During the processes of learning and memorizing neurotransmitters (chemical substances) which are released from the synaptic vesicle trigger a chain of events which alter the manufacture of proteins in the receiving nerve cells in the brain. More of these proteins are manufactured when a circuit is active. Thus the nerve cells of the brain are changed to form modules or designs as the neuro-physiological basis of learning and memorizing processes.

78. Influence of Family Organisation on Child Development

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Key words : Family organisation, Social behaviour, Adjustment ability, Child development

The present study aimed at making a comparative assessment of the effects of two types of family organisations (i.e., Unit and joint) on some aspects of development of a child – which includes, intellectual, educational, social and adjustment ability (personality). On the basis of these aspects, the hypotheses formulated for testing include – 1) children coming from unit families will show greater improvements on tests of intelligence 2) children from joint families score higher on social behaviour rating scales, and 3) children from joint families will score higher on adjustment scale, etc. Intelligence tests on 600 (300 from unit, 300 from joint families) samples were done with appropriate tests, and revealed that joint family atmosphere was proved to be more suitable for the development of adjustment ability which is one aspect of human personality.

79. Error of Commission as a Function of Personality type in Sensory and Cognitive vigilance task

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Key word : Sensory, Cognitive, Vigilance, Personality, Error of commission

Individual differences play an important role in every domain of automated system which

intern leads to commission errors by an operator. Present study makes an attempt to examine error of commission in extravert and introvert participants under sensory and cognitive vigilance task. Results indicated that introvert committed more error in comparison to extravert in sensory vigilance task. Whereas no significant difference was found between extravert and introvert in cognitive vigilance task. These results are explained by 'in built' model of motivation which secure both introvert and extravert participants from making error of commission in cognitive vigilance task.

80. Study of Region on Positive and Negative Affect

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Key words : Positive Affect, Negative Affect, Affect Balance and Culture, Tamil, Malayalam, Mumbai

Individuals are similar and different in their affective experience of life. Positive and negative affective experiences are part of life. Some experience more positive affect, others negative affect, while still others balance the two. This difference between individuals may be due to various factors. One reason could be the cultural background of the individual. To study if this possibility is true, the Scale of Positive and Negative Experience was administered to 234 adolescents from Tamil and Malayalam communities in the city of Mumbai. Results showed that there was no significant difference in the overall affect balance between the two groups.

81. Suicide and work schedule in working women

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Key words : Suicide, Role stress, Work schedule

Stress is a common problem in modern life that affects both mental and physical health. In professional life the stress faced by the employees is substantial. Sometimes stress is built into the job itself yet not all employees face stress the same way. This study concentrates on the role stress of working women which constitute a large proportion of the entire work force. Major concern is role stressor during working hours which is studied under the heading of work schedule with the different shades of personality where a person acts and reacts to his/her environment and in the course of such action and reaction adapts to it. The sample consisted of 240 married working women 120 from each fixed and erratic work schedules within the age range of 30 to 45 years belonging to Uttarakhand and Orissa on availability basis and reveals that high role stress promotes suicide ideation in general, but neurotics and introverts are more susceptible to the effects of high role stress in relation to suicide ideation.

82. Role of Motivation in enhancing the performance of Employees working in Organisations

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Key words : Motivation, Leader, Performance, Research and Development, Organization

The achieving success and maintaining the competitiveness of any organization depends on the motivational level and exis wok-culture; which directly and indirectly affect the performance of their employees, especially those working in the Research (R&D) organizations. Information technology and liberalization all over the world has increased the chance of success in many global competitiveness, non availability of technology, technical skills, tools and equipments and complex work environment achieving success for R & D organizations become uncertain this affect the motivational level of their employees. So the efforts is to study the role of motivation in enhancing the performance of employees working in the R & D organizations.

83. Language and Brain

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Key words : Language, Brain, Autonomous, Homogeneous, Heterogeneous

The present paper aims to unfold the mystery behind two important questions relating to language and brain Viz. 1) how human brain understands language and 2) how language evolved as an autonomous system and an effective tool of verbal communication. There are few more intriguing questions relating to the above questions like what characterises grammar, how significant is vocabulary and above all the way the brain process information. The paper explores the way brain functions with structurally homogeneous and structurally heterogeneous data and is reduced to function as passive bilingual, diglossic and dyslexic. The paper is based on the research carried out by the author over a period of two decades. All the information relating to information processing and information dissemination are adumbrated in this paper.

84. Religious affiliation and Political Modernity

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Key words : Religious affiliation, Political modernity, Modernity scale, Socio-economic status, Political awakening

The sample for the present study consists of 640 cases for four religious groups namely Hindus, Muslims, Tribal Hindus and Tribal Christians which were represented by 160 cases each. They were selected from stratified quota basis from Ranchi District. Necessary data have been collected following Likert type Political modernity scale to measure the political modernity. The scoring was done in such a way that higher the score higher would be political modernity. All the inter correlation between five dimensions of political modernity are positively and statistically significant. The extent of political modernity is very low in entire sample. In the comparison of different sociological variables, power of socio-economic status fully influences political modernity. High socio-economic groups have shown themselves significantly more modern than their low socio-economic counter parts. In the comparison of religious affiliation and political modernity, the Hindu have shown themselves politically more modern in comparison to the Muslims, the tribal Hindus and the tribal Christians. The present study suggests that there is a need of mass level political awakening in each strata of the society for the proper functioning of democracy.

85. Quality of Life of Older People : A Comparative Study

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Key words : Ageing, Older people, Marital relationship, Successful, Quality of life

How do older people cope with the demands of ageing and their changing social status ? Not surprisingly the answer is that there is considerable variation. As in all other parts of the lifespan relationships are important to the older person's adjustment. For some people, the marital relationship may become more rewarding during old age. Some researcher has found that satisfaction with marriage tends to be rated higher in retired people than in middle-aged adults. This may be partly because older married people tend to be those whose marriages have been successful i.e. they have stayed together because they were satisfied with the relationship. The paper highlights the impact of caste, gender, and habitat on the quality of life of aged people and their coping style in other domain of life.

86. Institutionalization of Hearing impaired children and its effect on reaction to frustration

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Key words : Institutionalization, Reaction to frustration, Hearing impaired children

The objective of the present study was to find out the effects of institutionalization and gender of hearing impaired children on their reaction to frustration. The two IVs varied at two levels were, Institutionalization : institutionalised and non-institutionalised and gender (Male and Female). The design was 2 x 2 factional design. The tool used was Indian Adaptation of Rosenzweig Picture Frustration Study(children's form). The sample consisted of 240 hearing impaired children. 120 institutionalized and 120 non-institutionalized. The findings were : Institutionalised subjects scored high on obstacle dominance scale than their counterparts. On two other reactions of frustration i.e. Need – Persistence and Ego-Defence the difference was non significant. Girls scored higher on the Ego-Defense than the boys, but there was no interaction effect of institutionalization and gender on the reactions to frustration at any of the scale.

87. Helping Students to Cope with Anxiety

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Key words : Anxiety, Yoga, Skills, Society, Nervousness

Everyone periodically experiences fear and anxiety. Life today is fast and full of competition. There is a constant urge within everybody's mind to get ahead in life, to earn more, to live up to expectation of others and finally to get noticed. Due to rapid change in our society, the life styles of the individual have totally changed over the years. Therefore the ability to help student and learn such important skills. They need to find out sources of acquiring the necessary kinds of knowledge and students are experiencing role overload, role stagnation and self role distance. Therefore, by keeping this view in mind this study was conducted to find out whether Yoga techniques have any effect on the anxiety level of students from a total

sample of 50 adolescent boys through purposive random sampling. All the students were taken from B. Tech 1st year students of IIT Delhi. Anxiety relaxation package was prepared for the students to overcome their daily life anxiety. After a period of gap the impact was assessed. Results reveal a significant decrease in the anxiety level of students. These yoga and meditation techniques brought the positive changes among the students.

88. Privatisation and Mental Ability

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Key words : Mental ability, Privatisation

It has been aimed at studying the effect of intelligence quotient of students upon their attitude towards privatisation from a total sample of 400 students (12-16 years) of Samastipur district, Bihar, following National Verbal Intelligence Test (NVIT) by Tarni Jee (1994). It is a verbal group test with 110 items of four types classification, analogy, best answer and test of reasoning. The results are discussed in the light of intelligence and privatisation.

89. A Comparative study of attitude towards Privatisation among Government employee and Social Workers of Vaishali District, Bihar

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Key words : East central Railway, Privatisation, Attitude, Social worker

The research paper aimed to study the attitude towards privatization among Government employees and social workers. The sample consisted of 200 Government employees and 100 Social workers of Patna District. Their age ranged from 22 to 43 years with a mean of 32.42 years. For measuring ATP, attitude towards privatization Scale by Tarni Jee was used. This attitude scale consists of 20 statements with five choice responses in the middle. The scale is in Likert format the possible range of scores in 20 to 100 High scores indicate more favourable attitude and low scores unfavourable attitude towards privatization. Both the temporal stability

of the test (r=8.59 N=400) and the internal consistency of the half test (r=0.853, N=100) and that of the full test after applying S.B, formula (r=0.912) were sufficiently high. The test has faced validation as well as content validation. Result reveals significant different between the means of their attitude towards privatization.

90. A Study of adjustment of Adolescence with Special Reference to their Gender and Education

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Key words : Adjustment, Adolescence, Gender Education, Ahmedabad

The aim of present study is to examine the adjustment pattern of Secondary and Higher Secondary School boys and girls. The sample consisted of 2160 boys and girls. Equal number of boys and girls were selected from the secondary and higher secondary schools of Ahmedabad. The adjustment areas were measured by the high school adjustment Inventory (HSAI) constructed by Singh and Sengupta. The collected data were analysed using 't' test. The result showed that the Secondary School going boys are more adjusted in social area than Secondary School girls. Higher Secondary School girls are more adjusted in home and health area compare to boys. Higher Secondary School boys are more adjusted in health and emotional area than to Secondary School boys but Secondary School boys are more adjusted in Educational area compared to Higher Secondary School boys. Higher Secondary School girls are more adjusted in home, health and social area of adjustment compared to Secondary School girls. But Secondary girls are more adjusted in educational area than Higher Secondary School girls.

91. Comparison of Emotional states between Single and Married working Women

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Key words : Emotional States, Women, Marital status

In Psychology, emotions are complex evaluative (positive or negative) reactions of the

nervous system in response to external or internal stimuli. Different types of emotions are associated with relativity distinct patterns of internal experience, overt behavior, motivational states, physiological arousal, learning and activity in the nervous system. The aim of this study was to compare the emotional states between single (50) and married working (50) women collected from Indore city following Kapoor and Bhargava. The findings of this study showed that there was significant difference in eight emotional states viz. anxiety, stress, depression, regression, fatigue, guilt, extraversion and arousal between single and married working women.

92. A diagnostic evaluation of Patients of Psychosomatic Disorders under DSM-IV

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Key words : Patients, Psychosomatic, Clinics, Chapra

The psychosomatic disorders involve a clinical picture dominated by maladaptive changes in bodily systems rather than overt maladaptive behavior. The incidence of psychosomatic disorders is indicated by the estimate that at least half of those who seek medical aid suffer from physical illness directly related to emotional stress. Viewing the necessity of this problem 60 patients of psychosomatic disorders age ranging from 30-50 years of both sexes visiting different clinics of Chapra town were assessed by TAT (Murray 1943). The incidence and severity of disorders were analysed on intensity of tension and reaction to stress. They had need for achievement, dejection, dominance, affiliation, nurturance, sex aggression and abasement. The men and women differ significantly on frequencies of their needs ($X^2=20.23$, df=8,P<.01) and intensity of press ($X^2=18.50$, df=8, P<.05). most of the patients were on the outcome of unpleasant continuum. Some of them could not complete the stories and had their negative ends.

93. A study of security-insecurity among disadvantaged youths

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Key words : Security, Insecurity, Personality, Ara, PDS

A study was undertaken to examine the level of security-insecurity among disadvantaged youths. The sample comprised 300 college students of Ara having an average age of 19.5 years. Based on available literature it was assumed that high disadvantaged Ss would show higher level of insecurity in their personality as compared to advantaged Ss. For studying level fo security-insecurity and degree of disadvantaged Hindi version of Maslow's Security-Insecurity Inventory and PDS (Prolonged Deprivation Scale) were administered respectively. Analyses of data revealed a significant difference between advantaged and disadvantaged groups in respect of security-insecurity. The assumption was upheld by the findings.

94. Impact of Sex on Some non Work Variables

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Key words : Work Motivation, Job satisfaction, Need for achievement, Life Satisfaction.

This study tried to measure the impact of sex on work motivation, job satisfaction, need for achievement and life satisfaction. For this, 200 employees were selected through incidental cum purposive sampling technique from Bokaro Steel Plant Limited, Bokaro district. The whole sample was divided into two parts – 100 male and 100 female. Five scales – Personal Data Sheet, Work Motivation Scale, Job Satisfaction Scale, Need for Achievement and Life Satisfaction Scale were administered. Data was collected and arranged in tables and statistical

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treatment was done. Result indicated that male employees had higher work motivation than female employees. Male and female employees did not vary on job satisfaction level. Male employee had higher need for achievement than female employees. Finally, male and female employees did not vary on life satisfaction level. Several factors were responsible behind this phenomenon.

95. Recovery Process in Drug Addiction – A Journey through Psychospiritual Approach

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Drug abuse and its relationship to personality pattern are highly complex and no single behavioral approach to intervention could be successful where residential treatment has been carried out. Thus multidisciplinary approach had been designed and implemented in Recovery Deaddiction/ Rehabilitation centre running by Human Development & Research Institute, Kolkata. The best way to address this problem is through comprehensive diagnosis and psychotherapeutic treatment which is psychospiritual in nature. The Rorschach Inkblot test, the Thematic Apperception test and Spiritual Well Being Scale had been administered on 100 multiple drug abusers. Test findings suggested passivity, alienation, social withdrawal coupled with anxiety and aggression. This present study revealed that psychotherapeutic treatment had been able to ameliorate these syndromes and drug abusers had developed self acceptance, self esteem, courage and resilience, love of life and purpose in life.

96. Challenges to Behaviourism and the Emergence of Modern psychology

B. Swathy

Brahmakumaris, Rajyoga Education & Research Foundation

Key words : Psychology, Behaviourism, Five major perspectives, Broad perspectives, New subfields

Today, the field of psychology involves five major perspectives such as: biological perspective, psychodynamic perspective, cognitive perspective, behavioural perspective and humanistic perspective. Each of these broad perspectives emphasizes different aspects of Behaviour and mental processes and each takes our understanding of Behaviour in somewhat

different directions. Further Psychology encompasses many different subfields and specialities' practiced in a variety of settings such as cognitive psychology, clinical and counseling psychology, developmental psychology, educational psychology, forensic psychology, health psychology, industrial and organizational psychology, neuro psychology, social psychology, experimental psychology, environmental psychology, psychobiology and evolutionary psychology. Behaviourism burst upon the field in 1913, Watson argued passionately for the view that psychology should focus not on consciousness or experience but on Behaviour-actions that can be observed and measured. The field of psychology is broad and diverse with new subfields arising and coming to prominence all the time.

97. Role of Caste in Teaching Ability - A Study of Teacher Assessment By Students

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Key words : Caste, Category, Teacher assessment, Teacher evaluation, Student feedback

The study aims to compare college teachers from different categories (castes) with respect to their teaching performance. The study is conducted in Maharashtra state and is based upon feedback generated from 10,429 students from different urban colleges from 9 universities. The Teacher Assessment Scale, specifically developed for this purpose, is used in the study. Teachers are compared on a Total Score as well as on five factors – Knowledge in Subject (F1), Classroom Teaching and Communication (F2), Sincerity (F3), Attitude towards Students (F4), and Facilitating Overall Development of Students (F5). It is seen that teachers from different categories do not differ in their overall teaching ability. However, teachers from the general category are found to be significantly better than teachers from the other categories in F1, F2 and F5. There is no difference in teachers from different categories in F3. General category teachers are found to be significantly lower than their counterparts from other categories in F4. Further analysis throws light on some interesting findings within each sub-test (Factors). The study carries implications for policy research and planning.

98. The Development and Standardization of Educated Un-Employed Youths Stress Scale

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Key words : Item analysis, Reliability, Validity and Percentile norms for sex, Area and Educational Categories

The current study is focused on the development of educated unemployed youths stress scale for Gujarati speaking population. Initially 53 items were constructed and based upon expert's comments, few inappropriate items were modified and few were deleted and 40 items were retained for final version of the scale. The sample was comprised of 1090 males and female respondents in the age range 21-29 years from many villages and cities of two districts viz. Rajkot and Junagadh. The average number of the subjects generally belonged to middle socio-economic status. As a whole ,all the subjects are educated but they are unemployed youths. Their educational level was Graduate (B.A), B.Ed., and Post-graduate (M.A.) or both at the time of data collection. The test-retest (N=160) and split-half (N=960) reliabilities, r-values were 0.86 and 0.90 with an index of reliability was 0.93 and 0.95 respectively for both. The content and the contrast groups validity were checked and discussed. The percentile norms were established for scale on sex, area and educational categories. The findings suggested that the current scale is a reliable and valid instrument. More future researches are directed for the generalization of the result to diverse samples.

99. Development of B.Ed. Trainees Stress Questionnaire (BETSQ)

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Key words : Development, B.Ed., Trainees, 5 Factors

People encounter stress in their daily lives. Stress is a normal reaction to difficult situations or environmental demands. One cannot eliminate stress but can reduce the intensity of the

stress in the individual's life. Knowing the level of stress among the B.Ed trainees will be helpful to guide the trainees in their life. The objective of the study was to develop a stress questionnaire to measure the level of stress among the B.Ed trainees. The sample of the study consisted of 50 B.Ed. trainees belonging to the age group 22 to 35. The present study adopted a survey method. In order to provide a comprehensive understanding and measurement of stress experienced by the B.Ed. trainees the investigator had developed B.Ed. Trainees Stress Questionnaire (BETSQ). The tool was developed through item analysis which consisted of 48 items and grouped under 5 factors, namely, psychological, academic, family, economical and social dimensions.

100. Assessing Quality of Life of Adolescent Girls in Protective Homes

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Key words : Quality of life, Human capabilities, Happiness level, Social rewards, Optimism in adolescents, Parental authority, Decision making, Maslow's hierarchy of needs

In the present study an attempt was made to assess the Quality of Life of adolescent girls residing in government protective homes. Dimensions of decision making and happiness were identified taking into consideration their unusual circumstances, their life records, beliefs, attitudes about self, etc. The study was conducted in the State Protective Home established under Immoral Traffic Prevention Act 1956, which houses girls under IPTA and also children in conflict with law. The study revealed that of all respondents only 5% of the respondents were optimistic. The level of happiness experienced by girls was found to be low for 84% of the respondents.

101. Personality and Social Value

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Key words : Personality, Learning, Cultural norms

The individual human personality is the product of a learning sequence. Driven by inner

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tensions and guided by external valences the child confirms to social pressures assimilates cultural norms and imitates the behavior of leading figures in his milieu, while recognizing the importance of accidents in the individual biography, we feel none the less impelled to conclude that personality is in the main a mirror of the culture. The society which is not same is one which offers a surplus of deprivations and frustrations. Bu it is exactly such conditions which lead to personality breakdown to scapegoating, to delinquency and to war. Thus in sheer self preservation, to protect the valued aspects of our individual and social existences, we must seek to create a same society.

4. EDUCATIONAL SCIENCES

102. Educational Science - Need of the Hour

B. Swathy

Brahmakumaris, Rajyoga Education & Research Foundation

Key words : Globalism, Scientific breakthrough, Technological revolution, Inner being, Imbalance

Globalism today is being accepted as synonym for progress, scientific breakthroughs and technological revolutions. People today are apprehensive about the rate at which the world is assaulted by trends, technological systems and new life style which trigger dramatic social, economical and cultural changes. There are two visible trends of *explosion of knowledge* on one hand and the *erosion of values* on the other hand. The grave problems of mental tension, conflicts, violence, pollution, population explosion, nuclear catastrophe all presents a gloomy picture of utter disharmony, discard and disarray. The spectacular scientific progress in the outer world has out-paced the exploration and elevation of the inner being of man. This has created a perilous imbalance which is the route of all problems that confront us today.

103. Attitudes and Practices of Teachers from Elementary Ecoschools on Environmental Concerns from Cuddalore District of Tamil Nadu, India.

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Key words : Ecoschool, Teachers, Attitudes, Practices, Pre-test, Post-test, Interventions.

Attitudes of teachers play a pivotal role in moulding children in a right perspective. In these days of fast alarming environmental degradation promotion of ecoschool is very crucial. In Kurinjipadi and Kammapuram blocks of Cuddalore district elementary schools numbering 50 have been promoted as ecoschools. The present study which was carried out from July 2009 to March 2010 focuses on environmental attitudes and practices of teachers from 25 of the 50 ecoschools thus far developed. In the taking up of environmental conservation activities all the

105 teachers working in 25 ecoschools were involved. To study the attitudes and practices of the teachers towards environmental concerns 23 male and 37 female teachers were taken up. The attitude scale consists of 25 statements under five dimensions such as biology, ecology, water resources, pollution, hygiene and sanitation. The application inventory includes five statements with three activities each. The grand mean attitude score of the teachers registered in the pre-test was 83.39%. No marked variation in the score gender wise was recorded. After interventions, only a marginal increase in the attitude score was recorded. The grand mean post-test score recorded was 90.90%. In the post-test also the difference in score gender wise was only marginal. Among the dimensions studied highest overall mean pre-test score of 88.72% was recorded for the dimensions "hygiene and sanitation" and the lowest mean pre-test score of 76.60% was registered for the dimensions "ecology". In the post-test, the highest overall mean attitude score of 95.25% was recorded for the dimension "biology" and the lower overall mean attitude score of 83.64% was registered for the dimension "water resources". No drastic variation in the overall mean attitude score among the dimensions was recorded both before and after interventions. For all the statements under practices highest percentage of teachers responded that they had taken up environmental conservation activities. However, a wide mismatch between practices and rating score was noticed.

104. Language Creativity As An Art: In Education

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Key words : Creativity, Language, Education, Profession.

In the fast changing world of today, with the boundaries of knowledge receding rapidly, the few years that children have in school could best be utilized to generate in them those functions which will stand them in good stead when they are adults. Under these circumstances, the lasting contribution of education in the cognitive sphere would be to develop in children the capacities of flexible thinking, reasoning storage of useful information and experiences and control over language. For successful adjustment, it is important for every child to identify the functional relationships among groups of things and events, to be able to recognize cause and effect, to classify and generalize. Thinking starts with a problem and is based on a knowledge

of past achievements and information that has been stored away. Joshi and Pathak (1966) factor analysed the scholastic attainments of high school students and extracted verbal and general memory factors. Does this indicate that the reasoning factors play no role in academic achievement.

105. Relationship between Personal effectiveness and Academic performance of students

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Key words : Personal effectiveness, Academic performance

Academic performance is of paramount importance these days. Therefore, the study was undertaken to study the academic achievement as an outcome of personal effectiveness with other background variables such as sex, type of school management, size of family, type of family, and birth ordinal position. A stratified random sample of 300 students consisting of 152 male and 148 female students were selected. Data was collected using Personal Effectiveness Scale and Academic Performance of the students. Data was analyzed using t- test and coefficient of correlation. The findings of the study showed that type of school management, type of family and personal effectiveness were found to have significant effect on the academic performance of students. A considerable number of students from school go to colleges and institutions of higher learning. It has been thus indicated that a good number of variables, such as personal effectiveness along with other variables influence achievement in different degrees. Heads of institutions, curriculum planners, teachers and others who are involved in the task of helping students to achieve better should have the knowledge of the extent of influence these correlates exert on achievement in turn on the quality of higher education.

106. Graduate student's attitudes towards the Inclusion of soft skills in higher education : An action research case study

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Key words : Attitude, Soft skills, Quality Enhancement

This paper is a case study to assess the attitudes of graduate students towards the

inclusion of soft skills with their regular course design. This case study is an action research study of the teacher to find out the importance of soft skills at graduation level for enhancing the quality of higher education. This means to make graduates more employable. The result also proves that graduates have strong attitudes towards the inclusion of soft skills along with their regular course.

107. Work Ethics of Secondary School Teachers : An Empirical Investigation of Selected Variables

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Key words : Work Ethics, Job Satisfaction, Organizational Culture, Secondary school teachers

A teacher should be the living embodiment of all human values. Teachers, therefore, need the right kind of value orientation and need to have a high level of work ethics. Work ethics embraces work responsibility, work conscience and ethical work behaviour. Work Ethics of teachers is related to their levels of job satisfaction and organizational culture. The study was conducted on a sample of 450 secondary school teachers selected by stratified random sampling technique. Equal representation was given to male and female teachers. Appropriate tools were used for data collection. The data was analyzed by computing coefficient of correlation and t-test. The results revealed that there was a significant positive correlation between Work ethics of secondary school teachers and their job satisfaction and organizational culture. The 't'-test analysis revealed that teachers having high job satisfaction and working in strong organizational culture had higher levels of work ethics than teachers having low job satisfaction and working in weak organizational culture. The study implies the need to enhance job satisfaction of teachers through a variety of organizational strategies. School managements also need to strengthen the organizational culture of their schools in order to increase the work ethics of teachers.

108. E-Learning For Empowerment and Inclusion of Disadvantaged Groups

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Key words: E-learning, Employment, Disadvantage, Strategies

A cognizable section of the society consists of many disadvantaged groups who do not have access to education for various reasons. Education must reach the unreached communities as stipulated by Dakar Framework of Action for Education for All (EFA). This cannot be done with out E-Education or E-Learning. E-Learning is the learning process created by interaction with digitally delivered content, services and support. E-Education helps to empower the unserved and the under-served. This study introduces an e-education framework for social inclsion of Education of disadvantaged groups of students. Various strategies need to be adopted for empowerment of disadvantaged groups are also discussed.

109. Indian Science Education and Research: A Critical Study of its Relevance to Society

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Key words : Quality of education, Science education and innovation, Obscurantism, Superstitions

Quality of education plays a pivotal role in the process of development of nations. Hence, quality concerns in education are national priorities for all nations. The whole of our education system suffers from poor quality and science education cannot be excluded from this. The quality of education in general and science education in particular is not measured in terms of aims and objectives of the nation. Making science and mathematics an integral part of general education till the end of school stage failed to yield meaningfulness in the true sense of the goal. Even though the last decades saw an exponential growth in technical education, it did not result in the desirable number of quality graduates. The biggest deficiency of higher education is its inability to develop sensitivity and commitment to freedom. In the second half of the 20 th century, India could not recreate the magic of the early part of the century created by Ramanujams, Ramans, Boses and so on. The potential Ramans and Ramanujams are there even today somewhere. The study will expose the realities of science education and research in India and its relevance to society. The findings would be useful in assessing the prospect of science in India in the presence of treacherous tantriks and selfish Swamis wielding enormous clout in the corridors of power and astrologers leading and guiding our politicians and also the evergrowing cult of obscurantism and superstitions.

110. Personality Moderates Approaches to Teaching

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Key words : Personality, Approaches to teaching, Trainers

Teaching is an oldest and historically significant system of learning. Literatures picture a multidimensional factors' accountability in facilitating the approaches to teaching. In the present study an attempt is made to find out the influencing role of personality on the approaches to teaching of the teacher trainees. 200 teacher trainees identified from two teacher training colleges situated at Coimbatore city, Tamil Nadu formed to sample for the study. The Big Five Locator Questionnaire developed by Lewis Goldberg (1993) and The Approaches to Teaching Questionnaire developed by Paul Ramsden (1992) were used to collect the relevant data for the study. Two way analysis of variance statistical techniques is adopted to analyze the data. A part of the result shows that personality dimensions systematically influenced the approaches to teaching of the teacher trainers.

111. Value Patterens among Presessional College Students

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Key words : Values, Professional college students

The chief aim of higher education is to develop youth to be best citizens of the country

and also to make them persons of high morality and character. In order to realize these aims the system of education is geared towards achieving it. Indian society is at cross roads so far as its value choice is concerned. The younger generations, who are there in our schools and colleges, have to be imparted with right type of values that would sustain them as good and responsible citizens of tomorrow. But the contemporary value system imposes a kind of conflicting relation with the values of the past and present. It tries to impose its effect on the values by considering them as central factor from the historical patrimony of the humanity. A comparative study of the value patterns of Engineering and Medical students with a sample of 100 students each were selected for the study. Value pattern scale was developed by the investigator, which included four categories of values namely: Personal, social, scientific and environmental values. The data for the study were obtained using multidimensional scale to measure value patterns. Findings of the study revealed that the value patterns of engineering and medical students were distinct with varying levels of their personal-demographic variables. Based on the finding of the present investigation the researcher has drawn practical and feasible implication for policy making in the area of quality professional education.

112. Sculpting the We-Factor

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Key words : Social, Sociological, Imagination, Socialization, Me, We, Beneficial

A baby's actions are guided by individualism. S/he has to be taught collectivism. Sharing, loving and selflessness taught are and the 'we' factor be activated. While working with students of different age groups it was felt that this facet of social imagination needs to be revealed to the young populace more gravely. They ought to be caught young to be molded into positively beneficial human beings instead of just being successful professionals indifferent to suffering in society. Children have to develop the we-feeling of belongingness in society so that they deal with their problems without creating them for others.

113. Scientific Research in Indian Universities and its Nodular Analysis

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Key words : Erudition, Assessment, Policy, Investment, Exploitation, IPR.

Universities are knowledge based organizations whose functions are largely confined to teaching and research. They are designed to operate to discover and disseminate knowledge by possessing significant and relevant expertise in all disciplines. India has a very vast structure of education and its higher education sector is now highly advanced, compared to its neighboring countries. The vast network of state funded Indian universities appears to be sinking into a state, where academic performance both in teaching and research become partially marginalized. Erudition and scholarship are no longer pre-requisites for advancement through academic ranks. Research both in science and the humanities, gets back the backseat and mediocrity has become glorified. A regressive trend has been observed in the past few years in science education in universities. Science seems to be losing out to other disciplines, particularly the professional courses in attracting students. The recent trend observed in secondary and tertiary education sectors is toward non science courses. Inadequacies in the policies of the government, negligence of its importance by political parties and social organizations, etc., have accelerated the decline. The widespread impression among students is that unlike professional courses, a career in basic science is not lucrative. Careful analysis of the situation is necessary for elucidation of this trend and finding effective strategies for strengthening science education. An extensive study was made to establish the nature of science education of the Indian universities and the current trend. The study focused on the Policies and practices existing in the higher education sector, enrolment pattern, funding pattern, academic performance etc.

114. Impediments of Scientific Research in Indian Universities

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Key words: Revolution, Edge, Expansion, Inclusiveness, Equity, Partnership, Internationalisation, Funding, Commission.

Higher Education in India including research has expanded enormously during the last sixty years. It is also encountering a few important and significant challenges. The concept of

education itself has gone through a sea change. Education for Knowledge, Information, Skills, Employment, Livelihood , Empowerment , social and National Development. Some institutions of higher education also have been active in working on problems that affect the poor. For instance, the Telecommunication and Networking (TelNet) group at the Indian Institute of Technology in Chennai has developed ICT solutions that deliver a menu of services, such as health care by telemedicine, agricultural consulting via Internet, education, communication, banking, entertainment, and E-governance. Early experiments showed that ICT can be a critical tool for empowering rural India, and people are willing to pay for improvements in their quality of life. This makes it a sustainable option and generates employment. This was an initiative taken by an academic group and put into operation by start-up ventures rather than supported by any research councils. But it is not only S&T delivered by the public or private sector that leads to inclusive growth. The problems of the poor are identified by the poor themselves, and it is the subsequent intervention by formal S&T systems that makes the huge difference.

115. Entrepreneurial Orientation of Senior Officers of Government of Tamil Nadu in Chennai city

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Key words : Entrepreneurial traits, Government Officers

The objective of this paper is to test the entrepreneurial orientation of Senior Government of Tamil Nadu in Chennai city, so that, they are able to deliver good governance. Thirteen traits were identified which are normally considered to be having influenced on the entrepreneurial orientation of any person. A questionnaire was developed with 70 statements to find out how well each statement describes a particular Government officer. It was distributed to a sample of 110 Government officers and got filled up by themselves. Data so collected have been analysed following appropriate statistical methods. It was observed that Government officers with Good and Excellent scores are very large in number (83%) when compared to poor and fair scoring officers (17%). The system of having a long chain in the decision making / implementation combined with high range of scores reduces the efficiency of government officers. The demographic variables (Designation level, educational qualification, length of service and Age) are found to have no impact on the entrepreneurial traits of Government officers. The above findings make us to conclude that Senior Officers of Government of Tamil Nadu in Chennai city hell all the Entrepreneurial Traits and they are definitely capable of delivering Good governance.

116. Reinventing Education

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Key Words : Planners, Investment, Education, Eradication, Illiteracy, Poverty

Education can be the next big area of the economic growth in the country. Various surveys have shown that the Indian Universities are not famous enough for providing quality education. Currently India's colleges and universities enrol only 10% of the college going population which is so below than other countries. The Indian society has suffered a great deal from a neglect of investment in human capital. We should invest 6% of GDP on education. Anything less than that would mean further delays in eradicating illiteracy and poverty. Indian higher education system suffer even more due to poor quality. Our Hon'ble Prime Minister said two years ago, more than 60% Indian Universities and 90% colleges are of below average quality.

117. Higher Education - Mismatch in Demand and Supply

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Key words : Higher education, Demand and supply, University system, Quota, Job market

The issue of *educated – unemployed* has been a serious concern in education policy of India. One of the major reasons for this is the 'slow' university system with outdated curricula. Clearly, traditional subjects have lost grips in job market, yet, higher learning institutes pursue with their rigid quota of seats under different streams. Highlighting this inflexibility, the paper

discusses the mismatch in demand and supply at both entry and exit level of higher education. The paper proposes higher education to be flexible by taking feedback from job market so as to attain the objective of *employability* at most basic level.

118. A study of Selective Well-being of College Teachers in relation to their Personality, Job Satisfaction and Occupation stress

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Key words : Teachers, Occupational stress, Job satisfaction, Well-being

Changes in the social world outside the classroom have made teachers work more complex challenging and more stressful. Teachers who are stressed show many ill health consequences like reduced work efficiency, psychosomatic symptoms and a feeling of depersonalization. This had led to the emergence of a new tem *occupational well being*. For the present study college teachers were selected randomly from the colleges situated in Chandigarh and Punjab in order to examine their Personality. Job satisfaction and Occupational stress etc. They were administrated on the Subjective Well Being Scale, Teachers, Job Satisfaction Scale, Occupational Stress Index, Eysenck's Personality Questionnaire and Spielberger's State-Trait Anxiety Questionnaire. Correlations were computed which Extraversion and Job Satisfaction. Occupational Stress, Neuroticism and State of Trait Anxiety were found to be negatively related with Well Being.

119. The Role of Pretend Play in Children's Cognitive Development

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Key words : Cognitive

There is a growing body of evidence supporting the many connections between cognitive competence and high-quality pretend play. This paper defines the cluster of concepts related to pretend play and cognition and briefly synthesizes the latest research on the role of such play in children's cognitive, social, and academic development. The paper notes that there is a growing

body of evidence to suggest that high-quality pretend play is an important facilitator of perspective taking and later abstract thought, that it may facilitate higher-level cognition, and that there are clear links between pretend play and social and linguistic competence. The paper also notes that there is still a great need for research on the relationship between high-quality pretend play and development of specific academic skills. The paper concludes with a discussion of the challenges and potential policy directions suggested by research findings.

120. Attitude of College Students towards Population Education and Family Planning in Imphal East and West District, Manipur

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Key words : Educational psychology, Population education, Attitude, Spurt, Standard deviation

This paper is directed towards exploring college student's attitude towards population education and family planning. For this, 257 students from 10 Govt. Colleges in Imphal east and west districts were selected. Results of the investigation revealed that two religious groups, i.e. Meitei and Muslim seemed to be more or less equally informed about the method of family planning. The Meitei students had more positive attitude towards family planning as compared to the Muslim students as Mean scores are higher for Meitei Students. However, no significant difference was found in attitude towards population education and family planning among college students due to difference in economic status, caste, income and sex.

121. An Empirical Relationship Between Entrepreneurial Behavioural Aspects and Their Problems

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Key words : Entrepreneurial behaviour, Behaviour segmentation, Discriminate Groups, Heterogeneity behaviour

The entrepreneurial psychology varies due to fluctuation in the business performance of

enterprises. When they are hampered by the problems, it is a good indicator to know the psychological profile of entrepreneurs. Actually the problem of enterprise unravels their involvement at transcendental level or the involvement at a limited shallowness. The behavioural sciences are useful in predicting the futuristic and prudential motives as well as the benefits exploited by the entrepreneurs. The present research article attempts to ascertain the abundant problems prevailing in the MSME sector in Tamil Nadu and its traces over business behavioural changes among the entrepreneurs. It has been observed that behavioural science is indispensable to identify the psychological profile of entrepreneurs.

122. Empowerment of Students with Speech and Hearing Impairments through Assistive Technology in Inclusive setting

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Key words : Empowerment, Impairment, Education Rehabilitation, Training

Disability is not a charity issue, but it is a rights issue. People with disabilities want to be treated like other citizens, with rights. They want to be equally and to participate as equal citizens in their communities. There have been major shifts in the perception of disabled people's rights, from charity to social development, from treatment to prevention, from dependency to empowerment, from humanitarian concern to human rights. Inclusive education is about the education of all children in mainstream schools and classrooms and the recent drive toward inclusive education is about more than disability or 'special educational needs'. The paper deals with principles and benefits of inclusive education, tele-rehabilitation and various assistive devices for children with speech and hearing impairments. The symbols, symbolic languages, augmentive and alternative communication are also briefly described. The world of assistive technology is changing rapidly as attempts are made to improve the quality of life for everyone. The rehabilitation of an individual will not be complete if we are not able to make himself sufficient, self-dependent and self-earning member of our society. We have to use modern tools, information technology and other hi-tech methods for imparting training.

123. A Two-dimensional approach for Computing Employee Satisfaction Index

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Key words : *Employee satisfaction, Satisfaction surveys, Two dimensional tool of measurement, Satisfaction index*

Present paper aims to develop the pre-eminent way for conducting research and surveys related to employee satisfaction. A novel approach for computation of Employee Satisfaction Index in Organizations has been reported. The current study focuses on the synthesis of a two dimensional model to extract out satisfaction level of employees in an organization.

124. Science, Education and Technology Challenges in 21st Century

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Key words : Science, Technology, Education, Standard, Promotion

This century faces the challenges in scientific and technical education on account of science teachers who are not up to the international standards conversant with modern advanced science as a first challenge. Secondly, students seeking admission to these courses are of mediocre standard, as compared to alumni who were having certain aims, zeal and tenacity of purpose. The present generation has less devotion to the science subject due to less lucrative jobs in industries and education vis-a-vis cream goes the engineering and medicine faculties. The standards of the educational institution have lowered down due to a large scale production of these institutions with the help of state government. The expansion of scientific knowledge and its use in applied field has caused more commercialization leading to cope up with the highest standards in the atmosphere of low standard institutions and teachers. Yet the attempt of Central government to create National level Science Institutes will ease out the problem to some extent. Lastly, there is a wide gap between the research work accomplished, public and industries, as the technology studied does not reach the grass root level. Because effective use of these findings does not create a continuous enthusiasm in students to choose science careers.

To create maximum interest much publicity of scientific investigations, projects and achievements are needed for science promotion in the country through active students.

125. Educational Development in India

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Key words : Salvation, Mundane, Veritable desire, Saakshar Bharat, Insight, Refinement, Omnipotence, Kaleidoscopic

According to thinkers in ancient India, Vidya or knowledge or leaning or education was considered the 'third eye' of man, which gives him an insight into all affairs and teaches him how to act; it leads us to our salvation: in the mundane spare it leads us to all round progress and prosperity .The fallowing verse is a common saying in India "Swadesh Pujyate Raja, Vidvan Sarvatra Pujyate". Dr. Sarvapalli Radhakrishnan described education as "Training the intellect, refinement of the heart and discipline of the spirit.' Pt. Jawaharlal Nehru said "Education is to enabling the individual to be a producer as well as a good citizen. In India in year 1951, the total literacy was 18.33 percent, while 27.16 percent were male and 8.86 percent were female. That has increased in year 2001. Total literacy was 65.38 percent, while male literacy was 75.85 percent and female literacy was 54.16 percent. These data shows that India has done a lot of improvement in female literacy comparing to male literacy, but our country's literacy rate is far below the countries which have nearly 98 percent and above literacy as Russia, Japan, U.S.A. and other countries. Kerala, Mizoram, Lakshadweep, Goa, Delhi, Andaman & Nicobar have high literacy rate while, Arunachal Pradesh, Jammu & Kashmir, Jharkhand, Bihar have very low literacy rate. Literacy creates an awareness of the physical, social, technological, economic and cultural environment. In foster a healthy attitude to dignity of labour and hardship. Today is also an occasion when all of us should re-dedicate ourselves to the cause of education and though it to building India as a modern so as to achieve 100 percent literacy as soon as possible.

126. New Model on the Development of Mathematical Reasoning

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Key words : New model, Mathematics, Self-reliance

Mathematics is a way to settle in the mind a habit of reasoning where the results are developed through a process of reasoning and the conclusions are drawn from the given facts. The reasoning in mathematics has been following characteristics such as simplicity, accuracy, certainty of results, originality, similarity to the reasoning of life, and verifications. Mathematics in the making is intuitive, experimental and inductive, where mathematicians generalise their theories from particular examples. Deductive reasoning proceeds from abstract rules to concrete ideas. Mathematics in its widest sense is the development of all types of deductive reasoning which requires undefined term, definitions postulates, axioms and essentials. Study of mathematics disciplines the mind and develops the reasoning power of our different faculties. It gives us knowledge without taxing the memory in the least – resulting in the development of power rather than the acquisition of knowledge. In short, model leads a student of mathematics to an intelligent and judicious mode of study in general and enables him to acquire mental self-reliance habits and independence in out-look.

127. Psychological Effects of Music and Exercise on Child Education

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Key words : Child, Music, Education, Exercise, Psychology

The aim of the psychology of music and exercise is to understand musical phenomena in terms of mental functions—to characterize the ways in which one perceives, remembers, creates, and performs music and exercise. Among the psychological effects of music and exercise, the most pronounced ones are the behaviour and temperament of the individual. Emotions, feelings and thoughts are highly influenced by practising the same. The emotional experience derived

from music has a powerful effect on the formation of one's moral and intellectual outlook. Musical activities lead to the development of imagination and creative thinking. Singing or playing an instrument provides better sense of proportion, finer perception and a positive outlook. Shyness, aggressiveness and many such characteristics have been normalised by music. Musical tones may help one overcome loneliness. This study on different age groups and categories of exercise and music modules reveal conclusively the beneficiary effects as a whole on child psychology. Music has an ability to inspire and enthuse the listener and performer, thus acting as an important and powerful weapon on his emotional well-being. Education is important, especially for young children, who soak up their surroundings like a sponge. Education is a huge part of and has a huge affect on child psychology. In school children both music and exercise help to socialize, making friends and picking up various social tactics, all things that affect child psychology.

5. MILITARY SCIENCES AND BEHAVIOURAL SCIENCES

128. The Strategic Environment of South Asia and its Impact on India's Security

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Key words : Volatile, Peninsula, Disparity, Strategic, Scenario, Conflicts, Trafficking

South Asia in general remains one of the most volatile regions of the world. The region that stretches from the Hindukush to the Malay Peninsula and from the Indian Ocean to the Himalayas comprising of countries Afghanistan, India, Pakistan, Bangladesh, Nepal, Bhutan, Srilanka and Maldives constitute a well defined region in Asia possessing clearly distinguishable and civilizational boundaries. They have common cultural, religious and language heritage binding on them with one another, besides their geographical linkages. As a region, South Asia is characterized by disparity in the size, population, economy as well as military capability. The countries of this region are still affected with poverty, under development and low levels of production, unemployment and pressure of population that calls for a common outlook on socio-economic development of the whole region. The regional strategic and security scenario continues to be affected by internal security problems of its constituent countries. Many of the conflicts in South Asia are worthy of consideration on their own merit because they have considerable long-term significance. National or sub national identity is the key to many of the region's disputes. Cross border terrorism, separatism, trafficking in women and children, smuggling of arms and drugs, organized crime, huge outflows of refugees, and disputes over water sharing remain major challenging issues before the countries of this region. China is yet another factor who is rapidly building up both economic and military capability to be in a position of strength, and is taking advantage of the weaknesses of the South and Southeast Asian regional forum's both Saarc and Asean. The paper will attempt to highlight the factors that cause strategic instability in the region and its relative impact on India's security.

129. Factors Influencing Underutilization of Immunization Services in Madhya Pradesh

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Key words : Child immunization, DLHS, Logistic regression

Immunization is a major focus of child survival and development programs through out the world. As per the SRS 2010 estimates the infant mortality rare has been estimated at 70 per 1,000 live births which is one of the highest in the country. This paper presents the status of child immunization in M.P. based on dLHs-RCH-2 (2002-04) survey data. The paper also analyzes district and regional level trends in utilization of immunization services in RCH-1 (1998-99) and RCH-2 (2002-04). Logistic regression analysis has been carried out to delineate the factors influencing the utilization of the immunization services in Madhya Pradesh in RCH-2. The analysis indicates that only 33% children age 12-36 month carefully vaccinated as compared to 48% in RCH-1. At least 17% children did not receive any type vaccination as compare 13% in RCH-1. Except for BCG vaccine, there is a dropout in DPT by 18, polio 23 and measles by 7% points in RCH-2 in comparison to RCH-1, indicating underutilization of immunization services in M.P. over a period of time. In RCH-2 complete vaccination has dropped by 7-19% age points, in all six regions of the state than RCH-1. Logistic regression results shows likelihood of vaccination for the child increases with increase in mother's education antenatal care during pregnancy, institutional delivery, residence in urban area, high standard of living, and belonging to non SC/ST group. Creating awareness about immunization schedules through ANMs, Anganwadis, and educating mothers about its importance is as important re regularising services in the remote/outreach areas. A synchronization of individual goals with national level goals will hopefully yield results.

130. Crime Against Women - A Violation Of Human Rights : A Study on the Women of Dibrugarh District of Assam From 2003-10

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Key word : Crime against women (CAW), Domestic violence, Measures, Social hazard

Crime Against Women (CAW) is the most pernicious social hazard which not only impoverish the society but also jeopardize the peace, harmony and stability of societies. Everywhere the women are always subjected to physical, verbal and mental abuse by their male counterparts. However, among all types of Crime Against Women, domestic violence is the most common and least report crime. A recent report of United Nations study concludes that women in great numbers, around the world, are murdered, assaulted, sexually abused, threatened and humiliated within their own homes. Similarly kidnapping, rape, dowry demands, sexual harassment at work place are also some important crime against women that women very often come-across. Recently the number of CAW cases has been rising alarmingly throughout the country. Under the circumstance certain measures have to evaluate to check the ramification of the social hazard. The present study is an effort to estimate the intensity of CAW in Dibrugarh district of Assam.

131. A Meta-Analytic Research Approach on Training Needs Identification Models In Five Star Hotels

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Key words : Meta Analysis, Research Review, Training Needs Identification, Hotels

Research review has long been one of the most important scholarly activities in all branches of science. Here, in this paper, an effective framework for Training Needs Analysis using a Meta-Analytic Approach has been developed. There are many studies on the given topic. For the purpose of this paper, four established models have been analyzed and their

respective differences have been studied. Thereafter, data on Training Needs Identification process for three Five-Star Hotels have been collected to develop a different framework which is operationally more feasible and replicable.

132. Food, Science and Health Behaviour : Indian Era

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Key words : Controlling, Human factor, Behaviour, Safety, Food

The latest tool of controlling the elements of Human Factors is the behaviour- based safety system. It is a process which helps workers in identifying and choosing a safe behaviour over an unsafe one. Behavior-based safety is the application of science of behaviour changes to real world problems which focuses on what people do, analyses why they do it and then applies a research – supported intervention strategy to improve what people do except that in this paper safety and health behaviour (Indian Era), global health, water, population and reproductive health are the main points.

133. The Jagannath Cult : Its Impact on the Chitrakaras of Raghurajpur, Orissa

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Key words: Raghurajpur, Chitrakaras, Jagannath cult, Pata painting

About 10 km from Puri and 50 km from Bhubaneswar lies Raghurajpur, declared a 'Heritage Village' by the Government of India for its unique artistry. The hamlet village of Raghurajpur is dominated by the *Chitrakara* community. The *Chitrakaras* are tied neither by caste nor by religion, but by a common traditional bond. Their traditional art-form – *pata*

painting, is an inherited skill. Religious-minded to the utmost, painting is almost a form of worship for them. Originally, the *chitrakaras* were commissioned by the kings of Puri to dedicate themselves to the service of *Lord Jagannath*, the presiding deity of Orissa. In this paper, it will be examined how the long association of this talented artisan community with the *Jagannath cult* has inspired them to preserve the sanctity of their traditional *pata-art*.

134. A Study on Socio-Economic Status of Parents and Behaviour of Adolescents

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Key words : Socio-economic, Schools, voluntary organization, Board of Assam

The socio-economic status of a family is an important determinant in the physical and mental bearings of students. Not having so sound socio-economic condition of the family deprives a student from enjoying many benefits of our society, often pushing them to a marginalized position in school situation also. Here, an effort has been made to see if socioeconomic status (SES) of the family played any role in the behaviour of the students. The study considers the students of 12 schools from different school systems, one managed by voluntary organization and other is affiliated by Secondary Education Board of Assam. A standardized instrument for the present population had been used for a better measure.

135. On the Ecological, Behavioural and Identification of Varied Threats to Brahminy Kite in and around Kurukshetra, Haryana, India

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Key words : Brahminy Kite, Kurukshetra,, Brahamsarover, Banyan, Depletion, Intervention of Society

Brahminy Kite is seen in Kurukshetra around Brahamsarovar in addition to other satellite sarovars in the vicinity of small jheels, ponds, chappars, lakes etc. It has always been observed

sky borne over the vast water sheet of Brahamasarovar a perennial water body having religious and historical significance. Similarly, it has been spotted frequently on the margins of Chilchilla Bird Sanctuary nearby Kurukshetra city. In this Sanctuary, Brahminy Kite has been observed ground borne in shallow marshy waters. In Brahamsarovar, it has been observed preying on fish by initiating repeated dives into water at the surface only. More often than not, it has shown a strong tendency to perch on a thickly canopied Banyan tree while flying at low heights in a royal style; it reveals its copper brown upper attractive surface in a majestic way. Brahminy Kite seems to define poetic parameters of beauty and grace while in buoyant positions and postures. The populations of Brahminy Kites in Kurukshetra are extremely depleted as has been observed in the last 25 years or so. It has never been seen in pairs; leave alone, in a group or community. The present trend foretells it's phasing into still difficult times in future. To rehabilitate the Brahminy Kite, rejuvenation of wetlands is a primary condition. Also, protection of Banyan trees in the vicinity of Jheels should be assisted through intervention of society, nongovernment organizations and law. Its nest lodging tree should be implanted nearby wetlands.

136. Bangalore : History, Tourism and Culture

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Key words : Bangalore, History, Tourism, Culture.

Bangalore, also known as Bengaluru, is the capital of the state of Karnataka. The name Bangalore is an anglicized version of the city's name in Kannada language, *Bengaluru*. The earliest reference to the name "Bengaluru" was found in a ninth century Western Ganga Dynasty stone inscription on a "Vira gallu" 'hero stone' [a rock edict extolling the virtues of a warrior]. In this inscription found in Begur, "Bengaluru" is referred to as a place in which a battle was fought in 890AD. It states that the place was part of the Ganga Kingdom until 1004 AD and was known as "Bengavul-uru", the "city of Guards" in Halegannada. Bangalore with is epithets like, the garden city, Silicon Valley, pub city and the pensioner's paradise has become a center of attractions from differ perspectives. It is an educational hub and a knowledge capital. It has a great history and heritage. It is a metropolitan and cultural base. I is the center of prosperous economy with a lot of infrastructural growth. It has all the provisions of entertainment and recreation. It has a multi religions base and posses many temples, mosques, churches, gurudwaras, stupas and Jaina badis. Bangalore today is catering to the needs of all kinds of people like foreign visitors and travellers, businessmen, students, seekers of health and even the merry makers. Many people of varied interests hrong he city day in and day out. Over all it has evolved as a tourist city and an ultimate tourist destination. Bangalore is also a major center of Indian classical music and dance. Classical music and dance recitals are widely held throughout the year and particularly during the Ramanavami and Ganesha Chaturthi festivals. The Bengaluru Gayana Samaja has been at the forefront of promoting classical music and dance in the city.

137. Thantaphobia (Death Anxiety) in Elderly as Related to Religiosity

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Key words : Aging, Prayer and Worship, Future life, Priests

Aging is a natural phenomenon that refers to changes, which occur during the life span and result in differences in structure and function between the youth and the elderly. Today aging is concern world over. Indequate support from the care givers leads to lack of moral, emotional and physical support for elderly. Apart from decline in physical and mental functioning various other problems like non availability of social support, absence or passing away of one spouse, loneliness, depression, fear of death, low morale etc. are faced by them. Death anxiety (Thantphobi) refers to fear and apprehension of one's own death. It is the neurotic fear of loss of the self, which, in intense state, parallel feelings of helplessness and depression. Religiosity means faith in a power beyond oneself which is expressed in worship rendered for the service of the unseen power. Present study was conducted on 120 elderly males and females residing in Pathankot city of Punjab state. Selected elderly were above 65 years of age, from Hindu families, retired from their job or business and living with their spouses. Further they were not suffering from any deadly disease and had monthly income of Rs 10,000-20,000. Standardized scales were used to assess death anxiety and religiosity of the respondents. The results of the study showed that elderly females have significantly higher death anxiety as compared to males. However, no significant difference was found in case of religiosity among elderly males and females. Findings further revealed ht relationship between death anxiety and religiosity in

case of males was negatively and non significant correlated. But in case of females it is negatively as well as significantly correlated indicating that with increase in religiosity there was decrease in death anxiety. As we move from low to average and average to high religiosity, death anxiety decreases significantly. Various dimensions of religiosity(Prayer and Worship, Future life and Spirits and spirit world_ were positively and significantly correlated with death anxiety.

138. Differential Gender-Specific Vulnerability to Depression Induction in Learned-Helplessness model of Rats

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Key words : Inescapable foot shock, Escape test, Learned helplessness, Depression, Gender, Antidepressant drug

Women show a higher prevalence for depression than men, however the biological basis of gender differences in stress response and recovery still remain poorly understood. The aim of the present study was to asses the gender differences in response to single and repeated stress and recovery with and without anti-depressant drug in rats using Learned helplessness (LH) model, where young female Sprague-Dawley rats exhibited a significant difference in escape latency in compared to male associated with cognitive impairment. The induced depressive behavior in both sexes however was sensitive to fluoxetine. In conclusion, the findings suggest that female rats respond more to stress than males.

139. An Analytical study of political, Culture and Academic socialization of hill tribal population of Dindugal District

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Key words : Academic socialialization, Muduvar, Pollayan, Palliayan

Even in the twentieth century hill tribes are live in darkness, fathoms away in the area of

political, culture, academic socialization. Based on the data collected, the findings are about muduvar, pollayan, palliyan communities are they still likes to be inside the forest. They are not mingling with other peoples in culture and other aspects. But the government is not permitting to stay in the forest. So the only way to solve this problem, to approach them only through our university students. We can utilize our students of sociology, psychology, history, geography for this purpose, and given as compulsory project framed syllabus for the final year students and to create awareness among the tribal people.

140. Food Quality in terms of Oxalic Acid Content of Some Common Indian spices and Food items

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Key words : Oxalate content, Mineral absorption, Titrimetric method, Calcium chloride, Phosphoric tungstate

Oxalate content of a few common Indian spices and food items, which are not yet been reported, are estimated with a view to evaluate their interference with mineral absorption in human body. The process is performed for three consecutive days using phosphoric tungstate and calcium chloride buffer under acidic medium. It is a titrimetric method executed against potassium permanganate. Four common spices (cumin, coriander, black pepper, turmeric) and two protein rich food items (Soyabean & Rajma) are analyzed. From the data found, the developed result of the oxalate content of spices has been observed to be above the normal and that of the food items is below the normal level as recorded in the standard book of Nutritive Value of Indian Foods by Indian Council of Medical Research. In combination with the experimental data the chart can give us a better understanding of the experiment. Accordingly, guided by the facts, their consumption by human is suggested.

141. A Study on Creativity in Human Genetical Constitution

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Key word : Creative education, Spontaneous expression, New principles

Creative Education enables younger generation to be self-reliant, resourceful and confident for facing personal, interpersonal and other diverse types of problems in education. Creativity is a trait of an individual and creative individuals can see in the conceptual ambiguity the clue to a higher degree of synthesis. The reconciliation of various definitions on creativity put forward by different psychologists, etc. gives raise to the following levels of creativity viz. expression, production, invention, innovation and emergency. In the first level, independent spontaneous expression is given the prime importance, in the second, techniques are developed for producing finished products of exceptional quality, in the third ingenuity is exhibited with different types of materials, in the fourth, improvement through innovative practices is ensured and in the fifth-level, new principles are evolved for emerging need and demand of the society. Research findings indicate that individuals of these categories are very much enthusiastic, spontaneous and natural to solve various complicated problems of mankind.

142. On the Home Range of Free Ranging Rhesus Monkeys in Birsonti Forests in Kurukshetra (Haryana), India

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Key words : Home range, Rhesus monkeys, Bir-sonti forests, Kurukshetra, Feeding, Time of leisure

The present study reports the home range of free ranging Rhesus monkeys consisting of 4-5 troops in Bir-sonti forests located 12 kms east of Kurukshetra- Saharanpur Highway.

Observations revealed a clear cut pattern of the movement of each troop which are area specific and time specific. Further also observed that the home range is limited within a periphery of 6-10 sq.kms. Female monkeys are observed with their infants during the months of April, May, June and October. An intense feeding bout takes place in the evening prior to going to settlement for the night sleep. It has been observed that the home range of free ranging rhesus monkeys in Bir-sonti forest in Kuruksheta displays a set pattern where feeding activity and marching to and fro are enacted in a more or less mechanical way. Home range seems to be intimately linked with search for feeding material.

143. Behavioural Competencies As Strategic Tool For Global Competencies

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Key words : Total Quality of Mind (TQM), Behavioural Indicators, Relationship Management, Emotional intelligence, Core competency Framework.

Knowledge, Skills, Attitude, Self determination, Action, Ethics, Values, Introspection and Self Appraisal are considered as important tools for attaining Total Quality of Mind, the equilibrium of mind through which excellence can be attained in the area of competition in the fast changing corporate world. In order to achieve TQM successfully individual Competency and subsequently organizational Competency Mapping should be effectively implemented. Again each competency is characterised by the Behavioural Indicators i.e. how an individual could demonstrate that competency to show effective performance by way of communicating with others. The Behavioural levels allow us to be quite specific in determining what is required for a given role / situation, help us to clearly focus our development efforts for the greatest improvement in performance. Competencies in organizations should be developed through both Personal Functioning Competencies (including Success Factors not specific to work function or industry like Emotional Intelligence behaviors.) and Functional/Technical Competencies (including specific success factors within a given work function or industry).

144. Study on Attitudes of Adults Towards Mother

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Key words : Attitude, Projective technique, T.A.T., S.S.C.T, Behaviour

An attitude determines a characteristic or consistence mode of behaviour in relation to relevant stimuli, persons, groups or events. Man's day-to-day dealings with other persons his interaction in groups, his dealing with cultural products – all of them play important roles in the formation of definite attitude in relation to them. Mans all types of actions; whether it involves religions behaviour, way of earning livelihoods, political activities and buying – selling goods are governed by his attitude. There is a mutual relationship between behaviour and attitude. In the present study, a survey on attitudes of adults towards mother has been conducted by using projective method, which is a specific category scale for the measurement of personality and attitude of a man. The Sacks Sentence Completion Test (S.S.C.T) and the Thematic Apperception Test (T.A.T) are used to measure social attitudes and individual attitudes in various respect. It was found that attitude towards mother of 36% subjects were 100% positive according to S.S.C.T. Attitude towards mother was not 100% positive of any subject according to T.A.T. Again, we find no correlation between S.S.C.T. and T.A.T.

145. Reliability of Gravitational Insecurity (GI) Assessment (Revised Version)

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This paper propose to examine the reliability and validity of the Gravitational Insecurity(GI) Assessment among Indian children by considering nine items rated on two behavioral categories. Participants were 28 children with GI, 5-10 years of age, and a matched group of typically developing children. Internal consistency and split - half reliability of GI assessment items are good. Discriminant analysis classified 100% of the GI group and 100% of the typical group. It has been observed that the GI assessment is a reliable measure for identifying children with GI.

146. Anthropic Principle and Gravitation

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Key words : Gravitation, Psychology, Ecliptic houses, Positive-peace, Full Moon, Negative-war, New Moon

The continuous evolution of, statistically improbable, physical constants and progressive biological systems leading to the proposal of 'Anthropic Principle' when coupled with the established fact of 3339 number of 'Vedic Gods', is nothing but the dark lunar days of 18 year eclipse or Saros cycle, indicates the importance of New/Full Moon in psychology. This is verified by taking 32196 dates of different events for positive peace and negative war. The war and disasters have shown positive correlation to New Moon and peace examples to Full Moon, and negative correlation in reverse order. Some correspondence is also shown to planetary combinations, both indicating the gravitational impact over psychology.

147. Role of Family Environment on Socio-Emotional Adjustment of Adolescent Girls in Rural Areas of Eastern U.P.

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Key words : Family environment, Social adjustment, Emotional adjustment, Adolescent girls

The purpose of the study was to assess family environment of adolescent girls (17-18 years) and its impact on their socio-emotional and educational adjustment based on a survey conducted at Kumargaj Faizabad district of eastern U.P. 100 adolescent (17-18 yrs) comprised the sample of the study. Family environment Scale (FES) by Dr. Harpreet Bhatia and Dr. N.K. Chadha (1993) and Adjustment Inventory for School Students (AISS) by A.K.P. Sinha and R.P.

Singh (1971) was administered. Data was analyzed in terms of percentage and multiple regression analysis. The statistical analysis revealed that all the eight family environment factors Viz. Cohesion, expressiveness conflict, acceptance and caring, independence, active-recreational orientation, organization and control together showed significant role in socio-emotional and educational adjustment of adolescent girls.

148. Predictive efficiency of Motivation in Relation to Interactive style of Managers in Industry

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Key words : Motivation, Managers, Industry, Normative, Innovative

The present study focuses on the role of motivation to predict the types of interactive of managers in industry. The style of interactive varies among the managers having high or low motivation which depends on many factors like reciprocity of liking, social skills, managerial skills, equitable rewards etc. A total sample of 100 managers was selected at random from industries. The effect of high or low motivation was examined on the interactive style. It has been revealed that managers with high motivation are more supportive compared to managers with low motivation and they are also more normative and innovative. Managers with high motivation are having more developed state of mind regarding interactive style to solve a problem.

149. An Empirical Relationship Between Entrepreneurial Behavioural Aspects and Their Problems

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Key words : Entrepreneurial behaviour, Behaviour segmentation, Discriminate groups, Heterogeneity behaviour

The entrepreneurial psychology varies due to fluctuation in the business performance of enterprises. When they are hampered by the problems, it is a good indicator to know the psychological profile of enterpreneurs. Actually the problem of enterprise unravels their involvement at transcendental level or the involvement at a limited shallowness. The behavioural sciences are useful in predicting the futuristic and prudential motives as well as the benefits exploited by the entrepreneurs. The present research article attempts to ascertain the abundant problems prevailing in the MSME sector in Tamil Nadu and its traces over business behavioural changes among the entrepreneurs.

150. A Meta-Analytic Research Approach on Training Needs Identification Models In Five Star Hotels

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Key words : Meta, Analysis, Research, Review, Training, Needs, Identification

Research review has long been one of the most important scholarly activities in all branches of science. Here, in this paper, an effective framework for Training Needs Analysis using a Meta-Analytic Approach has been developed. There are many studies on the given topic. For the purpose of this paper, four established models have been analysed and their respective difference have been studied. Thereafter, data on Training Needs Identification process for three Five-Star Hotels have been collected to develop a different framework which is operationally more feasible and replicable.

151. Socio-Economic Profile of Women Involved in Silk Processing Activities in Manipur

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Key words : Women, Socio economic status, Role

Manipur women are remarkable for their contribution to all activities related to economic, social, cultural or political where they play a crucial role. It is said that Manipuri women are far better than their counterparts elsewhere, both socially as well as economically. The history

of Manipur has proved that Manipuri women can take important roles in any situation at the individual level as well as in groups. Women irrespective of their profession have their priorities in the domestic chores, whether they are workers, leaders or laboures. They are economically independent as they engage themselves in handloom and handicraft, silk rearing etc. However, a research study conducted shows that for women involved in silk processing activities (sericulturist-50, reelers-50 and 400 weavers) level of living and quality of living status is poor. More than 90 percent of all samples from all spheres were found to fall below the BPL (Below poverty Line) proving that their economic and social status are not commendable, as technology use is still primitive.

152. Medicinal Plants : Extraction of Medicinal Material

Herbs in the treatment of Wounds, Aches and specifically Diabetes

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School Name : Delhi Public School, Neelbad, Bhopal, Class : VIII F Age : 13 yrs

Key words : (Medicinal Plants, Herbalism, Ethno-botany, Agronomics) Simple Distillation, Chromatography, Plant Extracts, Body Aches and Diabetes.

INTRODUCTION

Herbalism or Ethno-botany is traditional or folk medicines practicing the use of plant extracts. The Charak Samhita (100 B.C.) records the use of over 340 extracts of vegetable origin. Instantly effective Allopathic medicines have drastic side effects hence diverting its patients to other modes of treatment like Naturopathy, Homeopathy, Unani and Ayurvedic medicine. During the last two decades herbal agronomics has led to a massive investment in pharmalogical, clinical and medical researches.

CURRENT SCENARIO

Herbs have been used for ages to control blood sugar by **diabetics**. Its **Cure has not yet been found** but some herbs do show some relieving effect.

THE PRINCIPLE

Extraction of crude medicinal extract from crushed plant parts by simple distillation performed using improvised apparatus followed by paper or layer chromatography of the extracted plant medicinal material.

THE EXPERIMENT

For most herbs, the specific ingredient that causes a therapeutic effect is not known. The whole herbs contain many ingredients, and perhaps they work together to produce the desired medicinal effect. After preparing Vicks from Eucalyptus extract, Mosguito reDellent cream from Citronella extract and Rose face cream from Palmarosa extract, extracts from some lesser known medicinal plants like Bryophyllum(Wound healing/ Antiseptic), Drum stick(Body ache reliever),Guava leaves(Mouth blisters, Gums ache & sores), Cuscuta(Body ache reliever), Onion(Ear ache), Vinca rosea(diabetes), Giloy(diabetes), and Stevia(Natural sugar) have been **collected by simple distillation** and their medicinal properties inquired from researchers of the field. Extraction from leaves of Mango, Oxalis, Jackfruit, pomegranate and Ashoka was also done. **Chromatography** was also performed on 04 extracts but identification of separate components was not possible.

THE TRIALS

Extracts of Bryophyllum, Cuscuta, Guava leaves, Vinca rosea flowers and Onion were even tried out in our families under the supervision of my grandmother. Extracts of Mango leaves, Guava leaves, Pomegranate leaves, Ashoka leaves, Drumstick leaves and Drumstick flowers were administed on 05 diabetics and their blood sugar level observed for 7 days.

THE SURVEY

The extent of awareness about herbal extractions and medicinal farming has been surveyed in Bhopal City. It revealed there was a need for a mass awareness drive in the area.