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President
Prof. Manoj Kumar Singh

**SECTION OF ANTHROPOLOGICAL AND BEHAVIOURAL SCIENCES
(INCLUDING ARCHAEOLOGY, PSYCHOLOGY, EDUCATION AND
MILITARY SCIENCES)**

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(Professional Body under Department of Science & Technology,
Ministry of Science & Technology, Govt. of India)
14, Dr. Biresh Guha Street, Kolkata - 700 017
Tel.: 033-22874530/033-22815323, Fax: 033-22872551
E-mail: es.sciencecongress@nic.in
Website: <http://www.sciencecongress.nic.in>
<http://www.isc2023.org>

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(INCLUDING ARCHAEOLOGY, PSYCHOLOGY,
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President: Prof. Manoj Kumar Singh

CONTENTS

I.	Presidential Address	5
II.	Abstract of Platinum Jubilee Lectures	29
III.	Summary of Platinum Jubilee Lectures	35
IV.	Abstract of Invited Lecture	43
V.	Anthropology	
(A)	Abstract for Symposium	47
(B)	Abstract for Invited Speaker	69
(C)	Abstract for Oral / Poster Presentation	95
VI.	Psychology	
(A)	Abstract for Symposium	183
(B)	Abstract for Invited Speaker	195
(C)	Abstract for Oral / Poster Presentation	219
VII.	Education and Military Sciences	
(A)	Abstract for Symposium	299
(B)	Abstract for Invited Speaker	309
(C)	Abstract for Oral / Poster Presentation	319
VIII.	List of Past Sectional Presidents	333

108th INDIAN SCIENCE CONGRESS
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I

PRESIDENTIAL ADDRESS

President: Prof. Manoj Kumar Singh

UNDERSTANDING SUSTAINABILITY, SUSTAINABLE DEVELOPMENT AND WOMEN'S EMPOWERMENT: INSIGHTS FROM ANTHROPOLOGY

Manoj Kumar Singh

Department of Anthropology
University of Delhi, Delhi-110007

Introduction

I am thankful to all the participants who have gathered here to enrich this congress of scientific academia I extend a warm welcome to you all to the 'Anthropological and Behavioural Sciences (including Archaeology, Psychology, Education and Military Sciences)' subsection of the 108th session of the Indian Science Congress. It is both an honour and a privilege for me to stand before you all and address the 2023 erudite gathering.

I propose to revisit the ideas of sustainability, and its use in the field of development and empowerment in the case of marginal communities with special reference to women. While tracing the intellectual trajectory of these concepts I use the lens of the discipline in which I am trained and which has come up with a holistic understanding of social phenomena thereby advocating for an integrated approach to studying human behaviour. In this address, I propose to examine how sustainable development is intertwined within the discipline that studies humanity as a whole, and how Anthropology can play a significant role in understanding and conceptualizing an approach towards development that drives itself to sustainability. Sustainable development goals are well known today; however, an anthropological understanding of such ideas still awaits serious engagement from scholars.

The term sustainability first originated with Hans Carl von Carlowitz in his German handbook on forest management called *Sylviculture oeconomica*, published in 1713. He contemplated the idea of systematic reforestation for continuous, steady, and sustainable use (Brightman & Lewis, 2017; Scoones, 2007). Brightman and Lewis propounded that as the ideas of sustainability started to gain the front seat in the global viewpoint, it led to an aggressive beginning of rationalized use and management of resources.

Forty-five years back, Thomas Malthus (1798) hypothesized that the population expands at a geometric rate while subsistence grows at an

arithmetic rate creating an imbalance. According to him, this imbalance would push the outgrowing population to either survive on a minimal or would have to starve with limited resources (Paul, 2008). Although, the evident recent technological advancements have been able to bridge this gap which, in a way has surpassed the principles of demand and supply with the surplus.

Population studies have generated debates on the limits of the path leading to this progress and with unmarked limits, the final stage looks mystified with an obscure future (Mitcham, 1995). The above argument was best illustrated using the theory of biological evolution- living entities had to sense, some had to smell, some had to see, or both, and the more they progress towards a more evolved form they tend to increase the complexities, but mere multiplicity could not be concluded to be more inclusive or better, it just signs the progress (Mitcham, 1995).

Therefore, it could be concluded that technology and science extend themselves toward much betterment but it does not imply an apt and ideal future. Thus, the idea pertained to the approach of being limitless. Scholars like Condorcet and Kant who propounded the early modern theory of progress talked about a kind of perfect state but yet it lacked the final point as to what could be such a state that enables man to enter into a stage of balanced growth in the future (Mitcham, 1995)

The postmodern scholars, on the other hand, attempted to identify the limit to the progress that came to the forefront with the work of a group called the Club of Rome, which published a book called *The Limits to Growth* in 1972. It was reasoned that, since the population expands exponentially which was more due to the industrial revolution, the result would be an increase in the demand for food, pollution, and resource depletion. Since the earth is a finite resource, this urge for unlimited growth could have been terminated into the trash. The growth trends for industrialisation and population cannot continue unchanged but if it continues, it could cause a disastrous episode to the future of mankind by probably leading to a collapse of civilisation.

The book *Mankind at its Turning Point*, gave a positive view, stating that growth must be perceived as organic rather than undifferentiated, to rescue the world from its peril of the issue of the "problematique". Growth was understood in its totality and in holistic terms that would help to create an interdependent society. The idea behind such growth was that society had been an interaction of various aspects such as economy, polity, religion, education, and culture.

These two works were pioneers in the field which shaped the idea that growth needs to be limited to sustain the future and this growth must be all-encompassing the aspects of a society in which mankind thrives. This finally culminated in the idea of sustainable development with a perspective that transformed from the notion of limiting growth to how development can be taken place with sustainability and in an acceptable manner so it does not hinder growth as well as conserve in the upcoming times.

This idea matured into a landmark report that was penned in 1987 called the Report of the World Commission on Environment and Development called the Brundtland Commission. The focus was on a new dimension, the relationship between the stumbling block of environmental problems and the economic as well as developmental prospects. This for the first time recognised that the accelerating deterioration of the environment and resources had immense potential to have a detrimental effect on economic and social development. This report for the first time defined the concept of sustainable development as "that meets the needs of the present without compromising the ability of the future generations to meet their own needs " (Report of the World Commission on Environment and Development, 1987, p. 24).

Concept of Sustainable Development: Anthropological Reflections

Gieryn (1999) had argued sustainability has been a multidimensional concept as it attends to issues from environmental, economic, social, and governance science (as cited in Scoones, 2007). A significant dilemma in the anthropological discourse has been how several connotations regarding the 'concept of sustainability could be synthesised that go beyond the textual definition regarding the protection and preservation of resources. The idea also examined how resources are geopolitically situated and the scientific intelligentsia needs to reconsider the indigenous and industrial capital (Brightman & Lewis, 2017).

Sustainability attained most of its attention in the 1960s and 1970s with the environmental movement. Sustainability today has been found in almost all discourses of life and has been seen as a notion that guides the developmental aspects surrounding mankind and society. Though the meaning and the conceptual notion of the term were known to everyone but yet there was no universally agreed particular and all-inclusive definition. But despite this definitional dilemma, according to Moore (2017), there was a uniform agreement on the fact that the current situation of our planet was moving towards unsustainability because the

consumption rate was far beyond what the planet could revive and which had taken a shape of a dismaying condition.

Towards the end of the 20th century, the concept of sustainability and allied concepts in various fields, such as sustainable environment, sustainable development, sustainable food, etc. became well-debated notions. These debates had taken two forms one had argued about the developmental goals of man and on the other hand, many had discarded these views to be only an academic luxury and also seen as an ephemeral idea (McCabe, 2003).

Since 1987, after the publication of ‘the Brundtland Commission report’, the expansion of the global population, made the global scientific community ponder upon the development and its concerns, hence thereby on “sustainability” as well. Henceforth, in 2002 the discussion of the World Summit of Sustainable Development focused on the concept of sustainability. The summit focused on the assessment of the progress and the loopholes of Agenda 21, a non-binding action plan on sustainable development (McCabe, 2003). Sustainability and sustainable development had been inherently part of the anthropological discourse since their beginning. The scientific connotations of the concepts and their earlier definitions based primarily on the Brundtland Commission’s report were struggling with some definitional issues on the other fronts while social, political, and economic dimensions were pushed to the back seat (Stone, 2003).

Anthropologists used various synonyms or terms close to sustainability such as viability, resilience (Brightman and Lewis, 2017), etc. Anthropological pursuits to understand sustainability might have taken many forms ensuring sustainability in its functional aptitude. The discipline which worked with humanity for ages found it a challenge to define sustainability in its concrete terms as an ideal adjustment of mankind to its surroundings. As humans would try to optimise their survival by changing their mode of adaptability to their changing environment which also encompassed not only environmental adjustments but also their changing economic, political, and social surroundings that continually shape and reshapes human survival in its proximity (Stone, 2003). Various indigenous societies have been engaged in behavioural adaptation to natural as well as social environments fulfilling individual or societal needs to improve quality of life in balance with the enduring nature and its resources.

Thus, it had become very significant to review the traditional definition of sustainability both at global and the local levels and to understand it through detailed ethnographic examples, which is the forte of anthropologists. The debates were around what was sustainable could be modelled, and if a particular way of life could be identified that was sustainable taking into account diverse time, space, gender, class, ethnicity, and other variants in a globally integrated world of economic and environmental continuity and within which boundaries of such studies were to be constructed (Stone, 2003).

Brightman and Lewis (2017) argued that to universalise, sustainability was coupled with development, which stands as a much-debated concept. Many authors supported the quest for an alternative to neoliberal understanding and definition of 'progress and development'. The development interventions had detoured socio-cultural realities resulting in unproductive efforts. Brightman and Lewis showed their disappointment as the desired results were lagging despite highly skilled systems being emplaced to achieve them. The challenge was posed by the structural percolation of strategies in a top-down approach rather as William Adams said (as cited in Brightman and Lewis,2017), it could be achieved without the government's control by delivering the conservation instruments to the bottom, 'unleashing the energies from below. It was also pointed out that the indigenous people were now incorporated in the sustainable forest talks to resolve the issue of deforestation but the aim was only restricted to dialogue and understanding of the local perspective which is pushed to the periphery in practising the sustainability drive. The time limit and devaluing of local perspective and practice also contributed to the failure of the practice.

The question largely arose with the fact that when all the other discourses in social and natural sciences were talking about sustainability and sustainable development, then what was the view of Anthropology in this context, that needed to be understood. The discipline of Anthropology was holistic and involved a meticulous understanding of a phenomenon in its spatial and temporal dimensions. Anthropologists have argued that the discipline could support harmonious interaction between scientific disciplines and understanding of local communities as all seek to comprehend the Anthropocene. They argued that Anthropology was in a better place to cater to the shift across cultures and disciplines by extending ideas, values, and practice at both small as well as large scales (Brightman & Lewis,2017).

Anthropology sought to understand every link that connected humans to their non-human entities, thus seeking to study what all scope existed for mankind and its survival in present, also contemplating how to create a sustainable future (Brightman & Lewis,2017). The notion of sustainability largely focused on the upcoming generations in a way that they could sustain themselves in the time to come thereby seeking a need to create liveable earth.

Anthropology focuses on studying humans in all their related dimensions whether it's society or the ecology in which it thrives or it can be the process through which humans had been evolving and adapting themselves to survive in their surroundings. So overall it can be said that Anthropology contributes to understanding how to sow the seeds of prosperity on this planet so that mankind can reap its benefits for its survival and not only for its own but also for all the upcoming generations to come, how modern man, since the genus *Homo* had evolved and had been able to adjust himself in consonance with the environment.

Implementing United Nations Sustainable Development Goals (SDGs) was quite challenging as some of them conflict with each other as illustrated by Homewood (2017) that eliminating poverty (SDG 1) was producing conditions antithesis to the requisites protecting terrestrial ecosystem (SDG 15) often creating an inherent contradiction between schemes and objectives of conservation and development compromised by the techniques employed to resolve the issue in a geo-politico-economic domain and humanistic engagement. Moore (2017) noted that it was not just technical problems in various concerned domains in SDGs but rather involve a major assignment of changing values. She argued that it might require visionary ideas concerning fundamental prerequisites of communities and societies as traditionally understood in Anthropology such as sociality, cultures, and sustainable actions.

Moore (2017) proposed a bone of contention that human was aware of the unsustainability that is inherent in modern industrial societies that fundamentally relied upon high consumerism but what was contradictory was the fact that despite such awareness that the consumption was at its brim of what the earth could support. Therefore, merely addressing concrete issues such as climate change, water shortage, food security, etc would not solve the crisis. So, what was required now would be the modification of values that called for a need of institutional and organizational changes, the need to pay heed to various notions and knowledge that were primarily the societal norms and the

ways of living amongst the simple and traditional societies such as sociality, trust, companionship as conventionally understood in Anthropology. Thus, it was concluded that the underlying issue of the idea of sustainability was not from its technical standpoint, rather it was a matter of "change" both fundamental and behavioural that induced new dimensions of ethical requirements in Anthropology. This could be elucidated by the simple fact that climate change had taken a serious toll on the south of the globe which has put several indigenous, vulnerable communities at stake. Here Anthropology could come in to better understand and acknowledge the nature and kind of injustices that were done to them and how in the north certain curtailment could be introduced in the usage of resources.

Escobar {as cited in Brightman & Lewis, (2017)} also suggested taking into account best practices that we the so-called modern, developed, industrial society could learn from these indigenous societies who often get marginalized. And therefore, in this way, if we redevelop the idea of sustainability which was engrained and contextualized within the society and socio-cultural lives of the communities, we can amalgamate the traditional knowledge of humans and its need to reap the benefits of the environment Hastrup (2017).

In the early 1900s, a group of theorists called the functionalists in Anthropology understood society by giving an organic analogy. Just as a living organism thrived, reproduced, and evolved through an interdependent organized functioning of its cells, tissues, and organs thus producing the entire system through which life could survive, similar to which society was able to sustain with the institutions such as religion, economy, polity, kinship as the organs that was driving the entire society.

These theorists were able to take out the essence of the function that these institutions play to make a society survive. As a school of thought in Anthropology, it emerged in the early twentieth century with scholars like Bronislaw Malinowski (1922) and A.R. Radcliffe-Brown (1952) having the greatest influence on its development. Malinowski recommended that each individual had some physiological needs such as food, shelter, and reproduction and these institutions were there to satisfy such biological needs. Therefore, society and culture functioned to serve the individuals leading to a sustainable and holistic development of man in their natural habitat embedded with culturally significant values, charters, norms, and material apparatus that guides each of these institutions.

Radcliffe Brown who was also called a structural-functionalist focused on the social structure than the biological needs. According to him, society was made up of systems of relationships provided by the institutions that helped in maintaining itself as a system and individuals were replaceable and mere transient occupants of social roles, but the society would continue to sustain itself. Thus, these theorists provided a holistic view of the culture and society and therefore no institution could be studied in isolation due to their interdependencies and interconnectedness. This could be correlated with the idea of sustainable development and thus an integrated approach is needed to solve global problems. We must seek an approach that advocates cooperation on social, scientific, economic, political, and environmental issues on an international platform.

As sustainable development addresses a complex set of problems such as resources, consumption, rationalization of production, energy, etc., it is needed to understand the community and its comprised members in its totality. Any policy related to such a development will be of success only if the citizens are observing them with participation and it goes in sync with their cultural attributes. Therefore, it becomes indispensable to study the society or the community in its meticulous details to develop a policy framework. It is required to get the consensus of all the participants to implement them. In this regard, anthropologists can contribute by giving detailed ethnographic accounts of the stakeholders which can further help the policymakers to find out how coherent and long-lasting balance can be attained in social, economic, and environmental attributes of man which is a humble way toward good governance.

In the 1930s and 1940s, a significant perspective and a theoretical standpoint emerged in the discipline of Anthropology, when an attempt was being made to understand how diverse cultures were similar and dissimilar in accordance to the environment and how the cultures had been adapting to their surroundings since their inception. This approach was known to be as 'cultural ecology' which intended on elucidating the interaction of culture, man, and the environment. It explained how technological adaptations led man to go through basic survival that was subsistence and thus provided causal explanations.

During this current ongoing global era of Anthropocene, the Anthropology of the environment has played a significant role in the understanding of sustainability and also of such a development. Anthropocene is essentially such a period in geological time when the effect of interference of mankind has started to take a toll on the ecological balances, disturbing the biogeochemical cycles of nature that

in turn began to have detrimental consequences to environmental order. Anthropology has contributed in this regard with insights as to what has created the crisis and how the culture has played its role in survival, what are the differences and similarities between the universal and the particular traits, and how the biological concept of ecology and natural sciences have a close interrelationship with the social sciences, opening a window to the scholars and scientists as to how environment and culture have been in an inevitable relationship. This kind of approach and study is not something that is a novel notion in the discourse of Anthropology, as it inherently studies man in its complete outlook.

Our ancestors, the hominins, were born in their surroundings, were brought up in the lap of the environment, evolved by continually adjusting themselves to nature, learned to walk upright, learned to cultivate, and learned to make tools, there had been a continual elimination and natural selection of our ancestors and other cohabiting fauna and flora throughout the episodes of the glacial and interglacial period. Finally, modern man was speciated along with phenomenal environmental changes, and today we continued to thrive following our needs but the fulfilment of which comes either from the environment or by its alteration. Thus, the environment had always been at the core of anthropological studies. The common perspective that the environment and ecology during the Anthropocene period are dominated by the Anthropos is highly becoming unsustainable and can be put into the floors of sustainability by going beyond the humans, human actions, human policies, and decisions.

Anna Tsing (2017) said (as cited in Brightman & Lewis, 2017) “meaningful sustainability requires multispecies resurgence, that is the remaking of liveable landscapes through the actions of many organisms”. She questioned the overemphasis of scholars on human plans and actions. The disjointed others made ‘sustainability’ a parochial concept, as in the discourse of understanding the idea of sustainable development we tend to forgo the non-humans, thereby often not understanding that sustainability as an idea must take into consideration humans and non-humans to make the earth liveable for the both.

Understanding Gender in Anthropology: Women’s participation in Sustainable Development

Gender is a key concept in the discipline of Anthropology. And gender equality is a very important aspect of sustainable development. Gender refers to the social dimension of being male or female in any given

society. Throughout the twentieth century and the rise of sociocultural Anthropology, the meaning and significance of gender to the discipline have shifted. In early ethnographic studies, gender was often synonymous with kinship or family, and a monograph usually included just a single chapter on women or family issues. Gradually anthropologists became interested in analysing the causes of the lower status of women, different forms of inequality, and empowerment of women. In the field of development, gender issues gained global prominence with the feminist movement, more recently SDGs. Reducing gender inequality is a very important development goal today.

Feminist Anthropological studies and their contributions to theory have given us a comprehensive understanding of women's position and roles in traditional and contemporary societies, the impact of changing economic and political environment, and gender inequality. Anthropological knowledge has also contributed to the development of approaches to address gender inequality. Some important studies are discussed below.

Early twentieth-century anthropologists presumed that the social and political differences or divisions between men and women were 'natural'. That male violence and aggression were biological, and conversely, women's innate maternal instincts led historically to matriarchal, female-dominated societies. The works by anthropologists like Phyllis Kaberry, who did fieldwork among Australian Aborigines in the 1930s, depicted women as 'active agents' but generally subordinate relative to men {Kaberry 2004 (1939)}.

Later studies challenged the notion that biological factors led to the subordination of women. There was a separation of the notion of sex from gender. Divisions between men and women were seen as being rooted more in culture. In the 1930s, Margaret Mead's study in Papua New Guinea demonstrated that ideals of femininity and masculinity, gender roles and responsibilities, vary enormously between groups, thus, were cultural variables. Her work clearly distinguished between sex and gender, the biological factors from the cultural factors that control human behaviour and personality development. Thus, it became clear that the definition of gender may vary from culture to culture {Mead 2001(1935)}.

With the rise of feminist Anthropology in the 1970s and 1980s, gender emerged as a distinct area of theoretical and methodological interest within the discipline. Feminist anthropologists sought to bring attention

to divisions between the domestic and the public sphere, structural inequalities, the role of economic disparities, and politics and identity. An important contribution in this area was made by anthropologist Eleanor Leacock (1922-1987). She was particularly known for her studies of social and gender relations among the Montagnais-Naskapi (Innu) of Canada and her contributions to feminist theory. She adopted a Marxist approach in her ethnographies and argued that capitalism is the source of much female subordination. Her work emerged at a time when feminists were grappling with explanations for inequality and oppression, from discrimination on the job to domestic violence and rape. Leacock argued that women's oppression has its origins in economic developments and social relations and that pre-class societies lived free of inequality. With the rise of state societies and capitalism, women's roles got reduced to family and their work was marginalized (Leacock, 1981).

Other important contributions in the area have been by Barbara Rogers, who in her work "*The Domestication of Women*" offered a critique of international development agencies and programs, where the field of development planning was dominated by Western men (Rogers, 1980). It also highlighted how capitalist exploitation, and Eurocentric ideas about the roles and activities proper for women, led to the destruction of women's traditional rights in society and undermined their economic autonomy. Concepts like the feminisation of subsistence agriculture and the feminisation of poverty also emerged from anthropological studies on African communities (Moore, 1988).

Insights from Anthropology have also shaped the approaches to address gender inequalities - from Women in Development to Gender and Development. Women in Development (WID) is an approach to development projects that emerged in the 1970s, calling for the treatment of women's issues in development projects. At that time, development projects were skewed towards men on the assumption they were "heads of households", thus their positive impact on women was limited. The WID approach looked at how to better integrate women into existing development initiatives to increase their productivity and earnings. Later in the 1980s, the Gender and Development approach proposed more emphasis on gender relations rather than seeing women's issues in isolation. It emphasized the need to challenge existing gender roles and relations. It concentrated more on project design and interventions that were focused on a development process that transforms gender relations. The aim was to enable women to participate on an equal basis with men in determining their common future.

Thus, we see how anthropological studies have enriched us with knowledge about gender issues in society and how inequality can be addressed. We know that gender inequality constitutes one of history's most persistent and widespread forms of injustice. Women and girls continue to suffer discrimination and violence in every part of the world. Gaps in gender equality exist in every sector, be it education, health, political participation, or participation in the workforce. Equality is the necessary foundation for a peaceful and sustainable world. Equal access to education, decent work, ownership of property, and representation in political and economic decision-making processes are not only women's rights, but they would benefit humanity at large. This is only possible through the empowerment of women, recognition of women's rights, supporting gender-just laws, and effective implementation of laws.

Women across the globe are responsible for childcare, nutrition, and health of their children and play a crucial role in managing household affairs. In developing countries like India, women are significant contributors to agriculture and farming, the rearing of animals, and also the collection of their fodder, water, and household sustainable fuel sources such as cow dung cakes that could be seen wisely in rural agricultural India. They are the key stakeholders in safe water collection and sanitation management with healthy practices to keep their children and other members disease-free. But an unfortunate scenario is that in these countries policy-making and enactment take into account their voices and concerns the least. If we go back a few decades, the Rio summit also women played a significant role to the extent that led the global stakeholders at Rio to consider women to be one of the key groups who are an indispensable part to achieve sustainable development goals. For all the efforts that she puts in, women carry a disproportionately higher burden of unpaid work in terms of domestic chores and childcare. Women's contribution has been primarily surrounded by sustainable practices that contribute not only to their households but also to the national level. But this contribution is invisible in national databases, especially in national policies. This unequal distribution of unpaid work is rationally unjust and deprives women of equal opportunities. The government could recognise unpaid work in national surveys the data of which could be used in national policies. The work is often repetitive, boring, and frequently drudgery as it has neither any remuneration nor any retirement benefits and this restricts the opportunity a woman can have to contribute to the economy. It is now a demand on an urgent basis for macroeconomists to realize this economic potential encompassing a more holistic, gender-neutral, and realistic economy.

The need of the hour is to recognise the women's role in sustainable development by enhancing their role and expanding their voices in any environmental decision-making to contribute to a green economy, such economy that balances economic growth with a reduction in carbon emissions, energy efficiency, and preventing loss of biodiversity and ecosystems. There should be an increase in women-centric capacity-building programs and training suited to their needs. To make women a part of inclusive sustainable development as a catalyst to the process, it is an immediate requirement the role of a woman to be free of any socio-cultural limitations that they have been facing since time immemorial in all spheres of their lives be it in their family, community or the society at large. Thus, the need is to change in perspectives and mindsets that have been preventing the participation of women on a global platform.

Provisional figures of the 2011 census (p.126) showed the male literacy rate to be 82.1% while for females it lags at 65.5%. Estimates show that for every 100 girls in rural India only a single one reaches class 12 and almost 40% of girls leave school even before reaching the fifth standard (World Bank Group, 2017, p. 6). The release of the Global Gender Gap Index, 2020 which is published by the World Economic Forum ranks India 112th out of 153 countries, and previously in 2018, it ranked 108th among 149 countries. The report also states that approximately around 99.5 years more it would take to end the gender disparity (World Economic Forum, 2020, p. 6). According to this report, South Asia accounts for about 860 million women of whom two-thirds are residing only in India and the gender gap can also be seen in the literacy rate with female literates at 66% compared to 82% literates amongst the males in India (World Economic Forum, 2020, p. 24).

The recently released Global Gender Gap report 2022 provides a furthermore grim situation, India ranked 135 out of 146 countries (World Economic Forum, 2022, p. 10). India is the fourth most lagging country in terms of the gender gap in South Asia with Iran, Pakistan and Afghanistan. The report considers several sub-indices. South Asia had the widest gender gap on the economic participation and opportunity gap sub-index (p.22). They are one of the largest in India, ranking at 143 out of 146 countries with only a 32.6% gap closed so far (p. 13). Only 22.3% of women participate in India in the labour market which translates into a gender gap of 72% (p. 14).

The Constitution of India makes special provisions to ensure gender equality for women through article 14, article 15 clause 3, article 39A, and article 42. The legislature of our country has also enacted several laws and acts to uplift women's rights and voices such as the Dowry

Prohibition act, 1961; Minimum Wages Act 1948; Maternity Benefit Act, 1961 etc. Several programs have been launched to intend towards the development of women and empowerment such as Beti Bachao Beti Padhao to ensure education to the girl child, Mahila Shakti Kendra to empower rural women with skill development and employment, Rashtriya Mahila Kosh which provides micro-credit to poor women, Ujjwala Yojana to provide better health by distributing free LPG, Sukanya Samridhi Yojana – a government-backed savings scheme for girls that can be utilized for higher education and many others. Though these programs have been able to create major differences, more is yet to be done especially in the field of education and literacy.

To illustrate we may take the case of Sukanya Samridhi Yojana, in which Bhattacharya and Gandhi (2020) have found through some studies that there is regional disparity in the scheme's populace and acceptance, where the acceptance is found more in the northern states. These kinds of studies should further be done to take out the loopholes in the implementation and the efficacy of such schemes to make them more goal-oriented and better targeted. The Global Gender Gap 2021 places India at 114th position out of 156 countries in its subindex of education attainment gap which is one of the lowest in South Asia (World Economic Forum, 2021, p. 18) concerns us about the need to emphasize diluting the gap thereby encouraging more women to take up education, and also stepping into taking up higher studies in research in science and also in other fields.

Women in science –why they are behind?

Historically in India, women had played a crucial role in the development of science and technology. The British era produced phenomenal women excelling in their respective fields. Here I must mention a few names such as Kadambini Ganguly who was the first female physician in India, physicist Anna Mani, Rajeswari Chatterjee, the first Indian woman to pioneer in the field of microwave engineering, Anandi Joshi who was trained in Western medicine and first female to have graduated in western Medicine for the United States and countless such names.

In the post-independent period, exemplary examples can be cited to portray women's excellence in science and technology. Some of them are worth citing here. Indira Hinduja pioneered the GIFT technology (gamete intrafallopian transfer) that resulted in the birth of the first GIFT baby, space astronaut Kalpana Chawla, the first Indian woman to space, Janaki Ammal who was the first Indian scientist to be the recipient of the

Padma Shri award, oceanographer Dr Aditi Pant who was the first Indian woman to visit Antarctica, Tessi Thomas also known as the missile woman of India, the first woman scientist to head a missile project in India, Chandrayan 2 mission director Ritu Karidhal, etc. and the list goes on to enumerate the excellence of Indian women in science and technology. Therefore, there cannot be any apprehension in saying the enormous contribution that women made in the field of science and technology especially quoting India.

In a recent reply by our honourable Union Minister of Education Sri Dharmendra Pradhan to a Lok Sabha question, it was found that in comparison to even the developed countries such as the United States and the United Kingdom, Indian female graduates in STEM (science, technology, engineering, and mathematics) holds a greater percentage which is nearly around 43% as per the data on gender statistics released by World Bank and quoting the AISHE data from the last three years he stated that there has been a rise of 53,388 women who have opted for STEM as a field of study from 10,02,707 in 2017-18 to 10,56,095 in 2019-2020 whereas there is a decline of men enrolled for studies in STEM from 12,48,062 in 2017-18 to 11,88,900 in 2019-2020 which includes all the enrolment in the graduate, postgraduate and PhD level programs. This provides a cheerful picture but this is just the beginning towards more inclusive education and better implementation of government programs that encourages women to pursue a career in science and technology also, we must now emphasize finding out the underlying qualitative factors that have been deterring women from taking up science and technology.

It is pertinent to note that according to the female gender percentage in India by World Bank based on data retrieved by them from United Nation's World Population Prospects:2019 revision, females constitute about 48% of the population which is very little less than half of the total population but on the contrary, they contribute a little above 20 per cent in the labour force (comparing up to 2019) as per data retrieved by World Bank from International Labour Organisation. The UNESCO Institute for Statistics June 2018 provided a fact sheet called *Women in Science* that women only make up around 14 % of the nearly 28 lakh scientists whereas the global average translates to around 28.8%. In the global scenario, UN Women (n.d.) "according to UNESCO's forthcoming *Science Report*, only 33 per cent of researchers are women, even though they represent 45 and 55 per cent of students at the Bachelor's and Master's levels of study respectively, and 44 per cent of those enrolled in PhD programs". Thus, it is quite evident that although women are now

excelling in taking up higher studies in science and technology but not equally been translated into employment in this field.

Having said this about the great contributions of women in science and half of the population it is crucial that we must not now overlook such a vast expanse of the population and must now indulge them and make them recognised in the field of science and technology to harness their intellectual capabilities in this field. It is also important to find out the gendered perspective and gender analysis in all these fields to discover new things and dimensions. The more diversity, the more it adds to collective intelligence in the group of scholars.

Science and technology cater to all sections of society and also to all gender across humanity whether a man or woman or even the third gender as recently recognised and therefore the outcome have a lot to do with who is doing the scientific inquiry. We need to design a therapeutic chair, would that only be used by men? no, but we must take subjects across the various gender so that we can innovate something suitable for people across various somatotypes. The gendered approach is therefore very crucial in science whether they are subjects of study or they are researchers. Therefore, today it is necessary to incorporate not only women but all the third gender as scientists and researchers.

Science is the front seat in nature which solves mankind's problems arising out of existential crises and technology serves to fulfil the needs man faces in his everyday life. And we all know that need is the mother of invention and discovery. What may be the need of a woman can be well understood by a woman herself which can make her innovate and create ideas to serve that need which might not be done necessarily by men because it is possible that what the other gender perceives to be of great importance might not cater the same need to the man.

We need to encourage more women in this field and support them essentially. There is no innate biological or physical lag for a woman to understand and research science and technology, it is just some physical barriers that have led this field to be dominated by men today. In most developing nations even today, women lack even access to basic education and later on acceptance in the workplace. It is now the time to bridge the gap.

Press Information Bureau, Government of India (2021) stated "As per latest Research and Development Statistics, 2019-20 of DST, India has 16.6% women researchers directly engaged in R&D activities. There are

several reasons for the lower participation of women in R&D. This includes familial issues like marriage, family responsibility, relocation due to transferable job of the spouse, etc. These reasons attribute to dropout from higher studies, career breaks, overage for scientific jobs, and prolonged absence from place of work or even resignation from the job”

Right beginning from school days, another gender than men, should be encouraged to accept science and technology to pursue higher studies by combating stereotypes of their gender and intellect, teaching a growth mindset from the early school days, exposing young talent to the greatest women achievers in history as their role models, provide them with the opportunities to succeed in this field, and by creating such an environment that promotes science as early as in the lower grades of school.

We have learned before about the contributions of women since the prehistorical ages towards a sustainable and holistic development. The greatest challenge to achieving sustainable development goals tackling issues such as climate change to reduce poverty and improve health would need to harness a woman's or even the other gender's potential. In this direction, the Government of India has taken several steps to encourage women scientists in research activities.

The SERB – POWER initiative, has aim to reduce gender inequality in the field of science and engineering through fellowships and research grants. Knowledge Involvement in Research Advancement through Nurturing (KIRAN) Scheme is started by the Department of Science and Technology (DST) and aimed to bring gender parity in the Science & Technology sector by inducting more women talent into the research & development domain. Vigyan Jyoti Scheme is launched by the Department of Science & Technology (DST). It is intended to create a level-playing field for the meritorious girls in high school to pursue Science, Technology, Engineering, and Mathematics (STEM) in their higher education. The CURIE program of DST where only women Universities are being supported for the development of research infrastructure and state of art laboratories to promote women's participation in science and technology. Several and numerous such programs have been initiated which now need to be revisited and implemented with a greater effect.

Anthropology, Humanity and Sustainable Development

Laura Rival (2017) argued that achieving the real meaning of sustainable development goals and pputthem into a successful practice required

delimiting the notion that incorporates every stakeholder i.e. every living being of the planet, going beyond to only governments, corporations, and the scientific communities.

Homewood (2017) gave a well-documented case study in the East African rangelands to understand what the idea of sustainability is accounted for, by the local natives and whether it is in sync with the hegemonic notions of sustainability as broad as defined in the sustainable developmental goals. She explicated the discourse of sustainable development, shaped predominantly by three key aspects: economic development, social equity, and environmental protection. She argued that the convergence of these three together as the global visions try to consider, is virtually impossible. These aspects are assembled through various focus areas around which goals are formulated and measurable and verifiable indicators are considered measures to collect and analyze data.

She focused on how civil society institutions see the trade-offs between rural livelihoods, biodiversity conservation, and expanding large-scale cultivation at the local level through Community-Based Natural Resources Management: CBNRM. She studied these key aspects in the context of East African rangelands which were home to renowned pastoral groups such as Maasai, Samburu, Turkana, and Mursi, and later in special reference to Tanzania's program of Wildlife Management Areas (WMAs).

In the study she focused that the East African rangelands had three aspects that played an integrated role in the conservation and development pursuits - the first was the rangelands, which were the home to a diverse declining wildlife population, the second was the indigenous pastoral people who were engaged in a well-debated land use practice and economic activities with low efficiency and productivity, and socio-political marginalization contributing to the perceived poverty. The third factor knitted the value of the tourism business, which could be escalated if the locals go away from the habituated land, leaving scope for a vast expansion of wildlife to attract tourists, the top contributor to the GDP in countries of East Africa (Kenya and Tanzania). This was the kind of environmentally sustainable conservation practice(s) through which economic growth, social equity, and environmental protection all can triumph, which forms the base of the majority of conservation and developmental programs across the world. But the vision of CBRNM was to keep the locals at the forefront, making them the responsible stakeholders.

The state and international NGOs were working in collaboration where the state was designing and driving the program well adapted to the local situation, and the NGOs funding their intervention, which was focused on community participation in the management of wildlife resources, to enable them to derive benefits from wildlife resources where revenue was distributed to participating villages and enhance conservation of wildlife resources. Participation was a complex and compromised concept. According to Comandulli {2015 (as cited by Homewood, 2017)} when the role of participation was given prominence in the developmental goals and conservation policies to balance out social equity and justice, the power relations have been often seen to get into scores of uncertainties. The team working in this area did participatory mapping to formalize WMA boundaries following participatory land-use planning (PLUP) protocol based on the manual given in FAO (2009). The village government (VG) members (of the village targeted for incorporation into a WMA) were asked to identify seven village representatives who were given brief training after the creation of a map before the planning process locating the existing land usage practices and other key resources. It was followed by the creation of a map locating land usage from a futuristic point of view.

The participation of local people, restricted to a level was reported to be weakening the participation and was taken as against the community. Homewood (2017) argued that another dimension that needs to be incorporated into 'meaningful participation is that the local people must be able to become an evaluator of the kind of interventions instilled which can further be used to revisit, modify or eliminate any measure. The benefits going to the village are meagre as the chunk gets diverted to the state taking away 1/3rd of the benefits and the rest is divided into 50-50 proportions between WMA and VG (used for community-level projects such as building school classrooms, paying a fee of the selected student, etc) which hardly percolates to the household level. To become eligible to receive these the WMA villages have given 90% of their productive land and which also turned into a story of disappointment among people because of rules imposed on forest collection, additional costs of living in proximity to wildlife, such as risks of disease, loss of property and lives of human as well as livestock. The cases reported unfolding the difficulties in human and wildlife conflict (Brightman & Lewis, 2017).

The Northern proposal of WMA was rejected initially but eventually, village members were persuaded to join and local people were evicted from their lands for the project thus making them compelled to live in the unoccupied and abandoned area in and around village lands where they

were not even allowed to access it for grazing. Thus, what we can visualize here is that the connotations were largely politico-economic in characteristics rather than imbibing the aspects of the environment and its sustainability.

"People commonly expressed local visions of modestly aspirational futures centred on the security of tenure, of food and livelihoods. These were generally phrased in terms of social, political, and economic rather than environmental characteristics. This focus on dimensions of security was not some manifestation of a conservative culture resisting change {Homewood (2017)}. Anthropology's view of sustainability foregrounds local voices and buy-in; demands a cultural and political analysis; and challenges the hegemonic discourse globally and locally. It argued for a far stronger awareness of the political and political-ecological dimensions of sustainable development interventions, with special reference to local land-use situations, and more attention to large-scale processes of resource grab, conversion, and extraction. Anthropology was now well placed to integrate qualitative and quantitative analysis, evidence and critique in ways that carry weight with policymakers, and to shape positive change".

Another case of people and sustainability could be illustrated in the following work. Lalita Prasad Vidyarthi, one of the renowned anthropologists from India, opined that there existed a complex interaction of ecology, man, and religious aspects that contributed to habitat conservation. In 1963 he published his work on the Malers of Rajmahal Hill of the present Sahebganj district, Bihar which elucidated how the ecology shaped every aspect of this tribe. He interpreted that the life of Maler was deeply connected to the phenomenon described by him as the 'nature-man-spirit complex'. This book took out methodological and theoretical standpoints to understand the inevitable character of the relationship between man and the environment through religious aspects, and these elements are interdependent and mutually complementary. And such a close association with ecology was due to the fact as Vidyarthi found that the Maler culture originated and flourished in nature's cradle so much so that forest was an indispensable part of their life be it providing land for slash-and-burn agriculture or providing them with day-to-day resources and therefore the main source of Maler economy. And the religion which was surrounded by several spirits was a way to mediate their interactions with nature.

What has been a contention for several anthropologists is that the primary definitions and scopes of sustainable development have majorly

been from a global perspective. As we had come across phrases like " global environmental change" or " global water crisis" or the ideas of chronic poverty, hunger, etc which more or less address the problem in its totality across the globe wherein, though in accordance with the conventional concepts of sustainable development, it does not limit itself to local scenarios and goes beyond trans boundaries. Anthropological models of sustainability cannot "neglect and place boundaries on the local systems and overlook and overlook important aspects of border systems" (Stone,2003). Contemporary scholarships have given rise to a new field called "sustainability science" (Kates et.al., 2001) that had a quest to understand how the nature and society could be related somehow which had gained commendable attention in the global scenario (as cited in Mc Cabe,2003)

Therefore, it is now crucial for anthropologists to come to the forefront and to engage themselves in deliberations that were taking place on global platforms such as the United Nations or in the above-mentioned new field of sustainability science. She also expressed disappointment because there were many authors such as Robert Netting (McCabe, 2003) who had devoted their lives to studying sustainable cultural practices but were rarely found in the literature concerning sustainability science. She also stated that since Anthropology historically continued to be associated to study people and their surroundings, the discipline needed to take part in the discourses and debates regarding sustainability as well as sustainable development, and hence this discipline could contribute toward significant perspectives surrounding the entire notion of what was being sustainable and how to put the traditional theories concerning it into action in times to come.

Conclusion

In this presentation, I have tried to correlate the concepts of Anthropology and sustainable development linking them with gender issues., Anthropology can contribute immensely to understanding the indigenous ideas of sustainable development which can help global scientific scholars and academicians to achieve Sustainable Development Goals better. It can overall be able to diversify the connotations and definitions of sustainability in a more holistic frame and thereby can provide new meaning and dimensions to the already existing notions of sustainability and sustainable development. Anthropologists through detailed ethnographies would further be able to let the world know about how communities even now are using nature-friendly sustainable technologies in their day-to-day life, which the members of so- called

modern society with unending needs and demands, can learn and practice.

Anthropology started with its engagement with preliterate and premodern, non-industrial societies. In India when it comes to contributing to the core scientific debates such as issues of sustainability and sustainable development, anthropologists have taken a back seat. Through this paper, I argue that a subject that every day deals with mankind holistically, be it molecular genetics or learning about socio-economic domains, has been kept aloof in significant debates and discussions. It is high time that they get recognition more in the national and international platforms that deal with the problems of humanity.

Women are an inevitable part of society, science and sustainability, without them being equally a part of the scientific community it is almost impossible to attain an era of advanced technology contributing to sustainable development. Anthropology can help more in understanding society and cultures of people across the planet and tackle the issue of why have women taken a backseat in the majority of the countries whether developed or developing, in higher studies and research in the field of science and technology. It is now very significant that we take a bottom-up approach, understanding the perspectives on gender across different castes, classes, religions, ethnicity and regional affiliation. In a country like India where society has been patriarchal, there are many obstacles for them even to pursue a college education. It is pertinent to analyse these issues on a regional basis, then only much more effective implementation could be done of those schemes and policies that encourage women toward science and technology. Here Anthropology can play the most crucial and indispensable role to understand the gendered perspective.

I wish all of you a very stimulating sessions on the theme of Science Congress during your stay here at Nagpur. Anthropology is the comparative study of other cultures. A cross cultural understanding of the local cosmologies dealing with the ideas and associated practices around the issue of sustainability, sustainable development and women's empowerment hold clues to a better world with a sustainable planet. Let anthropology be a powerful intellectual voice in the era of the Anthropocene and beyond.

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108th INDIAN SCIENCE CONGRESS
JANUARY 3-7, 2023
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II

ABSTRACT OF
PLATINUM JUBILEE LECTURES

**THE ANTHROPOLOGY OF SUSTAINABLE DEVELOPMENT: PRACTICE
AND PROSPECTS OF SCIENTIFIC ENGAGEMENT**

Prof. Avanish Kumar

School of Public Policy and Governance
Management Development Institute, Gurgaon
Email: avanish@mdi.ac.in; avanishkumarprasad@gmail.com

Abstract

Sustainable Development derives its principles to propagate empowerment by seeking a balance between the environment and economy. With the evolution of science and social sciences, the search for solutions to empower society and the state has remained an endeavor due to constantly diminishing resources and a rapidly expanding economy. The sustained watershed in the 21st century has redefined the terrain of 'time' and 'space'; the two fundamentally interrelated domains of co-understanding across science and society. This has propagated the need for 'anthropology as combined thinking of the scientific and humanistic explanation. With the adoption of the anthropocentric approach in the global governance framework, applied anthropologists have the opportunity to evolve from descriptive-analytical studies to a new domain of transformational studies - emerged with a focus on alternate sustainable living in an interdependent globalized society. In principle, the idea of transformative solutions to interlocking challenges may not be 'in opposition to anthropologists who dislodge reformist desires as a universal value to raise living standards throughout the world with the improvement of "material standards". In contrast to the material-centric, the anthropocentric transformative approach may accelerate the production cycle to improve living while maintaining the balance between culture-nature. Primarily because, anthropology always maintains 'the distinction between facts and values, between theories and policies, as a functional and contextual, not substantive and absolute.

The principles and paradigm of anthropology and sustainable development are in line with EB Tylor's approach of 'carrying investigation of culture in other branches of thoughts and beliefs, so as the statement of facts must form the staple of the argument and the limit of needful detail only reach when each group (within the discipline) displays its general laws (with allied disciplines of sustainability). The practice and prospects in Anthropology of Sustainability is an attempt to unwind the anthropological approach to contextualize social and spatial

diversity, equity, and inclusion in a network society. Since time immemorial, anthropologists are active in aiding progress and in removing hindrances, thus the science of humans and culture is a 'reformist science'.

It is evident from above that in the last decade the spectrum of the emerging areas of thematic exploration has cross-fertilized the classical theories of archeology, social and physical anthropology to transdisciplinary; from a community to transnational and culture to climate change. The anthropological journey of transformation is unique with the co-existence of the traditional societies' ethnography and the contemporary scientific inquiry of the modern world; this gives rise to two questions of exploration for this paper; how domain of sustainability embedded in anthropological exploration co-create value to the scientific and local communities?; and, does the anthropology of sustainability provides an opportunity to integrate diverse anthropological knowledge for transforming business-society-government partnership by creating operational direction towards a sustainable future? Building upon the five sustainability discourses, the paper identifies and analyzes three arenas of anthropological contribution in the domain of sustainability; (i) 'principle of anthropology' as interrelatedness between science, society, and nature (resource); (ii) 'field' as the configuration of methodology to obtain scientific explanations of ethically justified social realities, and (iii) contemporary anthropological research and its relevance to sustainable future in two streams; 'descriptive analytical' and 'transformational'. Finally, the paper concludes with a set of recommendations for prospects of scientific engagement for anthropology and anthropologists in the field of sustainable development.

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III

SUMMARY OF
PLATINUM JUBILEE LECTURE

THE ANTHROPOLOGY OF SUSTAINABLE DEVELOPMENT: PRACTICE AND PROSPECTS OF SCIENTIFIC ENGAGEMENT

Avanish Kumar¹

Abstract

Sustainable Development is to empower people without comprising the future. Sustainable Development derives its principles to propagate empowerment by seeking a balance between the environment² and economy. With the evolution of science and social sciences, the search for solutions to empower society and the state has remained an endeavor due to constantly diminishing resources (natural) and a rapidly expanding economy. Even traditional societies have evolved technology dependent upon the material as mechanical means of adjustment to the natural environment. The age-old phenomena of the technology-nature-human interface are evident from the classical work of Leslie A. Whites', *The Evolution of Culture: The Development of Civilization to the fall of Rome* published in 1959³. What has shifted the paradigm of technology to harness energy is the 'playing ground'- from self-sustenance local economy to global interdependent economy. Post liberalization, rapid diffusion of information technology, and economic transformation have impacted the man-nature relationship in every society to some degree. Even for primitive such as Birhor's living in the remote forests of Jharkhand, lives, and livelihoods are altered by the rising national demand for coal to generate energy⁴. To fulfill the unmet national demand, extraction of natural resources, be it coal, bauxite, or iron ore is on the rise. This has given rise to anthropologists experimenting with

¹Prof. Avanish Kumar explores questions at the intersection of policies and practices that promote sustainability, inclusion, and participation in organizations and society. In his over two decades of experience, he brings the experience of working with NGOs, government, corporate houses, and academic institutions. Prof. Kumar's work revolves around mainstreaming the marginalized through citizen-centric governance, and sustainable models to promote sustainable partnership between business society and government for long-term solutions. The common endeavor in his work is to create operational directions/solutions to real-world problems by bridging theoretical and conceptual understanding in the field. His current research interest is to establish the interplay between identity, income, and insecurity in the context of women's empowerment.

²The environment is interchange used with natural resource

³White prosed a formula ($P = E + T$) to study the evolution of culture by defining the relations between p as the degree of cultural development in terms of product produced; while E is a measure of energy consumed per capita/per annum and T is the efficiency in utilizing energy harnessed See for details White, L.A. (2007). *The Evolution of Culture: The Development of Civilization to the Fall of Rome* (1st ed.). Routledge. <https://doi.org/10.4324/9781315418575>

⁴ Lahiri-Dutt, K (1997), Caught between the Two Worlds: The Birhor of Hazaribag and Tribal Development in India, JASO, (28/2) pp-197-200.

new modes of research and writing about corporate actors.⁵ Despite all these important ethnographic forays into the corporate world, the overall corpus of anthropological knowledge remains small, and we have yet to see the emergence of a sustained line of scholarship and inquiry⁶.

In the 21st century, it is the global responsibility to redress increasing social and spatial inequality and vulnerability be it among Birhor's in India, Trobriander of Papua New Guinea⁷, or communities and regions across the world to achieve a sustainable future. Primarily because, the off-track modern societies with the divorce to sustainable living is often contrasted in traditional societies with the interplay of artifacts, institutions, and resources to craft lives and livelihoods. The lopsided modern economy has focused more on introducing high-yielding extractive technologies with limited or no control over the replenishment of natural resources. Moreover, the increasing gap between local and global equity with diminishing balance between environment-economy has made sustainable development and empowerment more important than ever. This has shifted the national and global focus from the 'triple bottom line' of the people-planet-profit debate in the 90s⁸ to people, planet, peace, prosperity, and partnership in Sustainable Development Goals (SDGs). Through SDGs in 2016 global community made a commitment with an extensive and inclusive framework, however, Covid-19 has reset the global concerns. Global concern is evident from the recently held seventy-seventh session of the United Nations that has further evoked a common endeavor to reinstate sustainable alternatives. The head of the governments debated exploring solutions to intertwined global challenges under the theme 'A watershed moment: transformative solutions to interlocking challenges'.⁹

The sustained watershed in the 21st century has redefined the terrain of 'time' and 'space'; the two fundamentally interrelated domains of co-understanding¹⁰ across science and society. This has propagated the need for 'anthropology as combined thinking of the scientific and

⁵Marcus, George E. 1998. Corporate futures: the diffusion of the culturally sensitive corporate form. Chicago: University of Chicago Press.

⁶Welker, M, Damani, J.P. and Hardin, R (2011). Corporate Lives: New Perspectives on the Social Life of the CorporateForm, *Current Anthropology*.Vol (52), Supplement 3.

⁷Read for details the book, Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea by Bronislaw Malinowski, 1922.

⁸Elkington, J. Accounting for the Triple Bottom Line.*Measuring Business Excellence*. 2:3. Pp 18-22.

⁹ See for details https://www.un.org/sustainabledevelopment/unga-high-level-week-2022/?gclid=EAIaIQobChMItp_8uq2v-gIVB5hmAh1mugEYEAAYAAEgIPmvD_BwE#debate

¹⁰Co-understanding is the product of an interaction between the treatment of many readers.

humanistic explanation¹¹. In the last five decades, the countless crises which sustainable development and women's empowerment has faced, have ushered in a new order of transdisciplinary research. Between the 1970-the 1980s, the academia-advocacy collectively perceived *limits to the growth*¹² of the ethnocentric, econocentric, and conservationist approach and thus a felt-need to evolve convergence beyond the rigid path of divergent disciplines. The success of the sustainable development and women's empowerment paradigm rests on the realization that an integrated anthropocentric approach¹³ addresses constantly diminishing natural resources without comprising growth. In 1987, the anthropocentric approach gave rise to the global consensus on defining sustainable development as "*Our Common Future*"¹⁴ with a new corridor of scientific thinking integrating science, society, and the state. With the adoption of the anthropocentric approach in the global governance framework, applied anthropologists have the opportunity to evolve from descriptive-analytical studies to a new domain of transformational studies - emerged with a focus on alternate sustainable living in an interdependent globalized society. In principle, the idea of transformative solutions to interlocking challenges may not be 'in opposition to anthropologists who dislodge reformist desires as a universal value to raise living standards throughout the world with the improvement of "material standards". In contrast to the material-centric, the anthropocentric transformative approach may accelerate the production cycle to improve living while maintaining the balance between culture-nature. Primarily because, anthropology always maintains 'the distinction between facts and values, between theories and policies, as a functional and contextual, not substantive and absolute'¹⁵.

The principles and paradigm of anthropology and sustainable development are in line with EB Tylor's approach of 'carrying investigation of culture in other branches of thoughts and beliefs, so as the statement of facts must form the staple of the argument and the limit of needful detail only reach when each group (within the discipline)

¹¹ Peregrine, P et al (2012). What Is Science in Anthropology? P *American Anthropologist*, Vol. 114, No. 4, pp. 593- 597

¹² For details, pl refer to Donella H. Meadows et al (1972). *The Limits to growth; a report for the Club of Rome's project on the predicament of mankind*. New York: Universe Books.

¹³Anthropocentrism is the practice, conscious or otherwise, of regarding the existence and concerns of human beings as the central purpose of universal existence. The objective of this ideology was to enable human beings to impose a sense of order and meaning on the world and provide humanity with an individual and collective identity. See for details Speed, C.(2006) Anthropocentrism and Sustainable Development: Oxymoron or symbiosis, *Transactions on Ecology and Environment*, Vol.93. pp 323-332.

¹⁴ See for details, Report of the World Commission on Environment and Development: *Our Common Future*, available at <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

¹⁵ Kaplan, A (1984). Philosophy of Science in Anthropology. *Ann. Rev. Anthropology*. Vol (13) pp 25-39

displays its general laws (with allied disciplines of sustainability). The practice and prospects in Anthropology of Sustainability is an attempt to unwind the anthropological approach to contextualize social and spatial diversity, equity, and inclusion in a network society¹⁶. Since time immemorial, anthropologists are active in aiding progress and in removing hindrances, thus the science of humans and culture is a 'reformist science'¹⁷.

As a reformist science, anthropology and anthropologists have always discovered and redefined their landscape with emerging areas for research. A review of anthropologists' contributions working with the World Bank between 1975-1993 ranges from epistemological knowledge in crafting development programs and policies on social organization, resettlement & rehabilitation, and environment management¹⁸. In a critical analysis of recent contributions by anthropologists between 2010 and 2016 published in the *Annual Review of Anthropology*, the spectrum of articles illustrates an exploration of the holistic and humanistic dimensions of sustainability. The research in anthropology extends from 'Disease and Human/Animal Interaction' (Muehlenbein, 2016)¹⁹ ; *Anthropology of Aging and Care* (Buch, 2015)²⁰ ; *Design and Anthropology* (Murphy, 2016)²¹ ; *Time as Technique* (Bear, 2016)²² ; *Archeology and Contemporary Warfare* (Pollock, 2016)²³ ; *Language, Translation, and Trauma* (Pillen, 2016)²⁴ ; *Anthropology and Heritage Regimes* (Geismar, 2015)²⁵ ; *Urban Political Ecology* (Rademacher, 2015)²⁶ ; *Environment*

¹⁶ For details on network society, refer Castells, M. (2022). The Network Society Revisited. *American Behavioral Scientist*, 0(0). <https://doi.org/10.1177/00027642221092803>

¹⁷ Tylor, E. B. *Religion in primitive culture*. New York: Harper Torchbooks, 1958.

18 Cernea, M (1994) *Sociology, Anthropology, and Development: An annotated bibliography of World Bank publications, 1975-1993, The World Bank.* <https://doi.org/10.1596/0-8213-2781-X>

¹⁹Muehlenbein, M. P. (2016). Disease and Human/Animal Interactions. *Annual Review of Anthropology*, 45, 395–416. <http://www.jstor.org/stable/24811573>

²⁰Buch, E. D. (2015). Anthropology of Aging and Care. *Annual Review of Anthropology*, 44, 277–293. <http://www.jstor.org/stable/24811662>

²¹Murphy, K. M. (2016). Design and Anthropology. *Annual Review of Anthropology*, 45, 433–449. <http://www.jstor.org/stable/24811575>

²²Bear, L. (2016). Time as Technique. *Annual Review of Anthropology*, 45, 487–502. <http://www.jstor.org/stable/24811578>

²³Pollock, S. (2016). Archaeology and Contemporary Warfare. *Annual Review of Anthropology*, 45, 215–231. <http://www.jstor.org/stable/24811563>

²⁴Pillen, A. (2016). Language, Translation, Trauma. *Annual Review of Anthropology*, 45, 95–111. <http://www.jstor.org/stable/24811556>

²⁵Geismar, H. (2015). Anthropology and Heritage Regimes. *Annual Review of Anthropology*, 44, 71–85. <http://www.jstor.org/stable/24811649>

Anthropology: Systemic Perspective (Orr and Dove, 2015)²⁷; *Disturbance, Complexity, Scale: New Approaches to Study Human-Environment Interactions* (Bird, 2015)²⁸ ; *Oil and Anthropology* (Rogers, 2015)²⁹ ; *Anthropology and Voice* (Weidman, 2014)³⁰; *Neoliberalism* (Ganti, 2014)³¹ ; *The Anthropology of Money and Finance: Between Ethnography and World History* (Hart and Ortiz, 2014)³² and *World Anthropologies: Anthropological Cosmopolitanism and Cosmopolitics* (Ribeiro, 2014)³³; *Disability World* (Ginsberg and Rapp, 2013)³⁴; *The Anthropology of International Development* (Mosse, 2013)³⁵ ; *Lives with Others: Climate Change and Human-Animal Relations* (Cassidy, 2012)³⁶ ; *Towards the Ecology of Materials* (Ingold, 2012)³⁷; *Publics and Politics* (Cody, 2011)³⁸ ; *Climate and Culture: Anthropology in the Era of Contemporary Climate Change* (Crate,2011) ³⁹ , *Anthropology of Credit and Debt* (Peebles, 2010)⁴⁰ ; *Water Sustainability: Anthropological Approaches and Prospects* (Orlove and Carton, 2010)⁴¹. With the integration of this holistic understanding of human-nature relations, anthropology is probably most suitably located to fill the void for a sustainable future. It entails realization for

²⁶Rademacher, A. (2015). Urban Political Ecology. *Annual Review of Anthropology*, 44, 137–152.

<http://www.jstor.org/stable/24811653>

²⁷Orr, Y., Lansing, S., & Dove, M. R. (2015). Environmental Anthropology: Systemic Perspectives. *Annual Review of Anthropology*, 44, 153–168. <http://www.jstor.org/stable/24811654>

²⁸Bird, R. B. (2015). Disturbance, Complexity, Scale: New Approaches to the Study of Human-Environment Interactions. *Annual Review of Anthropology*, 44, 241–257. <http://www.jstor.org/stable/24811659>

²⁹Rogers, D. (2015). Oil and Anthropology. *Annual Review of Anthropology*, 44, 365–380. <http://www.jstor.org/stable/24811673>

³⁰Weidman, A. (2014). Anthropology and Voice. *Annual Review of Anthropology*, 43, 37–51. <http://www.jstor.org/stable/43049561>

³¹Ganti, T. (2014). Neoliberalism. *Annual Review of Anthropology*, 43, 89–104. <http://www.jstor.org/stable/43049564>

³²Hart, K., & Ortiz, H. (2014). The Anthropology of Money and Finance: Between Ethnography and World History. *Annual Review of Anthropology*, 43, 465–482. <http://www.jstor.org/stable/43049586>

³³Ribeiro, G. L. (2014). World Anthropologies: Anthropological Cosmopolitanisms and Cosmopolitics. *Annual Review of Anthropology*, 43, 483–498. <http://www.jstor.org/stable/43049587>

³⁴Ginsburg, F., & Rapp, R. (2013). Disability Worlds. *Annual Review of Anthropology*, 42, 53–68. <http://www.jstor.org/stable/43049290>

³⁵Mosse, D. (2013). The Anthropology of International Development. *Annual Review of Anthropology*, 42, 227–246. <http://www.jstor.org/stable/43049300>

³⁶Cassidy, R. (2012). Lives With Others: Climate Change and Human-Animal Relations. *Annual Review of Anthropology*, 41, 21–36. <http://www.jstor.org/stable/23270696>

³⁷Ingold, T. (2012). Toward an Ecology of Materials. *Annual Review of Anthropology*, 41, 427–442. <http://www.jstor.org/stable/23270720>

³⁸Cody, F. (2011). Publics and Politics. *Annual Review of Anthropology*, 40, 37–52. <http://www.jstor.org/stable/41287718>

³⁹Crate, S. A. (2011). Climate and Culture: Anthropology in the Era of Contemporary Climate Change. *Annual Review of Anthropology*, 40, 175–194. <http://www.jstor.org/stable/41287727>

⁴⁰Peebles, G. (2010). The Anthropology of Credit and Debt. *Annual Review of Anthropology*, 39, 225–240. <http://www.jstor.org/stable/25735109>

⁴¹Orlove, B., & Caton, S. C. (2010). Water Sustainability: Anthropological Approaches and Prospects. *Annual Review of Anthropology*, 39, 401–415. <http://www.jstor.org/stable/25735119>

decision makers with evidence and experience of contextual reality to resolve policy dilemmas. The American Anthropological Association while describing anthropology goes to an extent to state “anthropology is the study of what makes us human”⁴².

It is evident from above that in the last decade the spectrum of the emerging areas of thematic exploration has cross-fertilized the classical theories of archeology, social and physical anthropology to transdisciplinary; from a community to transnational and culture to climate change. The anthropological journey of transformation is unique with the co-existence of the traditional societies’ ethnography and the contemporary scientific inquiry of the modern world; this gives rise to two questions of exploration for this paper; how domain of sustainability embedded in anthropological exploration co-create value to the scientific and local communities?; and, does the anthropology of sustainability provides an opportunity to integrate diverse anthropological knowledge for transforming business-society-government partnership by creating operational direction towards a sustainable future? Building upon the five sustainability discourses⁴³, the paper identifies and analyzes three arenas of anthropological contribution in the domain of sustainability; (i) ‘principle of anthropology’ as interrelatedness between science, society, and nature (resource); (ii) ‘field⁴⁴’ as the configuration of methodology to obtain scientific explanations of ethically justified social realities, and (iii) contemporary anthropological research and its relevance to sustainable future in two streams; ‘descriptive analytical’ and ‘transformational’. Finally, the paper concludes with a set of recommendations for prospects of scientific engagement for anthropology and anthropologists in the field of sustainable development.

⁴² See for details, American Anthropological, available at Association <https://www.americananthro.org/AdvanceYourCareer/Content.aspx?ItemNumber=2150>

⁴³ Post Brundtland Commission Report that defined sustainable development in 1987 to contemporary global governance framework of Sustainable Development Goals.

⁴⁴ A field is defined as a real-life laboratory

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IV

**ABSTRACT FOR
INVITED LECTURE**

ARCHAEOLOGY AS A TOOL FOR SUSTAINABLE DEVELOPMENT IN INDIGENOUS COMMUNITIES

Claire Smith

Department of Archaeology,
College of Humanities, Arts & Social Sciences
Flinders University, GPO Box 2100,
Adelaide SA 5001
Email : claire.smith@flinders.edu.au

Abstract

This presentation outlines current research on how archaeology and heritage can be used to advance sustainable development that is embedded in Indigenous aspirations. The case study is research undertaken in collaboration with Australian Aboriginal communities. The project addresses the practical question: How can archaeology help to build Indigenous cultural knowledge and heritage values into sustainable wealth creation? To answer this we have identified four priority areas: education, employment, enterprise and equity. The research is identifying and addressing barriers and enablers as they arise at the cultural interface between Indigenous and non-Indigenous worldviews. This research articulates with current attempts to decolonise archaeology. Worldwide, archaeologists are questioning the relevance of their discipline, especially in light of its historical complicity in colonialism. There is an overwhelmingly non-Indigenous workforce that narrows the richness of interpretations, as well as the potential danger of 'disengaged scientific practice'. Indeed, some researchers question whether the archaeology of Indigenous societies has any value, given that communities not only live daily with poverty and food insecurity, but also endure transgenerational trauma and interventionist governments. However, archaeology can bring unique value via strengths that have not yet been fully tapped. Archaeology is vital for its role in safeguarding tangible and intangible cultural heritage, and for the long-term relationships of trust that archaeologists establish with Indigenous people. Heritage, as the foundation and production of archaeological work, can strengthen a sense of community, and can be a therapy for trauma and foster resilience, wellbeing and social cohesion. This research considers these issues in terms of sustainable development in Indigenous communities.

Keywords: Indigenous communities, Archaeologists and Education

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V

ANTHROPOLOGY
(A) ABSTRACT FOR SYMPOSIUM

**SUSTAINABLE DEVELOPMENT AND ENVIRONMENT: SOME
OBSERVATIONS ON ROLE OF WOMEN IN PROTECTION,
PRESERVATION AND CONSERVATION OF CRITICAL BIODIVERSITY**

P. C. Joshi

Former Vice Chancellor (Acting)
University of Delhi, Delhi – 110 007

Abstract

India is the land of Chipko Movement, a movement often referred to as ecofeminism as well. While Chipko Movement has been seen as an early struggle to put a check on indiscriminate destruction of forest resources, it also represented an alternative way of looking at nature in its interconnectedness and animate form. The Chipko Movement caught world's imagination in bringing up front the consciousness about biodiversity conservation and reforestation as a necessary condition for human survival. However, the idea of scientific biodiversity is confutative as is clearly evident in the scientific management of biodiversity and wildlife which looks at human beings as impediment to proper upkeep. More specifically, the forest and hill dwelling communities are seen as enemy of biodiversity and obstacle in scientific management of the forest and natural resources. This contention overlooks the fact that these communities have been living in close and quite often symbiotic relation with the surrounding natural environment by establishing links in the form of folk literature, myths, rituals and other forms of legends. In Indian context, the ritual relations of human with plant and animal kingdom, both domesticated and wild, reflected through mediums such as sacred grooves, supplicating behavior towards such entities and taboos in instrumental use of these resources, need to be seen in relation to man-biodiversity ties.

The present paper tries to argue for women as harbinger of indigenous knowledge which has the potential of improvement in sustainable management of critical biodiversity. The argument is presented in the light of some case studies highlighting the mechanism of amalgamation of people's science with the science proper, in order to better approach sustainable development. The task of biodiversity conservation cannot be done in isolation, especially by neglecting local communities who have been historically living there. It is important that the traditional wisdom, enshrined in the indigenous knowledge is investigated in reference to the sustainable development and biodiversity conservation and sincere efforts are made to bring common people in the center of the mission for biodiversity conservation so that people become co-owners of biodiversity.

Keywords: Sustainable development, biodiversity, India, women, conservation, indigenous knowledge.

WOMEN EMPOWERMENT: CONVERGENCE GAP AND WAY FORWARD

S. Jibonkumar Singh

Department of Anthropology
Manipur University-795003

Abstract

When the globe has shrunk in this post-modern world due to a sea changed advancement in the field of science and technology, women empowerment still is a global issue that needs to be addressed to. Women can stand tall like men only when there is gender equality and an equal opportunity in all aspect of life. To achieve an economic welfare and overall development of a society and a nation, there is a need for empowering women. In our country India women are confronting with a number of gender biased issues in very many aspects of their lives leading to an inferiority feeling and a hindrance in the development of the society. The development of a society or a nation cannot be achieved only through the participation of men but equally balanced participation of women as well. In a nutshell there is a need for a paradigm shift in women empowerment in order to address and eliminate the convergence gap and look for a way forward for a progressed nation.

Keywords : Women empowerment, paradigm shift, convergence gap, gender biased, economic welfare

**TECHNOLOGY,GENDER AND SUSTAINABLE
DEVELOPMENT:INSIGHTS FROM ANTHROPOLOGY**

S.M. Patnaik

Department of Anthropology,
University of Delhi, Delhi-110007

Abstract

The rapid developments in the field of science and technology have been instrumental in excessive human activities and destruction of natural resources leading to serious planetary crisis. It indicates the commencement of the new geological period, the Anthropocene in last few decades. Sustainability is the dream of passing a livable earth to future generation, human and non-human (Tsing 2017). Anthropology as a holistic science gets engaged in shifting the temporal and spatial scales of analysis while exploring the interface between technology, gender and the idea of sustainability. Anthropology of sustainability involves studying cultural processes from multiple perspectives based on interest and needs of particular societies rather than the universalist interests of any single ideological or historical tradition (Maida 2007). It requires reimagining and reworking communities, societies and landscapes especially the ones influenced by industrial capitalism, to build an innovative synergy (Brightman and Lewis 2017). However, sustainability is a nebulous concept and always avoids a standard definition. It challenges the ideology of progress and development that continue to prevail across political and economic institutions.

In the light of the above this paper attempts to chart out some of the technological developments having implications for women's autonomy and freedom in negotiating the patriarchal subjugation. Further the changing notion of sustainability at different periods of history also holds key to development of a new world order through creative synthesis and innovative approach.

Keywords: Anthropology, sustainability, gender, technology

**SUSTAINABLE DEVELOPMENT AND WOMEN EMPOWERMENT:
ISSUES OF TRIBAL WOMEN IN INDIA**

Sukant K Chaudhury

Department of Sociology
University of Lucknow, Lucknow

Abstract

Today's environment is of great concern, particularly in light of large-scale degradation and over-exploitation by omnivores. The small-scale societies are the real victims in terms of both - ecological refugees and ecosystem people, and they are the tribals of India. They depend on the natural environments of their own locality to meet most of their material needs. They earn barely enough to meet their expenditure. They also include the displaced millions of Indian peasants and tribals. In light of this, the 17 Sustainable Development goals adopted by United Nations in 2015 are a great hope. It includes no poverty, zero hunger, good health and well-being, quality education, and many more things including gender equality (it is the 5th goal). Thus, it has been given priority, which is achieving gender equality and empowering all women and girls. Its implementation started in India only in 2020 but in the next 2 years because of the COVID-19 pandemic, things were hardly implemented, and the goal is set to be achieved in 2030. It seems to be a very unachievable and difficult proposition. Even today the Kondh and Paraja of Odisha, the Onges and Shompen of Andaman, the Tharus and Bhutias of Uttar Pradesh and Uttarakhand, and many others are in deep poverty and primarily illiterate people. The claims are big but the implementation part is not satisfactory.

In light of this, the present paper aims to analyze steps to achieve the sustainable goal of gender equality through case studies taken from the field.

Keywords: Paraja, environment, women empowerment, tribal women

**DISABILITY AND SUSTAINABLE DEVELOPMENT GOALS IN INDIA:
ISSUES IN POLICY AND PRACTICE**

Nilika Mehrotra

Centre for the Study of Social Systems
School of Social Sciences
Jawaharlal Nehru University,
New Delhi

Abstract

The disability rights questions in India have moved from rhetoric and activism to grounded academic intervention and informed politics and Practice in Indian context. Disability Rights movements and State Policies have yet to articulate disability as a development issue for marginalized sections like Indigenous people, Dalits, religious and sexual minorities. I argue here that development policies need to articulate and execute the questions of multiple marginalities in a significant way to ensure sustainability and achieve social justice for persons with disabilities. The 2030 Agenda for Sustainable Development and its 17 SDGs are powerful framework to guide local communities, countries and the international community toward the achievement of disability-inclusive development. It recognizes the slogan ‘to leave no one behind,’ including persons with disabilities and other disadvantaged groups, and has recognized disability as a cross-cutting issue. This paper tries to identify the issues in the Indian context and the challenges posed in the process.

Keywords: Disability, India, Sustainable development goals, policy making

REPRODUCTIVE TRAJECTORIES AND HEALTH OF WOMEN IN EVOLUTION: A BIOSOCIAL INSIGHT

Kallur Nava Saraswathy

Department of Anthropology
University of Delhi-110007

Abstract

Women's health is an important contributor to human evolution. The occurrence of diseases and their associated risk factors are similar in both men and women. However, reproductive trajectories like menarche, conception, childbirth, and menopause are unique to women and are invariably influenced by social, cultural, and biological variables. The contribution of women to future generations is not just through genetic material i.e., 23 chromosomes, but also through epigenetic alterations which are hugely influenced by a range of environmental factors from the individual level to the public policy level. Globalization, a phenomenon that has an immense impact on the social life of people in terms of education, socio-economic status, etc., in turn, is affecting the biological dimensions of individuals, specifically women in terms of reproductive events like decreasing age at menarche, increasing age at marriage and first conception, etc. These biosocial factors invariably affect the reproductive biology of women which is controlled by both genetic and epigenetic mechanisms. Genetic mutations and also epigenetic alterations do have almost an equal role in gene expression. However, Gene-Gene and Gene-Environment interactions cannot be ruled out in the expression. Over and above, National Government Policies like institutionalized deliveries and nutritional supplementation programs like Iron and folic acid in artificial forms during pregnancy also have some say on reproductive biology specifically associated with pregnancy progression and outcomes. Advanced medical technologies and strategies manage adverse pregnancies to result in apparently healthy-looking offspring. However, do such healthy-looking offspring carry a healthy epigenetic architecture is debatable.

The present paper revolves around female health in terms of reproductive profile and associated biosocial components. The paper also tries to revisit some of the government nutritional supplementation programs and future fortification plans to explore if they are useful or harmful or have no effect.

Keywords: Women's health, gene-environment interaction, bio-social determinants, nutritional supplementation

**WOMEN EMPOWERMENT IN INDIA:
NEED FOR SUSTAINABLE DEVELOPMENT**

Dhruba Kumar Limbu

Department of Anthropology
North-Eastern Hill University
Shillong-22

Abstract

Conventionally “development” may connote improvements in well-being, living standards, and opportunities. It may also refer to historical processes of commodification, industrialization, modernization, or globalization. It can be a legitimizing strategy for states, and its ambiguity lends itself to discourses of citizen entitlement as well as state control (Cooper and Packard, 1997). Sustainable development, however it is defined, requires that the value of the asset base available to the relevant population does not decline over time. The concept ‘sustainability’ alerts human beings to make a balance between natural resources and population and to manage the resources. According to Brundtland commission (1987), sustainable development is development that meets the needs of the present generation without compromising the ability of future generation to meet their needs (cf. Sach 1997). Women’s full participation is essential to achieve sustainable development” (Principle 20, Rio Declaration). Empowering women and greater equality between women and men is also a precondition for sustainable people-centered development in developing countries like India.

Keywords: Sustainable Development, women empowerment,

**WOMEN EMPOWERMENT AND SUSTAINABLE DEVELOPMENT:
SOCIAL REFLECTIONS FROM THE TODA OF NILGIRI HILLS,
TAMILNADU**

Jakka Parthasarathy

Director (Rtd.) Tribal Research Centre, Ooty
Bengaluru-560073.

Abstract

A process of sustainable development, as recently focused by social scientists, is social and economic human well being. It is well defined that sustainable development meets the need of the present without compromising the future. In the Indian context, tribe is viewed as an ethnic category characterised by a collective self-image or identity with commonly shared traits of culture. In anthropological perspective, tribal women empowerment, in India, is embedded with needs of the present and future.

This paper examines the strategies of empowerment in the process of development as reflected among the women of the Toda tribal community inhabiting Nilgiri district of Tamil Nadu. The Nilgiri district, also called as the Nilgiri hills, is one of the smallest districts in Tamil Nadu state, located at the junction on the Eastern and the western ghats. In the district Todas are inhabiting on the upper Nilgiri plateau amidst the shoa grasslands, along with the neighbouring communities like Badagas, Kotas, Irulas and Kurumbas.

Todas are identified with their unique features like Toda dialect, origin speculated from Rome to Summeria, half barrel shaped huts, fair, skin colour, traditional garment, jewellery, Lacto vegetarianism, bow and arrow ceremony, patrilineal clans, buffalo sacrifice, dairy religion, besides were a typical example of fraternal polyandry. The study observed that throughout three principal periods of hills development Aboriginal, Colonial and National Independence, the Toda women gradually empowered themselves without compromising the future survival. The study concludes that Toda women by discarding their age-old hard customs like female infanticide, wife catching, polyandry, female illiteracy etc., they empowered by embedding qualitative development in younger generation. The study also explored the strategies the Toda women adapted in achieving sustainable empowerment.

Keywords: Toda Tribe, Sustainability, women empowerment, Hill development

**THE FICTION OF SUSTAINABLE DEVELOPMENT AND THE SILENCE
OF THE ANTHROPOLOGIST: A CRITIQUE FROM TRIBAL
DEVELOPMENT**

Abhik Ghosh

Department of Anthropology
Panjab University, Chandigarh

Abstract

Development and its critical response by Anthropologists had become a standard part of Anthropological works and textbooks from the 1970s onwards. In the Indian context, this translated often to the problems of development, among other things. It seems that having failed to sustain this critique Anthropologists have tacitly accepted the idea of development lock, stock and barrel in the present day. In fact, very few Anthropologists even worry about the long-term effects of such development as an essential part of development. Under these circumstances, what stands out is the acceptance of even harmful practices for the community as a part of development. The real critique of the development process is lacking in such discourse and no one is even looking for a way out. In such a set of circumstances, the fact that paying lip service to sustainability in development has become a standard practice has led to the acceptance of the development agenda *in toto*, while small-scale and cosmetic changes are advised by the so-called advisors within the social sciences, including anthropologists. In reality, our current development practices cannot by any means be said to be sustainable even in the short term. In India, the real critique for such kinds of development has emerged from researchers and practitioners in the arena of tribal development, where they have often aligned themselves with activists, as well as rare practices that are available only for local areas. In such cases it was difficult for the administrators, bureaucrats and those in government to acknowledge that these practices could possibly be one of a range of behaviours that might help to save us all in the future. This paper highlights some of these cases to show that an Anthropological critique needs to again rise from the ashes of its complacency to show all of us how to improve our present conditions of existence without letting go of a shared and continuing future.

Keywords: Sustainable, development, anthropologists

INFORMAL SECTOR AND WOMEN WORKERS

Roumi Deb

Amity Institute of Anthropology
Amity University
Noida

Abstract

Women often face constraints in accessing decent work, especially if they have less skills and limited access to resources and thus may be more prone to accept employment in the informal economy. Such jobs are typified by limited or no social protection, poor working conditions and sometimes exploitation. The present study aimed to relate socioeconomic trends, issues of legitimacy, empowerment and sustainability concerning women employed in the informal sector in Delhi. Data was collected from 500 migrant women. It argues that women who work in the informal economy are often the most vulnerable workers, though paradoxically are making a significant contribution to economic growth. Despite working and living in the most developed parts of the country they live economically marginalized, neglected, with no job, health and social security. Though the departure from traditional family structure drastically affected their family dynamics. Most of the women reported that their mothers and grandmothers were housewives and helped in traditional agriculture. If employment and income generation could be spurred at their place of origin by capitalizing on the most popular/sustainable agriculture produce of their state and by interventions of novel post-harvest technologies, including training in minimizing local crop loss and efficient agricultural practices, cultivating herbal products, fortified food products, packaging techniques and developing self-help groups, these efforts may lead to improvements in their overall wellbeing, awareness and employment generation. Empowering women and leading to gender equity, giving greater audience to local custom and culture of selected districts, a model can be developed that could be replicated in different population groups across country. If it becomes reality, women and families will not feel the need to move to big cities where they are deprived of many legitimate civic services. In addition, the Government, CSR firms, NGOs can help in bringing education, health care facilities and technology to these rural areas to boost literacy rates, develop skilled manpower, substantially improving health outcomes and integrating rural population with urban one.

Keywords: women, economy, informal sector, women workers

ANTHROPOLOGICAL FIELDWORK: A GENDER PERSPECTIVE

Rashmi Sinha

Faculty of Anthropology
School of Social Sciences
Indira Gandhi National Open University
New Delhi-110067

Abstract

Anthropological fieldwork is a process wherein a fieldworker establishes the relationship with the participants to learn about them through anthropological tools and techniques. Fieldwork in Anthropology describes research in all areas of anthropology right from social and cultural anthropology to medical and biological anthropology. One of the significant content areas of anthropological fieldwork in physical and socio-cultural anthropology revolves around studying the origin and functions of family system, reproductive health of women, examining the growth and development patterns, nutritional profiles, decision making, exploring kinship and sex roles, understanding the differences in the division of labour, and socio-demographical analysis. These domains require women's active role as a fieldworker and as a participant to understand the intricacies of a cultural system. However, women's role as a participant is often glossed over, under-analysed or absent from the ethnographic descriptions. A great deal of cultural information on women exists, but it frequently comes from questions asked of men about their wives, daughters and sisters, rather than from the women themselves. Additionally, the identity of a fieldworker as person of a particular gender also influences the dynamics of anthropological fieldwork. The gendered nature of anthropological fieldwork has left the female anthropologists to ponder and feminist scholars to critique, and even then their work has largely been ignored. The present study attempts to analyse the gendered aspects of anthropological fieldwork and demands the increased role of female anthropologists in the field of anthropology.

Keywords: Fieldwork, Reproductive health, Nutrition, Growth and Development, Ethnography, Family System, Kinship, Decision-Making, Socio-demographic Analysis.

HYPERTENSION: SOME EXCEPTIONS IN A HILL AND A PLAIN TRIBE OF NORTHEAST INDIA

Gulrukh Begum

Department of Anthropology
Gauhati University, Guwahati

Abstract

The report of the Committee on Tribal Health in India noted the high rate of hypertension among the tribal and also the fact that <10 per cent of those with hypertension were aware that they had hypertension (Ministry of Tribal affair). Hypertension is generally viewed as an "urban" phenomenon, with blood pressures tending to be low and not rising with age in underdeveloped societies. Both genetic and environmental factors are put forward as an explanation. Sex, age, socio-economic conditions, adiposity indices, physical activity level, dietary pattern and region are always found to be associated with hypertension. Diet plays an important role in the prevalence of tribal hypertension. Study among two tribal communities in North-Eastern India; one in Arunachal Pradesh and another in Assam has shown some exceptional results in the prevalence of hypertension. Wancho, one of the indigenous hill tribes of Arunachal Pradesh and Plain Garo another tribe from Assam were studied for hypertension and associated risk factors. Wanchos are less accessible because of their scattered habitats and inaccessible terrain. Data was collected from villages in Longding district. A total of 318 adult Wanchos (177 males and 141 females) ranging from 20 to 60 years of age were measured cross-sectionally for height, weight, BMR, skinfold measurements and blood pressure. The data collection on physical activity was done with the help of WHO Step-wise instrument version 3.2, 2004. In another cross-sectional study involving 862 plain Garo women of 18-70 years were collected from villages in the district of Kamrup in lower Assam. The Garos are a Tibeto-Burman ethnic group who are one of the few matrilineal tribes in the world. The women were measured for height, weight, circumferences at different sites, indices and physio metric measures. Vigorously active males are found to be more at risk of hypertension. Similarly, hypertension among the Garo women is not only found among the overweight/obese/ at risk individuals but also among the underweight/normal/no risk status.

Keywords: Hypertension, Northeast India, tribes

**INSTITUTIONALIZING BEHAVIOURAL INTERVENTION PACKAGE TO
EMPOWER ABUSED PREGNANT WOMEN: A FACILITY-BASED
RANDOMIZED CONTROL TRIAL**

Meerambika Mahapatro,

National Institute of Health and Family Welfare,
New Delhi

Abstract

Empowerment of women is a prerequisite to sustainable development. Empowering women, especially those who are at the bottom of the social pyramid due to abuse at the stage of pregnancy requires an evidence-based approach. Domestic violence (DV) at the time of pregnancy is more, negatively impacting women's physical, sexual, and emotional well-being. Thus, it requires an institutional behavioral architecture that increases access to knowledge, resources, and decision-making power at the time of crisis. And simultaneously through intervention raises awareness of their rights and entitlements in order to achieve a level of control over their social environment. Without control over their environment, women are subjugated by unequal medical treatment, preventing them from taking control of their lives and the life of the fetus. Consequently, women continue to suffer in the vicious cycle of violence. The study, by evaluating the magnitude of the DV problem, a Behaviour Intervention Package (BIP) is a cognizant effort to empower women by providing integrated psycho-social support to cope with the DV trauma. The study aims to institutionalise the Behavioural Intervention Package to empower abused pregnant women. A randomized controlled trial was carried out with abused pregnant women attending the antenatal clinic of Lok Nayak hospital, Delhi. The study was carried out with a sample of 215 women and a set of inclusion and exclusion criteria. The BIP consists of two components, i.e., preparatory and action components, which were administered to the study sample and followed up for 7 months. Situational and need assessments for each sample were undertaken in the preparatory phase. Following that, trained professionals administered each action component of BIP to the study sample, including A) Regulation of Internal System of Body, Emotions, and Thoughts; B) Developing Social Support Systems and Managing Family Dynamics; and C) Awareness of Rights, Resources, and Entitlements (Accessibility and Utilization). Regular follow-ups at various phases were also undertaken to improve the intervention implementation. Various assessments were made with the help of tools at the baseline and end line. The analysis shows that compliance with the

BIP was 90 percent. Physical and mental health were assessed with the help of SF-36 and found to be better with the intervention of BIP among the study group and significantly associated. The level of awareness and coping with the situation has significantly increased. Physical and mental health components have a strong association, which reinforces the need to conduct routine screening during pregnancy to identify and respond to women with domestic violence. The paper recommends institutionalizing the use of BIP across different settings, viz. hospitals, One-Stop Centres, NGOs, and counseling centres dealing with victims of domestic violence.

Keywords: Empowerment, BIP, RCT, Abuse, Pregnant Women

**BIO-DIVERSITY PRESERVATION AND INDIGENOUS PEOPLE OF
NORTH EAST INDIA: AN ANTHROPOLOGICAL PERSPECTIVE**

Jonali Devi

Department of Anthropology
Cotton University, Guwahati, Assam

Abstract

India's northeast consisting of eight states is as one of the 25th bio-diversity hotspot. The area consisting of 70 percent of hills and 30 percent valley area represent also a unique example of cultural diversity. The indigenous people of the hills and plains are very much dependent on their immediate environment. Living close to their natural settings they have developed knowledge and skills to maintain their lively hood as well as learn to conserve and preserve their bio-diversity. Their cultural values and ethics, beliefs and faiths, rituals and festivals are so framed that it enhances their sense of responsibility towards their environment. In the age of rapid population growth added by more and more uses of natural resources, preservation of our bio-diversity and natural resources is a big issue world over. In fact, the loss of bio-diversity is a major threat to forest eco-system and emerging as a great challenge to humanity (Tripathi et al, 2016). Under such a situation conservation of the nature by the indigenous people is a key to understand various issues related to sustainable development. The paper attempt to study from anthropological perspective the role of indigenous people towards conservation of biodiversity and natural resources in the context of northeast India. It will also highlight the changing scenario under which the traditional cultural values are gradually in the verge of extinction effecting biological environment.

Keywords: Biodiversity, indigenous people, natural resources, conservation, sustainability.

SARCOPENIA AND SARCOPENIC OBESITY: A SIGNIFICANT PUBLIC HEALTH CONCERN FOR AGEING POPULATIONS

Chandana Sarmah

Department of Anthropology
Gauhati University

Abstract

Ageing is associated with chronic degenerative health conditions which usually aggravate with increasing age. The genesis of much of the chronic degenerative conditions are laid in early part of one's life. Sarcopenia is one such chronic degenerative condition. It is associated with loss of muscle mass, muscle strength and decline in physical performance. Studies in recent years have shown that sarcopenia in older ages coexist with obesity. Sarcopenia and sarcopenic obesity together can influence general functioning, mobility as well as quality of life of elderly persons. Sarcopenia and sarcopenic obesity are significant causes of concern from the point of view of public health policy. Life expectancy in our country over the last few decades have increased considerably but the desire is towards a healthy life expectancy. Remaining functionally active and mobile are necessary to have a healthy ageing process. The prevalence and risk of sarcopenia and sarcopenic obesity needs to be assessed for achieving a healthy life expectancy. This paper tries to ascertain the risk of sarcopenia and sarcopenic obesity among three marginalised ethnic groups of Assam who remain physically active even in older ages. Sarcopenia and sarcopenic obesity have been assessed with simple anthropometric variables, isokinetic handgrip strength, body composition mechanisms. The prevalence of risk factor is high in both the sexes based on mid upper arm circumference and calf circumference. The two conditions can be modified through early life interventions in dietary or nutritional intake and physical activity levels. Awareness needs to be created at the community levels about these two conditions as a preventive health mechanism.

Keywords: Ageing, sarcopenia, sarcopenic obesity, public health, Assam

**RISK FACTORS OF CORONARY ARTERY DISEASE IN A PATIENT
BASED STUDY: ROLE OF ETHNICITY**

P. Venkatramana, Monika Sah

Discipline of Anthropology

School of Social Sciences

Indira Gandhi National Open University, New Delhi 110 068

SAA Latheef

Department of Genetics, Osmania University, Hyderabad

Abstract

In this study, an attempt was made to investigate the distribution of coronary risk factors in male patients with coronary artery disease (CAD) (n=50 each) belonging to Jaat and Vysya castes. Significantly higher average height, waist and hip circumferences, glucose and the waist-height ratio were observed in Jaats when compared to the Vysyas (P=0.000). Mean BMI, total cholesterol (total-C) and non-HDL-C, and lean body mass index (LBMI) was significantly higher in Vysyas against Jaats (P=0.00). A significantly higher percentage of type 2 diabetes (T2DM) (P=0.03) and isolated hypertriglyceridemia (P=0.01) was observed in Jaats against Vysya men. Percentage of general obesity (P=0.01), high total-C, high LDL-C (P=0.00), high total-C/HDL-C(P=0.04), combined positive family history of hypertension, type 2 diabetes, and general obesity, was significantly higher in Vysya when compared to Jaat men. In univariate logistic regression analyses, a significant association of T2DM (P=0.039) and isolated hypertriglyceridemia(P=0.020) with Jaat ethnic group and general obesity, high total-C, high LDL-C and high total-C/HDL-C with Vysya ethnic group was observed. Results of the present study suggest that population specific than global approach should be used in identifying high risk group and designing interventions to reduce the complications and management of CAD.

Keywords: Coronary artery disease, ethnicity, jaat, vysya castes

**PROTOHISTORIC CULTURES OF CENTRAL INDIA AND CONTINUITY
OF ANCIENT AGRICULTURAL PRACTICES –
DIET AND MATERIAL REMAINS**

Preety Trivedi

PG Dept of Ancient Indian History, Culture and Archaeology
R.T.M. Nagpur University, Nagpur

Abstract

The region of Central India, i.e. the regions south of North India and north of South India is known for abundant and diverse ecosystem. The earliest evidence of Human existence comes from the Narmada valley. The rich and diverse ecology of the region provided an ideal environment for the evolution and development of human subsistence, as seen in the archaeological remains from a number of excavated sites. The archaeobotanical investigations of carbonized food grains and seeds as well as soil samples recovered from various sites (cereals, pulses, fruit-seeds and other important plants) have brought to light affluent information of the beginning and advancement of a thriving agricultural economy during the Chalcolithic, Iron and Early Historical Periods (2nd millennium BCE to 1st millennium CE) in Central India. Central India is a dry upland region where the earliest evidence of agriculture begins considerably later (around 2300 B.C.), but by the late second to early first millennium B.C. we find settlements with permanent housing, well-made pottery, and a double-cropping agricultural cycle of a variety of winter and summer crops. An ethnoarchaeological study of the available archaeological evidence coupled with present ethnographic data provides an in depth understanding of the continuity of the age old agricultural practices of these regions, their importance and relevance in current researches.

Keywords: Chalcolithic Period, Iron Age, Early Historical Period, radiocarbon dating and isotopic analyses, agricultural practices, archaeological excavations, ethnoarchaeology, ethnographic data, tribal practices, diets, Central India

**TRACING THE GENESIS OF THE SINDHU-SARASWATI CIVILIZATION:
EVIDENCE FROM BHIRRANA, DISTRICT FATEHABAD, HARYANA**

Prabash Sahu

Department of AIHC & Archaeology,
RTM Nagpur University, Nagpur

Abstract

The Sindhu-Saraswati Civilization, variously known as the Harappan Culture, Indus Valley Civilization, which flourished in the Indian Subcontinent had a humble beginning from a rural set up to full-fledged urbanism. The excavations at Bhirrana, a village in the Fatehabad District of Haryana, located on the dried up river bed of Saraswati River, carried out for three consecutive field seasons from 2003 to 2006 has brought to light a continuous sequence of cultures beginning with the Hakra Wares Culture to the Mature Harappan period and subsequent desertion. The C14 dates from the site pushes back the antiquity of the Sindhu-Saraswati civilization to the seventh millennium BCE.

Keywords: Bhirrana, Hakra Ware, Early Harappan, Haryana, Mature Harappan, Sindhu-Saraswati Civilization

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**ABSTRACT FOR
INVITED SPEAKER**

**EPIDEMIOLOGICAL BURDEN OF ANTENATAL DEPRESSION:
PRELIMINARY FINDINGS OF GARBH COHORT**

Vipin Gupta

Department of Anthropology
University of Delhi
Delhi-110007

Abstract

Mental health is usually ignored, easily stigmatized while seeking psychiatric help and differently seen for each gender. Pregnancy is an emotional and biologically sensitive landmark in women's life and any stressor during pregnancy may lead to depression which may have negative consequences for birth outcomes, if left untreated. Apart from impairment of daily functioning, depression during pregnancy is also associated with low birth weight, fetal growth restriction, preterm births and post-natal complications. The manifestation of depression generally varies during pregnancy that leads to challenge in diagnosis and treatment. The aim of the study was to find the burden of antenatal depression and its impact on offspring's birthweight in an Indian population. Longitudinal data from an ongoing pregnancy cohort, i.e. *Gestational Route to Healthy Birth (GaRBH)*, in Bikaner district, Rajasthan, India, has been used for analysis. In this paper, we will discuss the high burden of antenatal depression in the study population, potential risk factors, its impact on birth weight of the offspring and relevance for improving public health.

Keywords: Antenatal, depression, epidemiology, public health, GaRBH cohort

**DIFFERENTIAL ASSOCIATION OF FOLATE AND VITAMIN B12 WITH
HYPERHOMOCYSTEINEMIA AMONG INDIVIDUALS WITH AND
WITHOUT COGNITIVE IMPAIRMENT: FINDINGS FROM A NORTH
INDIAN POPULATION-BASED STUDY**

NoaremKiranmala Devi
Department of Anthropology
University of Delhi
Delhi-110007

Abstract

Hyperhomocysteinemia is an independent risk factor for multiple chronic health conditions, including, cardiovascular diseases, Alzheimer's disease, etc. Keeping homocysteine levels within the normal range in high-risk groups has been associated with better health outcomes. Two of the most important modifiable risk factors of high homocysteine are folate and vitamin B12 deficiencies. However, recent studies have indicated that risk factors of hyperhomocysteinemia may vary among people with certain health conditions. Taking cognizance of differential etiologies of hyperhomocysteinemia among people with different health conditions, the present study aimed to explore folate and vitamin B12 deficiencies as risk factors of hyperhomocysteinemia among individuals with normal and impaired cognition. To achieve this aim, a total of 808 individuals of either sex aged 30 to 70 years were recruited from Palwal, Haryana. All recruited participants were screened for cognitive impairment (CI) using MMSS and a sample of 5 ml of blood was collected for biochemical analysis. Estimation of folate, vitamin B12, and homocysteine levels was done through standard biochemical techniques. In this study, while folate deficiency was found to be associated with high homocysteine levels among individuals with CI, both were not associated among those with normal cognition. On the other hand, vitamin B12 deficiency posed a significantly increased risk of hyperhomocysteinemia among those with normal cognition but not among those with CI. Findings of the present study suggest that hyperhomocysteinemia may have different causes/etiologies among cognitively healthy and unhealthy individuals and the same intervention may not be effective in both groups.

Keywords: hyperhomocysteinemia, folate, vitamin B12, lipids, cognitive impairment

**GENDER, SUSTAINABILITY AND EMPOWERMENT:
THE CASE OF A NAGA VILLAGE IN NORTHEAST INDIA**

Avitoli G. Zhimo

Department of Anthropology
University of Delhi
Delhi-110007

Abstract

Situated on a precipice of the *Purvanchalsin* the Senapati district of Manipur, *Ze-Mnui* village presents a strategic location to its residents, the *ZemeNaga* who have, in turn, been traditionally associated with head-hunting and warfare. The prolonged inaccessibility to the region as well as that of the people to areas other than the nearby forests and water sources is believed to have significantly strengthened the human-nature relationship. Endowed with a diverse range of floral varieties, the forests additionally house a rich faunal repository both of which have, over time, paved their way into the *Zeme* lifestyle not merely as material culture but also in the guise of the various folk songs and lores comprising their oral tradition. The present paper is an ecofeminist reflection on the gender relations that impact *Zeme-Naga* women and sustainability. The first part of the paper will deal with human-nature relationship with special reference to human-mithun-environment complex as found in *Ze-Mnui* village. The later part will deliberate on traditional practices that marginalized women, thereby putting the whole question of empowerment in a conundrum.

Keywords: Manipur, *Zeme Naga*, Empowerment

**RESILIENCE IN THE FACE OF ADVERSITY: A QUALITATIVE STUDY
OF WOMEN STRUGGLING WITH INFERTILITY
FROM DELHI-NCR, INDIA**

Chakraverti Mahajan
Department of Anthropology
University of Delhi
Delhi 110 007

Abstract

The centrality of motherhood to women's identity is essentially a universal reality. In the event of reproductive failure, women's identity becomes questionable. Infertility turns out to be a grave social and psychological burden for them. Studies have reported that among married couples, infertile women face more stigma and suffering as compared to infertile men. This affects the psychological well-being of women and results in feelings of loss, despair, guilt, low self-esteem, loss of confidence, and fear of being alone and abandonment. Women who seek infertility treatment continue to struggle with these negative emotions and often experience poor mental and emotional well-being. American Psychological Association defines resilience as 'the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands.' The aim of the present paper was to understand the factors responsible for resilience among women struggling with infertility. The present study is a part of a larger case-control study funded by the National Commission of Women to assess the mental health of infertile women. Data was collected from 500 women, of which 250 were fertile, and 250 were infertile women aged between 22 to 35 years. The study found that infertile women experienced higher levels of stress, anxiety and depression than fertile women. In the present study, we conducted 30 in-depth interviews with infertile women, of which 15 women were high scorers on the scales of stress, anxiety and depression, and 15 were low scorers. The study found that personal agency, spousal support and family support were three major factors associated with resilience in women struggling with infertility.

Keywords: Resilience, coping mechanisms, primary infertility, women

USING GENES TO EXAMINE CAUSAL RELATIONSHIPS AMONG CARDIOMETABOLIC TRAITS

Gagandeep Kaur Walia
Public Health Foundation of India
Gurgaon, India

Abstract

Cardiometabolic (CM) disorders are leading causes of morbidity and mortality globally. Although the association between these CM traits is well established, there still exists a gap in the evidence for direction of causality among these traits. Mendelian randomization (MR) is a statistical method that utilizes genetic information to infer causality. The MR findings have helped to identify some causal risk factors of CM disorders but this not well examined in India. The evidence of causality is crucial for any clinical/public health intervention to address cardiometabolic burden and address the sustainable development goals. We are utilizing available cardiometabochip array data and also generating Global Screening Array (GSA) data to derive robust genetic instruments for different cardiometabolic traits for examining causality among them. In preliminary analyses utilizing the available genotype data for 35 glyceic and 9 lipid loci on 4900 individuals (2450 sib-pairs) from the Indian Migration Study, we performed bi-directional MR. Instrument variables were generated for lipid and glyceic traits (fasting insulin, fasting glucose, HOMA-IR, HOMA- β , LDL-cholesterol, HDL-cholesterol, total cholesterol and triglycerides) to examine the causal relationships by applying two-stage least squares (2SLS) regression in both directions. Results from 2SLS showed that only triglycerides, defined by weighted genetic risk score (wGRS) of 3 SNPs (rs662799 at *APOAV*, rs780094 at *GCKR* and rs4420638 at *APOE/C1/C4*), were observed to be causally affecting 1.15% variation in HOMA-IR (SE=0.22, P=0.010), 1.53% in HOMA- β (SE=0.21, P=0.001) and 1.18% in fasting insulin (SE=0.23, P=0.009). No evidence for a causal effect was observed in the reverse direction or between any other lipid and glyceic traits. Preliminary findings suggest that triglycerides may causally impact various glyceic traits. Such causal evidences among Indians will help in formulating public health interventions and clinical management of the high-risk patients and will address the growing burden of cardiometabolic disorders in India.

Keywords: Causal inference; Cardiometabolic traits; Mendelian randomization

**HYPOXIC VENTILATORY RESPONSE IN RELATION TO HYPOBARIC
HYPOXIA: COMPARATIVE STUDY BETWEEN PERUVIAN ANDEAN
FROM AMERICA AND TAWANGMONPA FROM INDIA**

Sudipta Ghosh

Department of Anthropology,
North-Eastern Hill University,
Shillong, Meghalaya

Abstract

An increase in ventilation with low ambient oxygen pressure is a physiological response to high altitude hypoxia to deal with the decline of arterial blood oxygen saturation (SaO₂). Such an adaptive measure to maintain the required level of arterial blood oxygen saturation at high altitude is known as Hypoxic Ventilatory Response (HVR). Generally, on acute exposure to hypobaric hypoxia, new comers reveal high level of HVR. However, one might expect somewhat different adaptive mechanism for those who have been living at high altitude for generations, i.e. high altitude native people that are chronically exposed to hypobaric hypoxia. Interestingly, previous studies suggest that Andean high altitude natives have a low (blunted) HVR and low ventilation as compared to the new comers. Therefore, it might be academically informative and interesting to know whether Indian high altitude native populations follow the same trend or do they have a complete different pathway of maintaining required level of arterial blood oxygen saturation under hypobaric hypoxia. Unfortunately, such data from Indian high altitude native populations are hugely lacking for comparison with other high altitude native populations. With this information in mind, the present study is an exploratory one in nature in exploring the hypoxic ventilatory responses among the TawangMonpa from Eastern Himalayan Mountain of Arunachal Pradesh with special emphasis on the factors influencing such physiological adaptive measure of this population. Interestingly, unlike Andean high altitude natives (0.71±0.05 L/min₁/%₁) Monpa show high level of HVR (3.097±1.79L/min₁/%₁) and resting ventilation.

Keywords: Hypoxic ventilatory response, High altitude hypoxia, Monpa, Andean, Tribe

COMMON MENTAL DISORDERS AMONG FEMALES IN THE TWO MENDELIAN POPULATIONS OF INDIA

Shivani Chandel

Department of Anthropology
University of Delhi
Delhi-110007

Abstract

The burdens of mental disorders are tremendously increasing in India. Depression and anxiety are the two most common mental disorders worldwide. Women are disproportionately affected by common mental disorders (CMDs) as well as co-morbid mental disorders. Therefore, the aim of this study is to document and compare the prevalence of common mental disorders among females in the two Mendelian populations.

A total of 739 female participants were recruited for this study. Out of which 382 were Jat women and 357 were Ramgharia Sikh women. A common mental disorder namely, anxiety and depression were measured. Anxiety was assessed by using GAD-7 and depression was assessed by using BDI and PHQ-9. All statistical analysis was done using SPSS software.

In Jat population the prevalence of anxiety was 6.3% and depression was 1.0%. The prevalence of both anxiety 21.0% and depression 10.9% was higher among Ramgharia Sikh women as compared to Jat women. There is disparity in prevalence of common mental disorders between women in rural and urban setting.

It is important identify differential exposure to various psychosocial variables that leads to different mental outcomes in two groups of women.

Keywords: Depression, Anxiety, Women, Jat, Sikh, India

**INNOVATION IN THE LAND USE SYSTEM IN
CHANGKI VILLAGE, NAGALAND**

Tiasunep

Department of Anthropology
Nagaland University
Nagaland

Abstrat

The “tragedy of the common” is a well-known phrase for properties owned in common. Moreover, properties owned in common are known to have inhibitory effect for long term investment since individuals have no incentives for long term investment. Economics wisdom suggests however that long term investment as a necessity for economic growth. The cultural practice of commonly owned land among many tribals therefore poses a challenge in the environment of market driven modern economic system underpinned by private property system. This system of land use is one of the reasons that inhibit economic growth in Nagaland. An innovative approach on land use was developed in Changki village of Nagaland, which incorporate both the cultural practice as well as the insights of private ownership. The economic results of such incentives to individuals as also discussed.

Keywords: Common property, Changki, Land use, Economic growth.

MAINSTREAMING OF INDIGENOUS DEMOCRACY

Sharmila Ghosh

Freelance Consultant Anthropologists
Chandigarh

Abstract

An ancient group of people had migrated into the North Eastern part of the country and settled in with a unique cultural system distinguishing them from a large number of other migratory groups. This was the Khasi tribe of Meghalaya, known for their matrilineal system. This system was bolstered by the various social and political practices which by itself then became unique. The traditional political set-up of the Khasis was a smart balance between participation of all adult members, highlighting matrilineality while maintaining that the political sphere was primarily for the males. The administration of the Khasi land with the adoption of the Indian constitution facilitated the functioning of the traditional political structure via the Sixth Schedule. The administration of the Khasi territory which was worked out at four levels down to the clan, with the chiefships called Syiemships at the top, ascertaining the involvement to the level of the smallest group. This structure though recognized, was often found to be at odds with the modern administrative system as the involvement of the people was limited. This paper shall attempt to find the difficulties in the incorporated functioning of the traditional and modern system and the possibilities of merging of the two.

Keywords: Khashi, matrilineal system, Meghalaya

**CEPHALO-FACIAL ANTHROPOMETRIC PARADIGM OF THE MEITEI
MALES OF MANIPUR: A DIACHRONIC APPROACH**

Thoudam Bedita Devi

Sikkim Manipal Institute of Medical Sciences
Upper Tadong, Gangtok, Sikkim

Abstract

Among various anatomical features, cephalo-facial part is the most important dissected component of human body which help in personal as well as racial identification. It is through the measurement of head and face - known as cephalometry that cephalo-facial dimensions of an individual can be understood. Keeping this in view, the present study was undertaken with an objective of making a database of cephalo-facial profile of present Meitei male population of Manipur valley and also comparing the same with the earlier findings of Singh, who worked among the Meiteis of Manipur at least one generation before present in the year 1992. The findings of the study reveals that male Meiteis of Manipur valley have medium to long head length and head breadth, narrow bizygomatic arch, low morphological facial height, above medium nasal breadth. Over all head shape range between mesocephalic to brachycephalic. They possess mesorrhinae nose, mesoprosopic to letoprosopic morphological face, mesen type of morphological upper face and metriocephalic to acocephalic breadth height index. On diachronic comparison, the mean value of present population is higher than past population in 11 parameters out of the 13 cephalo-facial traits. And when test of significance is administered, statistically significant difference is observed in 10 out of 13 traits. Out of the 10 traits which show significant difference 9 of them are breadth measurements. On statistical comparison of the indices, significant difference is observed in all 5 indices when quantitatively compared. The overall findings reveal an increasing mean value in most of the parameters thereby showing a positive secular trend.

Keywords : Cephalic index, Nasal Index, Dolichocephalic, Mesorrhinae, Acrocephalic

**AN INTERFACE BETWEEN WOMEN AND TECHNOLOGY: EXPLORING
A WHATSAPP GROUP AS AN EMPOWERMENT ENABLER**

Indrani Mukherjee

Post Doctoral Fellow
Department of Anthropology
University of Delhi

Abstract

Empowerment is both a value orientation for working in the community and a theoretical model for understanding the process and consequences of efforts to exert control and influence over decisions that affect one's life, organizational functioning, and the quality of community life (Perkins & Zimmerman, 1995; Rappaport, 1981; Zimmerman & Warschausky, 1998). In this light the research explores a women's whatsapp group of more than two hundred and fifty members, from within an urban gated community. Looking at how social networking comes together in an online space, the research tries to understand the relevance of this 'women's helpline' in terms of leadership, business aspirations, information dissemination, voicing of opinion, charitable endeavors, support and conflict, policing and control, health and happiness and so on. The research reflects on whether or not the empowerment is restricted to the women's socio-cultural space of the home and hearth as well as whether the control over this socio-cultural domain lends thrust to empowerment itself. This work also reflects at how women come together in a significant way to help tide over difficult social situations like Covid-19, and how technology plays an extremely important role in remaining socially and emotionally connected while physical proximity as well as every day face to face interactions are limited and restricted.

Keywords: Empowerment, socio-cultural, women

**PREHISTORIC INVESTIGATION IN THE KHARLA RIVER VALLEY,
WESTERN ODISHA: GEO-ARCHAEOLOGICAL PERSPECTIVE**

Avick Biswas

Department of Anthropology
Vidyasagar University
West Bengal

Abstract

The article is a study of cultural antiquity reported from prehistoric sites of the Kharla river valley under Sambalpur district, Kuchinda subdivision, western Odisha. The Kharla river basin developed within Precambrian and Proterozoic rocks has preserved prehistoric sites – mainly microlithic in thin (<10 m) colluvio-alluvial deposits of late Quaternary age. Flake tools/middle palaeolithic artifacts have been discovered in ferricretized cobbly pebbly gravel of early late Pleistocene age. Geomorphic and palaeo-pedological features indicate humid climate during the early Pleistocene and early Holocene. The climate was distinctly dry during the later late Pleistocene. Easy availability of raw materials like quartzite, chert, chalcedony etc. and availability of water in plunge pools of water falls, even in dry period, have attracted prehistoric hunter gatherers almost throughout the Late Quaternary.

Keywords: Microliths, fluvial geomorphology, quaternary, ferricrete, calcrete, colluvio-alluvial fills, micro-assemblage

**ANCIENT SEAPORTS ON THE WESTERN COAST OF INDIA
(WITH SPECIAL REFERENCE TO
THE SOPARA AND GHARAPURI SEAPORTS)**

Manish Rai

Archaeological Survey of India,
Regional Director (Western Region),
Sion fort, Sion (E), Mumbai-400 022.

Abstract

India has the most prominent and strategic geographic location in the Indian Ocean having a 7516 km long coastline. The Bay of Bengal to the east and the Arabian Sea to the west and Rameshwaram to the south are dotted with hundreds of ancient ports and settlements. Many of them are mentioned in classical texts and are active for a long time, whereas many of neither mentioned nor active anymore. A new approach to knowing the scientific way of the monsoon in the Indian Ocean has emerged as the sailor's attraction and converted as a main hub of the ancient world. The spread of Buddhism in this region and its hinterland coincides with the history of urbanization as monks and merchants were travelling together, while monks had introduced a new way of life, merchants were responsible for introducing a new set of material culture. Sopara or Shurparaka is one of the oldest port towns in ancient India and located strategically on the Vaitarna and Ulhas Rivers of the Konkan. This historical site represents a Buddhist settlement which came up around the trading mart and emerged as the famous maritime silk routes of India with other contemporary countries during the 3rd century BCE situated in the western part of India. On account of climate change including changing of sea floors and resulted to pressurized to emerge and develop into the new places such as Gharapuri seaport to fulfill the require needs in the vicinity of the western coast of India. Soparaka mentioned in the Mahavamsa, Divyavadana, Vanparva of Mahabharata, Sripalacharit and other Buddhist, Brahmanical and Jainas text. Soparaka was also known to Ptolemy and writer of the Periplus of the Erythraen sea and later to Arab and Persian travellers but why Gharapuri seaports are not mentioned in the ancient or classical text? To be investigated and also discussed. This paper deals with the analysis of factors, causes of the rise and fall of Sopara and Gharapuri seaports along with a recent investigation. During and after Sopara, Gharapuri seaport has been flourished at least seven centuries of the first

millennium of the Common Era and resulted as one of the prosperous seaports on the western coast of India and carved out the famous Mahesh-Murti along with the public architecture representing exceptional testimony to the cultural tradition of the world.

Keywords: Gharapuri, Sopara, Mauryas, Satavahanas, Amphorae, Silk Road, UNESCO

**CRITICAL ISSUES AND CHALLENGES OF
HIGH OSTEOPOROSIS RISK AND FOOD CULTURE**

N.K. Mungreiphy

Amity Institute of Anthropology,
Amity University, Uttar Pradesh, India

Rashmi Sinha

School of Social Sciences,
IGNOU, Maidan Garhi, Delhi, India

SomishonKeishing

Department of Home Science,
G.P. Women's College, Manipur, India

Abstract

Osteoporosis is a global public health problem. It is a silent disease until fractures occur, which causes significant secondary health issues. In a study conducted among adult tribal women of Manipur, there was an alarmingly high prevalence of osteopenia (71.1%) and osteoporosis (10.3%). Osteoporosis was found more prevalent among older subjects. Osteopenia was present across all age groups but was found maximum among the middle age, during which most women experience menopause. The high prevalence of osteopenia and osteoporosis could be attributed to their food culture characterized by low production and consumption of milk and other dairy products leading to deficiency of calcium and other nutrients vital for good bone health. Besides lactose intolerance is common in the region. Lack of awareness about bone health adds to the critical issues of osteoporosis.

Keywords: Osteoporosis, osteopenia, food culture, tribes

**MALE BREAST CANCER: AN ANTHROPOLOGICAL
APPROACH TO TODAY'S ENIGMA**

Abhishikta Ghosh Roy
Anthropologist,
Anthropological Survey of India,
Ministry of Culture,
Government of India.

Abstract

An accentuated systems approach has been considered in Medical Anthropology with respect to theoretical and institutional methodologies to health, illness and healing. Marked changes in distribution, incidence and prevalence of disease, are all related to changes in life expectancy and living patterns, though the latter is related to globalization mainly, significantly among all types of diseases, non-communicable ones are rising with cancer predominating of all. According to WHO, by 2020, there is expected to be some 20 million new cancer cases worldwide. Anthropology has a major role to play in many aspects of cancer, which includes aetiology and protection, epidemiology and prognosis. Human beings are bestowed with a finest gift named culture, which is a significant tool to influence peoples understanding and acceptance of preventive measures. Social and cultural factors needs to be planned in such a manner so that it can be implemented for cancer control programmes ensuring success. Unadventurously, anthropology has pursued to assimilate the biological and physiological with cultural and social parameters. paying attention to the continuous cultural conformations of cancer that exist 'before cancer' will increase understanding of how the public health construction of 'cancer awareness' relates to everyday health practices such as symptom experience and health care seeking. In todays date when it is becoming more warning to fight cancer, anthropologists seek to answer to many questions pertaining to its growth and proliferation. The responsibility of a Medical Anthropologist lies in the fact to identify the causes and a better understanding of its prognosis, and if anthropologists come up with explanations, it can be a great measure for prognosis and thus the burden may be lowered and we can win over mortality. The present paper will seek to answer to all the above-mentioned facts taking Male Breast Cancer research as model.

Keywords : Cancer, epidemiology, Prognosis, anthropology

**GENDER SUSCEPTIBILITY TO SLEEP DISORDERS AND INSOMNIA
AMONG THE MANIPURI POPULATION AMIDST COVID 19**

SanjenbamYaiphaba Meitei

Department of Anthropology
Manipur University

Abstract

During the COVID-19 pandemic, people often have psychological health issues, including insomnia. An online survey was conducted to understand the gender susceptibility to sleep disorders and insomnia using the sleep disorder and insomnia severity index questionnaire from 585 Manipuris staying in and outside Manipur. The study found certain sleep disorders, such as somatoform disorder, circadian rhythm disorder, movement disorder and sleep apnea, to vary between the two genders significantly. Females are significantly more likely to develop somatoform disorder, circadian rhythm disorder, and movement disorder and significantly less likely to have sleep apnea. Sleep problems can be related to mental health issues, and females being significantly susceptible to such issues need to be addressed.

Keywords: Insomnia, gender, parasomnias, sleep apnea, Susceptibility, ISI questionnaire

**INFANT MORTALITY RATE AS INDICATOR OF MATERNAL HEALTH
DURING PROTOHISTORIC INDIA: A CASE STUDY FROM NEVASA**

Veena Mushrif-Tripathy

Department of AIHC and Archaeology
Deccan College Post Graduate and Research Institute
Pune

Abstract

Mother's health is very crucial for the growth of fetus and infant and it is one of the main issues considered for understanding infant mortality rate (IMR) in any given society. According to studies conducted by the World Health Organisation, early age marriages and repetitive pregnancies, lower socio-economic conditions are results in high IMR. Over the past 51 years this indicator reached a maximum value of 159.40 in 1960 and a minimum value of 47.20 in 2011 of IMR. These values must have been more in pre antibiotic medicines. To understand maternal health through IMR in protohistoric India is very challenging as it is dependent on archaeological records. The protohistoric period in Indian defines from 5000 BCE to 600 BCE which has shown the establishments of large cities like Harappan civilization to smaller agricultural Chalcolithic villages. The present paper is based on the skeletal analysis conducted on the site of Nevasa, District Aurangabad, Maharashtra dated to 2000 BCE. This is the time when we find a good number of human osseous remains representing a bygone population. Out of these remains, around eighty percentages belong to the sub-adult category, below 16 years. Among this, 60 percentages are from the infant category which belongs to below 1 year old. These remains show incidences of enamel hypoplasia, harris line, periostosis lesions, vitamin C deficiency etc which indicate metabolic disorders during early age leading to high IMR. In this paper, the author wants to argue that these early life nutritional deficiencies seen on the skeletal assemblage are indirectly or directly demonstrate the general health of the mother.

Keywords: Infant mortality rate, maternal health, Harappa, protohistoric

BODY COMPOSITION OF ELITE AND NON-ELITE JUDOKAS OF NORTH EAST INDIA

Ak. BojenMeetei, M. Monoranjan Singh, Mary Maheo, K. Somarani
Department of Anthropology
D.M. University, Imphal

Abstract

Judo is a complex Olympic Sport in which, besides technical skills and tactical strategies, body composition and anthropometric characteristics are also indispensable in competition and intensive training. The aim of this study was to determine the body composition and anthropometric profile of Elite and Non-elite judokas of North East India. A cross-sectional study was conducted on thirty-five male judokas aged 21.3 ± 3.9 yrs and twenty-eight female judokas aged 18.71 ± 3.3 yrs when they were participated during the 1st NE Olympic Games, 2018 held at Imphal. Elite and non-elite was classified on the basis of performance in various National Competitions. Body composition analyser (Tanita: TBF-310), anthropometer, measuring tap and hand grip dynamometer were used in the study. Descriptive statistics, t-test, and logistic regression were computed with the help of SPSS package, version 15. Percent fat (PF %) and fat mass (FM) was significantly lower ($p < 0.05$) in both male and female elite judokas as compared to non-elite judokas. Elite male judokas was found significantly lower values in WG, HG and WHR than the non-elite judokas. Short stature, lower PF%, FM and waist hip ratio (WHR) were predicted as determinant factors for better performance in judo competition.

Keywords: Body composition, Judokas, Elite and Non-Elite, Hand Grip, performance.

**MATERNAL AND CHILD HEALTH A MATTER OF GREAT CONCERN IN
WOMEN EMPOWERMENT -
A STUDY ON A PVTG OF WEST BENGAL**

Pinak Tarafdar

Department of Anthropology,
University of North Bengal
West Bengal

Abstract

A sustainable health status is one of the imperative factors of women empowerment along with the amelioration of economic, political and social condition of women folk. A full participation of women and men is always encouraged in production and reproductive life including shared responsibilities for the care and nurturing of children. But all over the world and moreover in the developing countries like India, women experience threats to their lives, health and well-being are over burdened with work and of their lack of power and influence; moreover, the situation is vulnerable among the marginalised segment. On the contrary traditional health care practices for women and children have emerged in all societies through cultural codifications of required procedures and rituals (Belsey Mark A, 2009) for providing viable support to pregnant women and new born babies. Although the contemporary idea of Maternal and Child health has been developed by WHO (1976) but the entire concept historically reflects the role of culture and institution for initiating empirical knowledge and technologies in the various economic, social, religious and political circumstances to ensure health and well-being of pregnant women, mother and children. Introduction of biomedical treatment and its contingent factors has made an alternative approach particularly for the indigenous communities who are found to rely on age-old health care practices. In order to retain the culturally constructed and psychologically assured health care modalities in connection with pregnancy, delivery and protection of new born baby the women responsibly continue the pivotal role and ultimately emerge as significant carrier of their own culture. Here the issue of women empowerment arises and also plays conspicuous role both for the continuation of the age old system and also for the acceptance of the modern biomedical counterpart. An intensive study has been conducted in this regard among the Toto (a PVTG of West Bengal) to explore the above stated phenomena in order to understand the maternal and child health care perspectives in the sphere of women empowerment and to examine the sustainable maternal and child health care status among this particular segment of the exclusively found distantly inhabited population.

Keywords: PVTGs, Matrenal health, child health, women empowerment

**MULTISPECIES ENCOUNTERS IN ANTHROPOLOGY
OF SUSTAINABLE DEVELOPMENT**

Rajanikant Pandey

Department of Tribal Studies
Central University of Jharkhand
Ranchi, Jharkhand

Abstract

Anthropology has given new ways of imagining the realities of life in technologically mediated world. Anthropologists have chalked out novel means of negotiating everyday affairs and posed serious questions about transcending human existence since age of science or enlightenment. However, in last one decade the new set of theoretical ideas inspired by posthumanistic ontology has compelled us to formulate anthropological researches by incorporating the presence of other species in human inquiries. Be it mosquitos, dog, elephants, mushroom or coronavirus, their presence in ethnographic accounts are taking central place. Bruno Latour, Eduardo Viveiros de Castro, Philippe Descola, Ana Tsing and many other are inspiring a move 'beyond anthropology of human'. Latour's passage from science technology studies to symmetrical anthropology argues for inclusion nonhuman actors in ethnography. Eduardo Kohn in his path breaking formulations has advocated a 'anthropology of life' which would situate "human worlds within a larger series of processes and relationships that exceed the human". My paper reflects upon such theoretical and methodological inquiries in contemporary anthropology, journeying the concept and interests addressed by posthumanistic thinkers and multispecies ethnographers. By outlining three examples of doctoral researches I am currently supervising; I will discuss the prospects of such studies in India. In conclusion, the possibilities of multispecies and posthumanistic studies in addressing question of sustainable development and women empowerment in India shall be argued.

Keywords: Technohumanism, Posthumanism, Multispecies
Ethnography, Sustainable development

**ROLE OF FLINT KNAPPING EXPERIMENT IN LITHIC RESEARCH:
AN OVERVIEW IN INDIAN CONTEXT**

Krishnendu Polley

Department of Anthropology
Bidhannagar College
Kolkata

Abstract

Flint knapping experimentation has about 138 years of history and now a day it has become one of the central pillars of stone tool analysis. In India the potentiality of flint knapping experimentation has not been explored properly. For a long time it has been merely used to test the reasonableness of a belief concerning an artifact's usage or method of fabrication. Luckily, the scenario has changed and now a day knowledge of flint knapping has been used to solve problems related to lithic research in Indian archaeology. The present paper attempts to provide current scenario of flint knapping experiments in India in the background of that in the world as well as drawbacks of overuse or over dependency of knapping experiments in lithic research.

Keywords: Lithic Analysis, Experimental Archaeology, Flint Knapping Experiments, Debitage Analysis

**PREVALENCE AND CORRELATES OF UNDIAGNOSED DIABETES:
A CROSS-SECTIONAL STUDY**

Huidrom Suraj Singh

Department of Anthropology
Manipur University

Abstract

Diabetes Mellitus is one of the most common metabolic diseases. It is characterized by chronic hyperglycemia associated with disturbances of carbohydrate, fat, and protein metabolism due to absolute or relative deficiency in insulin secretion and or action. Identifying hyperglycemia in the earliest stages (prediabetes) and proper treatment are the primary needs for effective and affordable actions to tackle the critical health issues caused by diabetes. The present study finds out the prevalence of undiagnosed prediabetes and T2D among the *Meiteis* of Manipur, Northeast India. Early diagnosis and understanding of risk factors may helps in taking preventive measures in time as well as in improving socio-economic status of the society.

Keywords: Obesity, Hypertension, Glucose level, WHR, Prediabetes, Socio-economic status

**COVID-19 AND THE SOCIAL MEDIA: EXPLORING THE VIRTUAL
WORLD AS A “NEW NORMAL”**

Rukshana Zaman

Faculty of Anthropology,
School of Social Sciences,
Indira Gandhi National Open University,
New Delhi-110068.

Abstract

The COVID 19 pandemic has not only created a health issue that has had an impact globally but also made us question things that we had taken for granted as “being normal”. In this dark age, however, everything was not gloomy, there has been silver lining in the clouds too. This article is a humble attempt to understand the entrepreneurship and start-ups that many women had ventured out and explored using social media platforms, during the COVID 19 pandemic. It would also focus on how women have used the social media platforms to acquire knowledge and empower themselves to understand the COVID 19 Pandemic, and evolve coping mechanisms. As physical fieldwork was not possible during the COVID 19 lockdown, to understand how women had empowered themselves with the help of technology and the social media platforms, this presentation borrowing from Margaret Mead have focused on studying “Culture at a Distance” using the virtual platform.

Keywords: COVID 19, Social Media, Virtual World, Women Entrepreneurship

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ABSTRACT FOR
ORAL / POSTER PRESENTATION

AN OVERVIEW OF STUDIES IN ROCK ART IN CENTRAL INDIA

Sudeshna Biswas

Research Scholar

Department of Anthropology
University of Delhi, Delhi – 110007

Abstract

During the late stone age, the early humans began producing rock art as a means to communicate, express, symbolize and replicate natural processes to connect with their survivals, livelihood and adaptations. It reflected the intellectual mental structure of humankind that thrived ages ago. There are rich shreds of evidence of rock art in India containing petroglyphs, pictographs and geoglyphs. This intrinsic rock art has always been a subject of fascination to scholars in history, fine arts, culture studies and prehistoric archaeology. Investigations and studies of rock art in Central India have thrown light into myriad amalgamations of prehistoric and historic paintings that have been coming into the picture more prominently after the discovery of the world heritage site of the Bhimbetka group of rock shelters. In this paper, I present an analysis of several rock art studies that have been undertaken yet so far in this region. It would be further expanded in the understanding of several scopes of research that can be explored in rock art studies. Rock art is a cultural construct, therefore how anthropologists can contribute to the interpretation and bring out new dimensions into rock art research will be discussed in this paper.

Keywords: Rock art, prehistory, central India, anthropology, scope

**AN EMPIRICAL STUDY OF DIRECT HOUSEHOLD CARBON
FOOTPRINT IN URBAN AND RURAL AREAS OF KALYANI SUB-
DIVISION OF DISTRICT NADIA, WEST BENGAL, INDIA**

Madhushree Dey

Dr. Harisingh Gour Vishwavidyalaya
Sagar, Madhya Pradesh-470003

Abstract

Recent interest in household carbon footprint helps to have an in-depth insight to mitigate climate change & bring sustainable solutions for global warming & rising emissions. The household carbon footprint has emerged as an important issue as it is intricately related to consumerism & lifestyle choices. Hence, a critical evaluation of household carbon footprint is necessary to reduce household emissions. Looking into the consequences of household carbon footprint, this study attempts to statistically measure the magnitude of the consumption of direct energy sources and household carbon footprint equivalent. It also examined the impact of socio-demographic variables on the total annual household carbon footprint in rural & urban locations of the Kalyani sub-division, Nadia, West Bengal. The results revealed that rising annual household income, household size and standard of living significantly affect the household carbon footprint in both areas but a higher total annual direct household carbon footprint equivalent (66.96%) has been observed in urban areas. In contrast, the annual carbon footprint equivalent of the rural area is 33.04%. Hence, from the above discussion, it can be concluded that household carbon footprint can have the true potential to be discussed at the global level.

Keywords: energy, emission factor, carbon footprint, households, consumption

**MAKING OF AN 'INDIGENOUS' MEDICINE:
AN ENQUIRY IN TO THE HISTORICAL TRAJECTORY
OF HOMOEOPATHIC MEDICAL PRACTICE**

Anjana Menon

Research Scholar

Post Graduate and Research Department of History
Maharaja's College, Kochi, Kerala- 682011

Abstract

The global outbreak of COVID-19 coronavirus epidemic has brought forth and strengthened the discourses on varied of forms of medical practices across countries and cultures. In the context of India, Homoeopathic medical practice, a state sponsored system of health care in the country was under close scrutiny. In the context, this paper attempts to trace the historical trajectory of this German born system of medicine that was integrated in to the national health system and often found a space among the 'indigenous' forms of medical practices in the country.

Keywords: Homoeopathy, Nation, Body, Culture.

**AN EMPIRICAL STUDY OF REPRODUCTIVE AND CHILD HEALTH
CARE PRACTICES AMONG THE BONDA TRIBE OF
MALKANGIRI DISTRICT, ODISHA, INDIA**

Ranjita Nayak

Dr. Harisingh Gour Vishwavidyalaya,
Sagar. M.P.-470003

Abstract

This study is to explore reproductive and child health care practices among the Bonda tribe. And the second one is to investigate the facilitation and barriers to access to reproductive health care among the Bonda mothers. Qualitative anthropological research methods were used to collect empirical data. Methods were used in-depth interviews, focus group discussions and case studies, and participant and non-participant observation. The findings show the major focus on the traditional practices, norms, and values developed by Ancestors. Work is valued higher than caring for children; this is the scenario. Therefore, government policies relating to young health care should receive more focus, and the underprivileged and rural areas of the nation should receive more importance. Health care providers and policymakers should pay more attention to women who marry and have children while still young.

Keywords: Reproductive Health care practices, Child health, The Bonda tribe.

**GENDER DIFFERENCES IN SUICIDAL BEHAVIOUR:
A STUDY AMONG YOUNG ADULTS OF DELHI**

Gangipogu Vijay Kumar and Kallur Nava Sarswathy
Department of Anthropology,
University of Delhi

Abstract

Suicide is considered one of the major public health burdens worldwide. Suicidal behaviour can impact human growth and development in terms of morbidity and mortality. In developing countries like India, suicidal behaviour is becoming more prevalent in younger age groups, especially among females. Therefore, the present study aims to understand the gender differences in suicidal behaviour among young adults in Delhi. This is a cross-sectional study carried out among 272 young adults (59.20% females) in Delhi. Data on socio-demographic variables and suicidal behaviour was captured through a pre-tested modified interview schedule and Suicide Behaviours Questionnaire-Revised (SBQ-R), respectively. Suicidal behaviour was present in 18.01% of the studied participants. Suicidal behaviour was significantly higher among females (21.73%) than among males (12.61%) (p -value <0.05), suggesting females to be at a higher risk for suicidal behaviour than males. Assessment of suicidal behaviour is important to prevent devastating outcomes among young adults, especially females. Keywords: Suicide, female, suicidal behaviour, SBQ-R

Keywords: Suicide, suicidal behavior, young adults, mental health

SELF RELIANCE WOMEN IN RURAL-URBAN REGION OF BIKANER

Subhash Kumar

Research scholar

Department of Anthropology
University of Delhi, Delhi, 110007

Abstract

For years, women have lived and took care of their families from the curtains of four walls. Their contribution to the livelihood of the family has been considered minimal and unappreciated. Although, the increased educational profile and the shift in the societal norms, participation of women has increased in the past few decades. But it is equally true that most of these changes are observed in the metropolitan and other urban cities. The periodic labour force survey (PLFS) reports from 2021-2022 show that where the percentage of male FLPR was 57.1 percent for rural India, it was as low as 27.7 for the females from rural India. In contrast to the common understanding that more female are employed in the urban area, the survey reported that the percentage of female participation in the labour force was 18.6 % in compare to that of male which is 58.4 %. This shows that inspite of the much emphasis on the education and social changes, women still stand far behind in contributing to the household income and livelihood due to the prohibitions put on them to work inside the homes. But what if they start working inside the home and yet contribute to their household income. The present study attempts to understand how women in Rural and urban pockets of Bikaner, Rajasthan have managed to economically empower themselves through MSMEs like papad making within the walls of their houses. The present study shows how the popularity of Bikaner as a 'snacks city' and the demand of local products have provided the local women economic opportunities to come forward and contribute to their household income and also become economically independent.

Keywords: livelihood, rural- urban, Bikaner, empower

**THE EFFECT OF MENOPAUSAL SYMPTOMS ON QUALITY OF LIFE
AMONG POSTMENOPAUSAL WOMEN OF PALWAL,
HARYANA, NORTH INDIA**

Sapana Kasaudhan

Department of Anthropology
University of Delhi

Abstract

The present study aims to address the prevalence of menopausal symptoms among postmenopausal women and their effect on the quality of life. A cross-sectional study was conducted among 266 females of age 40 -69 years from the Jat community. All postmenopausal females were interviewed using menopause specific quality of life (MENQOL) questionnaire. Decrease in physical strength was the most commonly experienced symptom mentioned by the study participants (64.7%). The physical domain imposed the highest impact on quality of life, followed by vasomotor, sexual, and psychological domains. Findings of the present study indicate a huge burden of menopausal symptoms among the participants. Menopausal symptoms are among neglected women's health issues that require immediate attention.

Keywords- Menopause, Quality of life, Socio-demographic.

**ASSOCIATION OF MTR A2756G GENE POLYMORPHISM WITH
ISOLATED SYSTOLIC AND DIASTOLIC HYPERTENSION AMONG THE
NORTH INDIAN POPULATION**

Suresh Dahal

Research Scholar,
Department of Anthropology,
University of Delhi,
Delhi-110007.

Abstract

Hypertension is a major public health challenge all over the world. The prevalence of hypertension is alarmingly increasing and it accounts for 57% of deaths due to stroke in India. Isolated systolic and diastolic hypertension and has been linked with increased risk for cardiovascular diseases (CVDs). Genetic studies have been implicated to understand the significant association of number of SNPs with hypertension; however, limited studies are available in Indian context. The present study attempts to understand the association of MTR A2756G gene polymorphism with ISH and IDH among North Indian population. A community based cross – sectional study was conducted in Palwal District of Haryana, North India. Participants aged between 30-70 years of either sex were recruited in the present study. Genotyping of MTR A2756G gene polymorphism was performed following previous reported protocols. The results revealed that MTR A2756G gene polymorphism was significantly associated with isolated diastolic hypertension [OR 1.76 (95% CI: 1.00-3.09) $p= 0.04$] but not with isolated systolic hypertension. The present study highlights the influential role of MTR A2756G gene polymorphism with isolated diastolic hypertension. Early identification of susceptible genes involved in hypertension may help to formulate effective policies to prevent hypertension.

Keywords: Hypertension, isolated systolic blood pressure, isolated diastolic blood pressure, Methyltransferase, gene polymorphism.

**VITAMIN INTAKE IN OBESITY AND BLOOD PRESSURE: A
POPULATION-BASED STUDY FROM PALWAL DISTRICT OF
HARYANA, NORTH INDIA**

Neha Yadav

Research Scholar,
Department of Anthropology
University of Delhi, Delhi-110007.

Abstract

Overweight/obesity is highly prevalent health condition and important risk factors for cardiovascular diseases (CVDs). Adequate intake of certain vitamins has been reported to play a protective role in obesity. Dietary pattern in terms of vitamin intake among the lifestyle risk factors of obesity has been linked with obesity in several studies. This study aimed to explore the inter-relationship between the intake of selected vitamins and body mass index (BMI) among adults of a lacto-vegetarian population. A total of 497 participants aged 30-70 years of either sex were recruited from Palwal, Haryana, India. Data pertaining to socio-demographic variables and dietary intake was collected using a pretested interview schedule and food-frequency questionnaire (FFQ) respectively. BMI was determined using standard techniques. Statistical analysis was performed using SPSS version 22. Inadequate levels in the intake of vitamin C were found to be positively associated with overweight/obesity. Conclusion: Adequacy in vitamin C intake may help in reducing the burden of overweight/obesity.

Keywords: Vitamin C; cardiovascular disease (CVDs), obesity; RDA (recommended dietary allowance).

**ISSUES OF SCHOOL DROPOUT AMONG ADOLESCENT GIRLS OF
JIRIBAM DISTRICT, MANIPUR**

YumnamLuxmi Devi

Department of Anthropology
Moreh College, Moreh, Manipur

Abstract

The present study aims to find out the school dropout adolescent girls age between 11-18 years. The present data are drawn from Anganwadi Centre of Jiribam District, sub-divided into seven sector govern under Integrated Child Development schemes (ICDS). The total adolescent girls who are enrolled in Anganwadi Centre is 1172 (ages 11-18 yrs) among them 142 are school dropout adolescent girls. Frequency and percentage were used to analyse the collected data. The objectives are to find out the age of adolescent girls who are most likely to drop out from school, as well as the causes of dropout from school of adolescent girls. And it is found that school dropout is highly shown in the age group of 15-16years (40.74%). Most common responses for leaving school are due to poor economic condition. This study will provide data availability for Jiribam District, Manipur where the concern governing and related departments can bring out the best schemes for a successful developed state.

Keywords: Adolescent Girl, School dropout, Anganwadi Centre, Jiribam District

**STATUS OF WOMEN IN SLUM:
AN EMPIRICAL STUDY OF BALU ADDA MALINBASTI**

Kavya Pal

Research Scholar,
Department of Anthropology,
Dr. Harisingh Gour University,
Sagar, Madhya Pradesh, India

Shuchi Srivastava,
Department of Anthropology,
National P.G. College,
Lucknow, Uttar Pradesh, India

Abstract

In present scenario we anthropologists are mainly concerned about the vulnerable groups by highlighting their voices of sufferings, their needs and concerns to policymakers, so, as to provide assistance in implementing prevention strategies in culturally sensitive and local component manner. The study was aimed to know about the status of women of Balu Adda Malin Basti, Lucknow. All the women of the slum were included in the study. 50 households were on the basis of random sampling. For women, cultural conditions and inadequate health services compound the disadvantages of sexual and social inequality, which not only increase their vulnerability to infection but also limit their resources for treatment. Through intensive anthropological fieldwork the data was collected. By taking the interview schedule the answer to the questions were taken. Random sampling was done and then the data was analyzed and report writing was done. For accurate analysis, data acquired was related to social status of slum women in which 70% women were married below the age of 18. In case of decision making for household it was found that only 30% females had that equal right of decision making. Educational status was also very low i.e. 83% women in that basti were illiterate. The health status was also not very good. 13% of women were anemic. It has been concluded while studying about women of Balu Adda Malin Basti, Lucknow that their socio-economic and health conditions are vulnerable, because of lack of food, lack of health facilities and poverty these women living in slum are at the worst hit by these factors. To know about the social problems faced by the women, educational status, occupational status. To know what health problems, they have to face. To know their age of marriage and whether their consent was taken or not.

Keywords- Status of women, women health, income generation, health and hygiene.

**GENDER DIFFERENCES IN MEMORY PERFORMANCE TEST:
A POPULATION LEVEL STUDY FROM RURAL HARYANA, INDIA**

Debashis Bhattacharjee and Prof. K. N. Saraswathy.
Department of Anthropology
University of Delhi
Delhi-110007.

Abstract

The worldwide decline of cognitive ability irrespective of increasing age develops as an important area of study in Anthropology, Psychology and Neuroscience. Cognitive Impairment (CI) becomes unavoidable health adversity. As per the Alzheimer's Disease Centres Program, CI has two subtypes one is amnesic (CI including memory impairment) and non-amnesic (CI excluding memory impairment). However, gender-wise understanding of memory performance reported equivocal findings. To understand the gender wise memory performance through Post Graduate Institute Memory Scale (PGIMS) in the studied population. The present cross-sectional study recruited 407 community-based older participants (195 Males and 212 Females) from 15 villages in Palwal district in Haryana, India. Data collection on socio-demography has been done through modified pre-tested questionnaires. Screening of cognitive ability was done through the Rowland Universal Dementia Assessment scale (RUDAS) and domains of memory performance (remote memory, recent memory, mental balance, attention & concentration, delayed recall, immediate recall, retention to similar pairs, retention to dissimilar pairs, visual retention and recognition) were assessed through PGIMS. As per RUDAS, more than 70% of the studied populations are in the cognitively normal group. Concerning gender-wise distribution, females are significantly higher in the case group ($p < 0.001$). Cronbach's alpha for overall PGIMS has been observed 0.807. Further, a significant intra-group difference in PGIMS score has been observed between males and females of cognitively normal ($p < 0.001$) and in the CI group ($p < 0.01$). Despite increasing age, males are cognitively better in comparison to females. With respect to memory performance, males performed better than females in the studied population. The present study was an attempt to understand the rapid decline of memory performance among older females. The study advocates the implementation of women-centric health policies and schemes for sustainable development in the society.

Keywords: Memory, Cognitive Impairment, PGIMS, RUDAS

**SMART PHONE ADDICTION WITH GENERAL AND CENTRAL OBESITY
AMONG YOUNG FEMALES: PILOT STUDY FROM DELHI-NCR**

Shivani Tyagi, Priyosmita Das, Sonal Jain, K.N. Saraswathy
Department of Anthropology
University of Delhi
Delhi-110007

Abstract

Binge watching or dependence on smart phones has increased so much that it seems difficult to spend a day without smart phones. Researchers have found that young individuals who use their smart phones more than five hours a day are prone to a higher risk of obesity and are likely to have other lifestyle habits that increase the risk of heart disease. Therefore, it seems necessary to understand the potential problems caused by smart phone addiction. To determine the association between smart phone addiction with general and central obesity among young females of Delhi-NCR. A cross-sectional study was conducted among 148 females aged 18-30 years from Delhi-NCR. For anthropometric data, general anthropometric measurements of the participants such as height and weight have been recorded. Body Mass Index (BMI), Waist-Hip Ratio (WHR) and Waist-Height Ratio (WHtR) was taken in order to assess the prevalence of general and central obesity. Smartphone Addiction Scale (SAS-SV) has been used to identify the level of smart phone addiction risk. The statistical analysis of the data has been conducted using Statistical Package for Social Sciences SPSS version 22. The prevalence of general obesity among females were found to be 24%, and the variables of central obesity viz. Waist Circumference (WC), Waist-Hip Ratio (WHR) and Waist-Height Ratio (WHtR) were found to be 29.7%, 51.4% and 28.4% respectively. A positive correlation was found between waist circumference, waist-hip ratio and waist to height ratio. Smartphone addiction rate among females was found to be 48.4%. Statistically significant association was not found between obesity and its variables with smart phone addiction. Among all the variables of central obesity waist-height ratio was found to be more prevalent. As the waist circumference increases, so do the other parameters such as waist-hip ratio and waist to height ratio, indicating a considerable correlation. There exists a positive correlation between waist circumference, waist-hip ratio, and waist-height ratio. No statistically significant association was found between smart phone addiction and obesity in the present study.

Keywords: smart phone addiction, central obesity, young females

**A ASSESSMENT STUDY OF STUDY HABITS AMONG TRIBAL
COLLEGE STUDENTS OF DEOGHAR TOWN**

Kiran Pathak

A.S. College, Deoghar
SidoKanhuMurmu University,
Dumka, Jharkhand

Abstract

In the present era, study habits, academic achievement motivation and information technology especially computer and internet is playing a vital role in peoples life. This study is an attempt to find out the level of Study Habits of college students. It also investigated the Gender and Achievers difference regarding these variables. A total sample of 100 study habits of adolescents has been taken from the students of different colleges, 2x2 factorial design methods was used. Tools were used by the Study Habit Inventory developed by Dr Shahid Hassan of the PG department of Ranchi University. Data were treated by Mean, SD and t-test. The findings of the study revealed that the most of the tribal students had high level of study habit and there was significance difference between high and low achievers tribal college student in their study habits. But there was no significant difference between mean scores of Study habits of Male and Female tribal adolescent students.

Keywords: Study Habit, Gender and Achievers.

**ANTHROPOLOGICAL PERSPECTIVE OF FOLK ARTS FOR
SUSTAINABLE RURAL DEVELOPMENT:
A CASE OF “VALLITHIRUMANAMNADAGAM” THE RURAL DRAMA
PERFORMED IN SOUTHERN TAMILNADU**

P. Balamurugan,
Centre for Rural Development,
Annamalai University
K. Rajesh, Department of Music,
Faculty of Fine Arts, Annamalai University
Annamalainagar- 608002., Tamilnadu

Abstract

In India, to promote cultural avenues, the rural community engages serious actions at family and community level. Everywhere there are so many static and dynamic initiatives have been running by rural mass successfully on the basis of the cultural traditions. Like, wise to celebrate public and religious functions, Tamil culture believe the Epics and 'Puranas', the history of their family as well as public gods. The folk art is the people's art of traditions, which performs within the streets. They are called as street theatre and rural drama as popularly called as the 'Therukoothu'. Once upon a time, this street theatre was the familiar and rural mass believes much the street plays. This type of folk arts is being performed once in a year at each and every village in the Tamilnad State with traditions of the rural community. The folk arts performed in Tamilnadu vary based on the Tamil Language slang and cosmetics that reflects the local cultural traditions. At this juncture, the present paper is aimed to review the importance of the recent street play-Therukkoothu- 'VallithirumanamNadagam', which gives a great pleasure to the village public. This also trace out the cultural heritage and people's happiness through this Rural Drama, and to connotes the methodology and activities followed to make rural mass a happy and great enjoyment. The present investigation has been conducted in Four Select Villages of Two southern Districts in Tamilnadu found that there are close relationship between the people's confidents and beliefs towards enjoyment and performing street plays- Therukkoothu-'VallithirumanamNadagam'.

Keywords: Folk Arts- Rural Drama- People's Beliefs – Cultural Traditions- Village Initiatives and Entities- Heritages-Evolutions of People's Enjoyment

MEITEI SACRED SPECIALISTS

Helena Mutum

Department of Anthropology,
Manipur University, Manipur 795003

Abstract

Sacred Specialist devotes himself or herself to serve people with the help of supernatural being at individual, local as well as in community level. In Meitei Society of Manipur they are the Maibas, Maibis, Traditional Healers and the Brahmin Pujaris. They ease the people from mental and physical suffering and satisfy their belief. They are considered to be the backbone of various socio-religious ceremonies and rituals.

Sometimes some Maibas and Maibis are found to practice black magic on the request of their clients. Despite their sacred role, the sacred specialists are not considered as 'normal' social members in the society.

Keywords: Supernatural being, Maibas, Maibis, Traditional Healer, Brahmin Pujaris.

**TITLE: ROLE OF TRIBAL WOMEN:
A STUDY AMONG THE GADDIS OF WESTERN HIMALAYAS**

Shivanshi Nehria and Abhik Ghosh
Department of Anthropology
Panjab University, Chandigarh. 160014

Abstract

Gaddis, a semi-pastoral tribe in the Himalayas widely scattered on either side of the Dhauladhar ranges in Himachal Pradesh in Kangra district and Chamba district. They moved with their animals in summers to higher reaches of alpine pastures for lush green fodder and in winter they migrated towards the plains of Himachal Pradesh and the borders of Punjab to escape from heavy snow. The research was a part of Ph.D. fieldwork which was conducted from June-September 2021 among the Gaddis of Bharmour region in Chamba and Dharamshala in Kangra. The study showed Gaddi women had equal status to men and they had a well-planned division of labor. Men moved out with the herd and women stayed back at home taking major responsibilities. Gaddi women actively participated in decision-making in the family and the family hearth was the domain of women. Their active participation was seen in the Panchayat Raj elections. The paper describes the role of women in different spheres of Gaddi society.

Keywords: Gaddi, tribe, women

INFLUENCES OF GESTATIONAL GLYCATED HAEMOGLOBIN ON MATERNAL AND CHILD HEALTH: A REVIEW

Anushikha Lohagan and Vipin Gupta

Department of Anthropology,
University of Delhi, India

Abstract

HbA1c levels $\geq 6.5\%$, diagnostic of overt diabetes is recently endorsed for both general population (ADA 2015) and early pregnancy (Metzger, BE. 2010). Its higher clinical convenience, stability and lesser pre-analytical error, is advantageous over measures of blood glucose (Hughes, Ruth C.E. 2016). Proper glycoregulation is crucial to minimize adverse pregnancy and birth outcomes attributable to hyperglycaemia (HAPO, 2012). Metabolic needs of pregnancy lowers HbA1c levels much lower than among non-pregnant controls (Nielsen, L. 2004). Pregnancy-specific thresholds for glycated hemoglobin may need to be established. The aim of this review is to comprehend trimester specific role of maternal glycated haemoglobin on predicting adverse maternal and child outcomes. Higher peri-conceptional HbA1c levels are significantly associated with increased risks of adverse pregnancy outcomes (Murphy, HR et al. 2011) and decreased beta cell function in late pregnancy (Bozkurt, Latife et al. 2020). In later trimesters, elevated HbA1c levels are significant predictors of pre-eclampsia, preterm delivery and perinatal death and excessive fetal growth (Damm, Peter et al. 2014). Second trimester and postpartum HbA1c levels are less predictive of glucose intolerance (Hughes, Ruth C.E. et al 2016). HbA1c at third trimester is a powerful independent predictor of macrosomia (Ivers, I M et al. 2002).

Keywords: HbA1c, glycated haemoglobin, pre-eclampsia, preterm delivery, perinatal death, glucose intolerance, macrosomia.

**ASSOCIATION OF FOOD HABITS WITH ADOLESCENT
HYPERTENSION: A STUDY FROM MANIPUR**

Malvika Yumnam

Department of Anthropology
Manipur University
Imphal

Abstract

Hypertension is one of the major concerning health issues worldwide. Lately, adolescent hypertension has been on the rise with change in diet and lifestyle as one of the probable contributing factors. To study the association of food habits with different parameters of hypertension among the adolescents of Manipur. This cross-sectional study includes 728 adolescents of the age range 17-19 years comprising of 470 males and 258 females of Manipur, India. Blood pressure measurements were taken using mercury sphygmomanometer and average value of three measurements was recorded. Statistical analyses were calculated using IBM SPSS version 23. Statistical analysis showed significant association of hypertension with consumption of salty food ($P < 0.05$, $\chi^2 = 12.28$), junk food ($P < 0.05$, $\chi^2 = 6.07$) and sugar sweetened drinks ($P < 0.05$, $\chi^2 = 8.37$). MAP was also found to be significantly associated with sugar sweetened drink consumption ($\chi^2 = 6.96$, $p < 0.05$). The study highlighted the association of salt, sugar and junk food consumption with hypertension among the adolescents of Manipur.

Keywords: Adolescent hypertension, Food habits, Sugar, Salt, Junk-food consumption

UNDERNUTRITION AMONG ADOLESCENT IN INDIA: A REVIEW

Vaidehi Goswami and Shivani Chandel
Department of Anthropology,
University of Delhi

Abstract

Adolescent is a significant period of human growth and maturation. Optimal growth and development during adolescent required adequate nutrition but developing country like India with largest adolescent population in the world reported to face higher prevalence of malnutrition. So, the aim of this review paper is to analyze the prevalence and determinants of undernutrition among adolescent of rural India. Search Engines such as PubMed, SCOPUS, Google scholar and Science Direct were included to extract academic data (from 2012 to 2022). Total of 18 studies were selected for this review. It was found that prevalence of stunting was higher among adolescent girls and thinness was higher among adolescent boys. Most common risk factors of undernutrition were socioeconomic status, WASH practices, food insecurity and, lack of awareness about government policies and programmes. More focus could be directed towards assessing reasons for disparity of undernutrition between girls & boys. Future studies can also study other risk factors for undernutrition such as body image perception, influence of media, mental health and addressing the gap in public policy implementation for better service delivery. Overall, improvement in nutritional status among girls could improve maternal health in future and will enable country to achieve Sustainable Development Goal 2.

Keywords: Undernutrition, Adolescent Health, Stunting, Thinness.

**VITAMIN B 12 AND FOLATE IN HOMOCYSTEINEMIA AND GLOBAL
DNA METHYLATION AMONG JAT POPULATION OF PALWAL
DISTRICT OF HARYANA**

Apoorva Sharma

Research Scholar,
Department of Anthropology,
University of Delhi

Abstract

Hyperhomocysteinemia refers to above-normal concentrations of plasma/serum homocysteine. Hyperhomocysteinemia in isolation may be associated with an increased risk of atherosclerosis and recurrent arterial and venous thrombosis. The cause is multifactorial, a combination of environmental and genetic factors, nutrition, lifestyle, and hormonal factors. Vitamin B12 and folate are major determinants of homocysteine metabolism. Hcy metabolism is predominantly controlled by epigenetic regulation such as DNA methylation, histone modifications, and acetylation. An alteration in these processes leads to epigenetic modification. Therefore, the present study aims to understand the association of Vitamin B 12, folate, and epigenetics with Homocysteine levels. Additionally, the role of vitamin B 12 and folate in epigenetics was also observed. The present cross-sectional study, conducted in Palwal District of Haryana State of India. The sample included 1042 men and women, aged 30–70 years, of Jat community, which constitutes a mendelian group sharing a common gene pool. The data was analyzed with the help of IBM SPSS 22. In the studied population, 58.3% (608) and 30.4% (317) individuals were found to be vitamin B 12 and folate deficient, respectively. 70.2 % (732) individuals were found to have hyper homocysteinemia. Individuals who were vitamin B 12 deficient were found to have significantly higher hyperhomocysteinemia. Individuals who were folate deficient were found to be weakly associated with homocysteinemia. The results of the present study revealed that global DNA methylation was not found to be associated with vitamin B12, folate and homocysteine in the studied population. Promoting vitamin B12 rich food, in general, and supplementation with vitamin B12 can help in lowering the homocysteine levels in the population. This can further help in lowering the risks for cardiovascular disorders.

Keywords: Homocysteine, vitamin B 12, Folate metabolism, Hyperhomocysteinemia

**BMI AND GLOBAL DNA METHYLATION: A POPULATION-BASED
STUDY FROM NORTH INDIA**

Anshika Kaushik, Sonal Jain and K.N. Saraswathy
Department of Anthropology,
University of Delhi

Abstract

Obesity is known to be strongly associated with cardiovascular diseases and cancer, the leading causes of mortality worldwide. The high prevalence of obesity is attributable to the changing life-style and gene-environment interactions. Epigenetic alterations, including changes in DNA methylation patterns, have been reported to be one of the hallmarks of various chronic diseases. However, much less attention has been given to alterations in global DNA methylation with BMI. The present study aims to explore overall variations in global DNA methylation patterns with BMI. A total of 1154 adult individuals aged 30-75 years belonging to a single Mendelian population from North India were recruited. Socio-demographic data was collected using a pretested interview schedule. Global DNA methylation analysis, of peripheral blood leucocyte (PBL) DNA, was performed using the ELISA-based colorimetric technique. SPSS version 22.0 was used for statistical analysis. Overall the global DNA methylation was found to be not associated with BMI. PBL global DNA methylation levels were found to be fairly stable among underweight and participants with normal BMI, followed by a decline in the overweight group, and a sudden rise of global DNA methylation levels in obese group. The present study reveals hypomethylation patterns in overweight individuals.

Keywords: BMI, Global DNA methylation, epigenetics, obesity

**ASSESSMENT OF MATERNAL AND CHILD HEALTH OUTCOMES
ASSOCIATED WITH POSTPARTUM DEPRESSION:
SYSTEMATIC REVIEW**

Sonia

Research scholar,
Department of Anthropology,
University of Delhi, Delhi, 110007.

Abstract

Postpartum depression (PPD) is a serious mental health problem that is directly associated with maternal health status and also has an equal impact on child health. Despite the growth of research in the area of mental health studies, there is a scarce literature available in the systematic form. The present review article is attempt to synthesize the existing literature in this area. It also aims to find out the significant risk factors associated with post-natal mental health and; how poor post-natal mental health of mothers impacts a child's health. PubMed, Web of Science, and Google scholar were independently searched to identify articles published during 2017-2021. Specifically, the literature on mental health during the post-natal period, associated risk factors, and child's health outcomes have been reviewed. Twenty-five studies met the inclusion criteria. Some Studies showed a significant relationship between post-partum depression and the poor health status of children. The results cast light on how postpartum depression create an environment that is not feasible for motherhood and child's development. Therefore, it is significant to detect and treat postnatal depression as early as possible to avoid harmful consequences. A Methodological evaluation of existing literature has been provided to identify the Gaps in the available studies. In conclusion, the review suggests the need for further studies with a large sample size and also a robust methodology is required for better conclusive results.

Keywords: Postnatal Mental Health, Maternal Health, Child's health Outcomes, Depression.

**ASSOCIATION OF MUSCULOSKELETAL DISORDERS WITH OBESITY:
A CROSS SECTIONAL STUDY AMONG
JAT FARMER OF HARYANA, INDIA**

Chonsing Shimrah and Shivani Chandel
Department of Anthropology,
University of Delhi, Delhi-110007

Abstract

Obesity is the greatest modifiable risk factor of MSDs. However, relatively few studies have addressed the association of musculoskeletal disorders with obesity among Indian population. Nordic musculoskeletal disorders questionnaire was used to assess the prevalence of MSDs. Adiposity indicators such as BMI, WC, WHR and WHtR was used to assess the status of obesity. SPSS software version.22 was used for all statistical analysis. Musculoskeletal disorders were more prevalent among obese males and females as compare to normal weight males and females. BMI and WHtR were the two adiposity indicators that were consistently higher among participants with MSDs. Furthermore, after adjusting all the confounders it was found that BMI pose significant risk of OR 1.770 (1.074-2.916) for shoulder pain and WHtR pose significant risk of OR 1.814(1.160-2.836) for the development of knee pain. Both obesity and chronic pain are highly prevalent and associated with high healthcare utilization. Therefore, along with early screening reduction of weight especially in terms of BMI and WHtR should be initiated in managing MSDs.

Keywords: Musculoskeletal disorders, Obesity, Farmer, India

**PREVALENCE AND PATTERN OF COGNITIVE IMPAIRMENT AMONG
RURAL WOMEN: A CROSS STUDY FROM HARYANA INDIA**

Neha Singh, Kallur Nava Saraswathy and NaoremKiranmala Devi
Department of Anthropology,
University of Delhi, Delhi-110007

Abstract

The prevalence of cognitive impairment is a growing burden in current times. The present study aims to estimate the prevalence CI among rural females. A cross-sectional study was conducted among 474 adult women from Jat community, Haryana. Data pertaining to sociodemographic and lifestyle variables were collected. MMSE tool was used to screen for cognitive impairment status. The results showed very high prevalence of cognitive impairment among the women (>80%). It was also observed that women below the age of 55 years were significantly more cognitive impaired than older counterpart. These findings strongly suggest the need for policies/interventions to improve women's cognitive health. Policy makers should focus on women-centric policies which target the rural communities.

Keywords: Cognitive impairment, women, rural community, MMSE.

SOCIOECONOMIC EMPOWERMENT OF WOMEN THROUGH SERICULTURE IN ASSAM

Julina Kashyap,
Tata Institute of Social Sciences,
Mumbai, 400088
Leena Saikia,
Mangaldai College,
Mangaldai, Assam 784125

Abstract

The paper tries to understand the lives of rural women involved in sericulture activities in Assam. The culture of silkworm and production of silk is found in most of the rural household of Assam and the rural women play important role in its activities. The objective of the study is to explore the socioeconomic upliftment of women through sericulture and to understand the challenges faced by the women in sericulture activities. The study was carried out through a qualitative methodology where 30 women were interviewed through a interview schedule which were open ended semi-structured questionnaire, as well as observation was considered to understand their role critically. The respondents were selected through a purposive sampling in three districts of Assam which is Kamrup, Darrang and Udalguri district. It is found that the involvement in sericulture activities has helped women in rural areas to enhance their livelihood. The rural women involved in commercialization of production of silk have given them the opportunity to be socioeconomically empowered by having liberty of their income generation. It is also found that most of the labor that involves women in the production of silk are mostly household spaced labor whereas, the outdoor labor would involve the men of the families. Climate change has impacted the production of silkworm which has led to low production in many locations of Assam, which has ultimately affected the livelihood of people involved in these activities. These locations are mostly near urban areas or industries. It is also found that the modern machines and technologies are not properly introduced and cannot be used as most of them are top to bottom approach based. It is suggested that the government initiatives need to be from the bottom-up approach. As we know the real development of a place will occur if women are empowered, and to reduce poverty and achieve most of the SDGs, upliftment of women socioeconomically is vital.

Keywords: Sericulture, women empowerment, SDG, socio-economy, livelihood.

OBESITY AND HYPERTENSION AMONG YOUNG ADULTS OF DELHI

Sumit Mishra,
Research Scholar,
Department of Anthropology,
University of Delhi

Abstract

Obesity and Hypertension are the most important risk factors for cardiovascular diseases (CVDs) which in turn are the leading cause of premature death worldwide. Our study aimed to determine the association of overweight and obesity with hypertension among young adults. This study included a total of 200 adults (85 men and 115 women) aged between 18-30. Anthropometric measurement and blood pressure were measured using standard procedures. Statistical methods such as Chi-square and Binary logistic regression were used. Prevalence of BMI ≥ 23 (Overweight+ obese) was 48% (52.1% males & 47.9% females) while hypertension was 23% (51.1% males & 48.9% females) in the studied population. The binary logistic regression, in terms of OR and coefficient analysis, revealed that high BMI is significantly associated with 2-fold increased risk for hypertension (OR 2.044, 95% CI= 1.046-3,933). This study shows a high prevalence of obesity and hypertension among young adults, males were more obese and hypertensive as compared to females. The risk of obesity and hypertension in young individuals requires urgent awareness.

Keywords: Obesity, hypertension, young adults

**IMMUNE CELLS IN PRETERM PREMATURE RUPTURE OF
MEMBRANES: A HOSPITAL-BASED CASE CONTROL STUDY
FROM DELHI (INDIA)**

Sweta Prasad¹, Jyoti Mishra², Manju Puri³, Kallur Nava Saraswathy⁴

¹Department of Anthropology,
University of Delhi, Delhi, India.

²Clinical Solutions,
Elsevier.

³Department of Obstetrics and Gynaecology,
Lady Hardinge Medical College, Delhi, India.

⁴Department of Anthropology,
University of Delhi, Delhi, India

Abstract

For a successful pregnancy and to accommodate the semi-allogenic foetus, a controlled immune modulation is necessary. Understanding the process of labour at the cellular level is crucial for comprehending the pathophysiology of preterm labour because preterm birth is a significant contributor to neonatal morbidity and mortality. To understand the role of T regulatory cells (Treg cells), B cells, T cells and Natural Killer cells in the causation of preterm premature rupture of membranes. The present study comprised of 13 PPROM cases and their gestation matched 13 controls. 5 ml of blood sample was drawn from all the participants and was used for estimation of cellular counts of B cells, T- cells, NK cells and Treg cells. PPROM cases had a significantly lower count of CD4+ T lymphocytes, Tregs (CD25+/127-) and Tregs (Foxp3+ of CD25+/127-) as compared to controls. However, count of B cells (CD19+), NK cells and NKT cells was similar in PPROM cases and controls. Normal human pregnancy is associated with elevated number of Treg cells. In the present study, the significantly declined count of Tregs among PPROM cases is suggestive of the reduced immune suppression which may be contributing to preterm premature rupture of membranes and preterm delivery.

Keywords: Preterm births, Premature rupture of membranes, Pregnancy, Immune cells, B cells, T- cells, NK cells, T regulatory cells.

**GENDER DIFFERENCES IN PREVALENCE AND SYMPTOMS OF
DEPRESSION AMONG ELDERLY:
A POPULATION-BASED STUDY FROM NORTH INDIA**

Vineet Chaudhary and Kallur Nava Saraswathy
Department of Anthropology,
University of Delhi, Delhi-110007

Abstract

The study aimed to understand the differences in prevalence and symptoms of depression among elderly females and males of a North Indian community. A total of 270 individuals (55.9% females) aged 60 and above belonging to the Jat community of Palwal, Haryana, North India were recruited. Sociodemographic data were collected using a pretested and modified interview schedule. Screening for depression and depressive symptoms was performed using Patient Health Questionnaire-9 (PHQ-9) and individual items of PHQ-9 respectively. The prevalence of depression was found to be 45.9%, 56.3%, and 32.8% in the overall study sample, among females and males respectively. The severity of hopelessness, sleep and appetite issues, fatigue, and suicide ideation was found to be significantly higher among females than among males in the overall study sample. No significant difference in the severity of other symptoms was found between females and males. When stratified for depression status, females were found to have more severe sleeping issues than males in both depressed and non-depressed groups. No difference in other depressive symptoms was found between males and females in depressed and non-depressed groups. Findings of the study indicate a huge burden of depression among elderly women not only in terms of prevalence but also in terms of severity. Women, regardless of their depression status, appeared to face sleep-related issues more commonly than their male counterparts.

Keywords: depression, elderly, symptoms, sleeping issues, hopelessness, suicide ideation

**MENSTRUAL HYGIENE PRACTICES AND CULTURAL TABOOS:
A STUDY AMONG ADOLESCENT GIRLS OF MANIPUR**

Elizabeth Lalramnghaki

Research Scholar,
Department of Anthropology
Manipur University, Imphal-795003

Abstract

Menstruation can be easily understood as the monthly bleeding of non-pregnant women of child-bearing age. It has always been surrounded by various perceptions and cultural taboos in different societies. In India, even the mere mention of it has been a taboo even to this date, the cultural and social influences appear to be a hurdle for advancement of knowledge of the subject. Inadequate knowledge and misunderstanding of it can lead to unhygienic menstrual practices and thus, can expose women to adverse health outcomes. In the study, an attempt was made to understand the hygienic practices and cultural taboos associated with it among the adolescent girls of Manipur.

Keywords: Menstruation, Menstrual Hygiene, Knowledge, Cultural taboos, Adolescents,

**ASSOCIATION OF FERTILITY WITH SOCIO-DEMOGRAPHIC
FACTORS AMONG THE NYISHI OF ARUNACHAL PRADESH**

Erika Pebam

Research Scholar

Department Of Anthropology

Manipur University, Canchipur, Imphal – 795003

Abstract

Fertility is the physiological capacity to conceive or bear children, and also it reflects the health status of the women. A study was conducted among the Nyishi married women of Arunachal Pradesh to understand the association of fertility with socio-demographic factors. The present study shows non-significant association between age of menarche, age of marriage, educational status, occupations and income of the respondents with the mean number of births. Also, there is less difference between the number of conceptions and number of live births. Of these various factors included in the study, contraceptive is the only variable that has significant effect on conception.

Keyword: fertility, conception, occupation, marriage.

**YOUNG MATERNAL AGE AND ADVERSE PREGNANCY OUTCOMES:
A CROSS-SECTIONAL STUDY**

Thangjam Chitralkha Devi

Department of Anthropology
Manipur University,
Canchipur, Imphal – 795003

Abstract

Adverse pregnancy outcomes are the major cause of morbidity and mortality in both mothers and children, particularly in low and middle-income countries. Limited studies on APO have been carried out among the Northeast Indian populations. This study aimed to identify the impact of young maternal age on pregnancy outcomes. The young maternal age is statistically significantly associated with PIH, Placenta previa, UTI, preterm delivery, neonatal complications, and postpartum complications. The findings confirm a positive impact of young maternal age on adverse pregnancy outcomes. These results may help in developing maternal health promotion strategies to prevent perinatal and maternal outcomes associated with young maternal age in the studied population.

Keywords: APO, young maternal age, preterm delivery, postpartum complications

**IMPACT OF COVID-19 ON SOCIO-ECONOMIC STATUS OF RURAL
POPULATION OF BUXAR DISTRICT, BIHAR, INDIA**

Deepak Kumar

Research Assistant

Department of Anthropology

Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya,
Wardha

Abstract

The whole world has been affected by the Corona virus. The disease caused by virus has been by the World Health Organization COVID-19 was named and the disease was declared a global pandemic. The impact of this pandemic has been found in education, economic, health, employment. It has been direct and indirect impact on the all the developed to developing countries of the world. Due to the suddenly suspension of all activities, there was a situation like starvation in front of people due to the closure of employment along with fear. In India, a large population live in rural areas. They are depended on agriculture, business, daily wages, migration etc. The purpose of the study is to evaluate the impact of COVID-19 on the socioeconomic status of the people of rural areas. The present study has been conducted on Buxar district. This study has been selected Mahdah, Harikisunpur, Nadav and Kulharia. In the study, 200 households have been selected by purposive sampling method. Information has been collected from door to door from the available adult person. In the present study, it has been found that in the rural areas of Buxar district, the impact of COVID-19 has been on agriculture, daily labour, business, private jobs etc. School education has suffered a lot due to COVID-19 in rural areas. Apart from this, there has been a lot of migration from cities to rural areas due to COVID-19, due to which competition in this sector has increased. Along with this, due to lack of awareness of COVID-19 in rural areas, due to rumors and superstitions, negligence has been found in its defense.

Keywords: SES, Covid-19, Rural Population,

**PATTHARKATTA / KANJARS: A DE-NOTIFIED TRIBE
OF UTTAR PRADESH**

Gaurav Mishra

Post Doctoral Fellow,
Dr Ambedkar International Centre
Ministry of Social Justice and Empowerment,
government of India,
15 Janpath, New Delhi

Abstract

The Pattharkatta or Kanjar are a nomadic and primitive group of hunters and gypsies. Locally, these are also known by various names in various locations (Mishra, 2017). They are designated by society as "Born Criminals," and their innumerable silent sacrifices are never recorded in history books. These people, who according to government records are "De-notified," live in the most appalling conditions. Numerous measures have been attempted by the Indian government and several state governments to assist in their reintegration into society, but no results have been seen as of yet. In spite of seventy years of Indian independence, these de-notified but honourable people of society still find themselves at a crossroads or struggling to define their identities. The current paper is an effort to carry the torch for them.

Keywords: De-notified Tribes, Criminal Tribes, Kanjar, Uttar Pradesh

HEALTH CARE SYSTEM OF THE KOM IN CHANGING WORLD

K. Grace Kom and MC Arunkumar
Department of Anthropology
Manipur UniversityCanchipur
Imphal - 795003

Abstract

The definition of disease changes over time due to increasing expectations of health or due to changes in diagnostic ability. Social and economic reasons, too, have played an important role in redefining disease and its health care. Though the height of science and technology has reached the moon, traditional medicine remains integral to our health system. Integrating this traditional medicinal knowledge with advanced modern healthcare would improve research and address awareness of the health of tribal communities. Thus, this study explores the healthcare practice among the Kom tribe of the North-Eastern State of India, contributing knowledge to the changing world.

Keywords: Disease, Healthcare, Medicine, Traditional knowledge.

**DIETARY FACTORS AND ITS ASSOCIATION WITH KIDNEY STONE
DISEASE: A CASE-CONTROL STUDY**

Henry Konjengbam

Research Scholar

Department of Anthropology

Manipur University, Canchipur

Imphal - 795003

Abstract

Kidney stone disease is one of the most prevalent urological conditions with multiple contributing factors. Diet is one of the significant risk factors for kidney stones. In the present case-control study of 200 Meitei adults (case = 100; control = 100), intake of boiled foods, milk, fruits, water, meat, salt-rich foods, and coffee/tea were found to have a significant statistical association with the formation of kidney stone. Higher consumption of water, milk, boiled foods, coffee/tea, and fruits was found to be protective against the formation of kidney stones. At the same time, higher intake of meats and salt-rich foods were more prone to the disease.

Keywords: Diet; risk factors; meats; water; salt-rich foods; milk; fruits; coffee/tea.

**ASSOCIATION BETWEEN GLOBAL DNA HYPOMETHYLATION AND
BLOOD PRESSURE: A POPULATION-BASED STUDY
FROM NORTH INDIA**

Imnameren Longkumer and Kallur Nava Saraswathy
Department of Anthropology,
University of Delhi,
Delhi-110007

Abstract

Hypertension drives the global burden of stroke and cardiovascular diseases. It is a complex disorder with multifactorial etiology, involving the interactions of both genes and environment. Recently, epigenetic markers, especially DNA methylation, has been implicated in hypertension pathophysiology. The present study aimed to determine the relationship between global DNA methylation and blood pressure among a Mendelian population from North India. This was a cross-sectional study from Haryana and recruited adults aged ≥ 30 years (N= 1542). Blood pressure was measured by mercury sphygmomanometer and blood samples were collected. DNA was extracted for estimation of global methylation level using ELISA-based colorimetric technique. The results revealed significant global DNA hypomethylation among both high SBP (≥ 140 mmHg) and DBP (≥ 90 mmHg) groups compared to their normal counterparts ($p < 0.05$). Correlation analysis demonstrated an inverse relationship between global DNA methylation and blood pressure [SBP ($r = -0.031$) and DBP ($r = -0.022$)], albeit with no statistical significance. The present study adds to the increasing evidence that DNA hypomethylation may be linked to the molecular pathogenesis of hypertension, and it can be utilized for hypertension management and monitoring of clinical outcomes.

Keywords: Hypertension; Epigenetics; 5-Methylcytosine; Global DNA hypomethylation; Mendelian population; Hypertension management

**PRELIMINARY GEO-ARCHAEOLOGICAL INVESTIGATION ON LOWER
SUBARNAREKHA VALLEY, JHARGRAM DISTRICT, WEST BENGAL**

Chandni Roy and Avick Biswas
Department of Anthropology,
Vidyasagar University

Abstract

Recently late Acheulian artifacts consisting of handaxes, choppers, pointed picks, scrapers made on quartzite and quartzitic sandstone have been discovered in ferricritised alluvial fills between *Gopiballavur* and *Rameswaram* temple covering a stretch of about 30km of the lower Subarnarekha River. Artifacts occur in stratified context, about 8 to 10 km below the fill surface and about 5km south of the present bank of the river. Stratigraphically, the basal bedrock is strong ferricritised boundary cobbly bed (FBB) without any artifact. The FBB is unconformably overlaid by brownish-grey mottled clay (BGMC) with lenses of ironstone bands, deposited in the fluvial-lacustral environment. The BGMC is conformably covered by the cobbly pebbly moderately ferricritised gravel with late Acheulian artifacts. The weathered nature of artifact bearing gravel, its present location, about 5km away from the modern channel indicates the relict nature of the fluvial fill. On the other hand, the site near *Rameswaram* temple with flake artifacts in Palaeo-gravel bar capped by ferricritised alluvial fill (10m thick) 20 m above the present channel of the Subarnarekha probably suggest that late Acheulian activity in Palaeo-Subarnarekha is most likely to be the middle Pleistocene age.

Keyword: Geomorphology, stratigraphy, ferricrete, Palaeo-environment, artifact, Acheulian

**ASSOCIATION OF ACE I/D POLYMORPHISM WITH HYPERTENSION
AMONG YOUNG ADULTS OF DELHI**

Seyielenuo Suokhrie and Naorem Kiranmala Devi

Department of Anthropology,
University of Delhi, Delhi-110007

Abstract

Angiotensin-converting enzyme (ACE) is a key enzyme in the Renin-angiotensin system (RAS), which regulates blood pressure in the human body. Many studies have found an association between the ACE insertion (I) or deletion (D) and essential hypertension. The purpose of this study was to see any possible association between ACE I/D polymorphism and essential hypertension among young adults between the age of 18-30 in Delhi. A total of 201 individuals fulfilling the exclusion and inclusion criteria were recruited. Age and sex-matched individuals were selected and categorised as normotensive (N=145) and hypertensive (N=49). DNA samples were isolated by salting out method (Miller, 1988) and amplified by PCR using standardised protocol and analyzed in 2% agarose gel. The overall prevalence of hypertension for young adults in Delhi was found to be 25.3%. The frequency distribution of I and D allele was 0.38 and 0.62 respectively. There was no significant difference in the distribution of genotypes pertaining to ACE I/D polymorphism with hypertension and indicated that ACE I/D polymorphism posed no additional risk for hypertension in the studied population. However, socioeconomic variable (education) was found to be a risk factor for hypertension. Thus, the present study indicates that environmental condition is posing as a risk factor for hypertension than ACE gene among young adults.

Keywords: ACE I/D polymorphism, Hypertension, young adults.

**PREVALENCE OF OBESITY AND HYPERTENSION:
A STUDY AMONG THE ADULT POPULATION OF DELHI**

Kirti Rao and Shivani Chandel

Department of Anthropology,
University of Delhi, Delhi-110007

Abstract

Hypertension, and obesity are common health conditions with major public health implications that tend to co-occur in an individual. Ever since the outbreak of the coronavirus pandemic, there are overwhelming reports of growing prevalence of these health symptoms worldwide. Therefore, the present pilot study aims to find the prevalence of obesity and hypertension among the adult population of Yadav community in Delhi, an endogamous population, one of the oldest communities residing in Delhi. Cross-sectional data was collected on 200 individuals, 18-55 age group, residing in different areas of Delhi. Participants were recruited based on inclusion/exclusion criteria. General information and, somatometric measurements were collected according to ISAK protocol. Blood pressure was recorded and hypertension status was defined according to the ACC/AHA hypertension treatment guidelines. High prevalence of obesity (73%) was observed in the studied population. Along with it, waist circumference (WC), Waist-to-hip ratio (WHR) and waist-to-height ratio (WHtR) were also measured to capture central obesity. It was found that 78.5% (WC), 80% (WHR) and 84% (WHtR) of the total population were at risk. Furthermore, 35.5% of people were diagnosed with hypertension. The prevalence of hypertension was higher in males than females. On the other hand, prevalence of obesity was recorded higher in females than males. To the best of our knowledge, this is the first study to find the prevalence of hypertension, and obesity among the adult population of yadav community in Delhi. High prevalence of both obesity and hypertension were recorded among the participants. This might be due to less physical activity, unhealthy dietary food intake, increased stress level during pandemic. Therefore, there arises an urgent need for increasing awareness regarding physical activity (especially of leisure-time) and healthy lifestyle through community specific intervention programs considering diverse socio-cultural practices in our country.

Keywords: obesity, hypertension, sedentary lifestyle

TRADITIONAL KUMAR POTTERS OF DIBRUGARH DISTRICT, ASSAM

Anjana Sarmah,
Department of Anthropology
Nandalal Borgohain City College
Dibrugarh, Assam

Abstract

Pottery making is an age-old traditional occupation of human civilization. The process of making pottery from a particular type of clay on a wheel or by hand reflects traditional knowledge. Among the Kumar, women are the artisans who have practising pottery making without a wheel for centuries ago as their traditional occupation. It is their hereditary pursuit. With changing socio-economic situations this tradition is constantly disappearing. In this paper, an attempt has been made to examine the present status of crafts, artisans, the technique of pottery production and the sale of finished products to create a strong database of this age-old tradition.

Keywords: Traditional knowledge, artisans, hereditary

OUTCOMES OF SPORTS EVENTS ON HEALTH PROMOTION

Tongbram Sarika Devi and **Shivani Chandel**

Department of Anthropology,
University of Delhi

Abstract

The 2030 Agenda for Sustainable Development acknowledges sports as a crucial facilitator of sustainable development. And extensive researches have provided that sports have a positive impact on health, psychological development, and personal growth. As a result, many local and regional based sports events and programs have been initiated to promote health in different parts of the world but the insight study of outcomes is been lacking. Therefore, the present paper aims to assess the outcomes of these events and programs. Three scientific databases such as Pubmed, GoogleScholar, and Scopus were used to search and 21 papers met the inclusion and exclusion criteria. The result of the present review shows that the outcomes of events were positively associated with expectations of event achievements for essential goals such as physical health, skills, and social affiliation in the majority of the reviewed studies. Also showing positive relation with post-event autonomous motivation to participate and adopt physical activity and sports in the community as well as individual level. More regional sports events can be developed if the motivational differences between gender and common barriers such as time restrictions, fatigue and lack of energy, financial restrictions, and health-related restrictions are taken into account.

Keywords: Sports, physical activity, motivation, public health, health promotion.

**ASSOCIATION OF REPRODUCTIVE TRAJECTORIES OF WOMEN
WITH COGNITIVE IMPAIRMENT.:
A CROSS-SECTIONAL STUDY FROM HARYANA, INDIA**

Kevingu Khate, Kallur Nava Saraswathy and Naorem Kiranmala Devi
Department of Anthropology
University of Delhi, Delhi-110007

Abstract

As the global burden of cognitive impairment (CI) increases, it has become a recent concern for women with higher prevalence of CI. Hence this study aims to examine if there is any association between reproductive profile of women and cognitive impairment. A cross-sectional study was conducted among 474 adult women from Haryana, whereby data pertaining to female reproductive profile was collected. MMSE tool was used for screening their cognitive impairment status. The results indicated that menopause status and number of live births were significant contributors to CI. Women with five or more live births were at significant increased risk for mild and moderate/severe CI (OR= 3.83 and 7.75 respectively). Women who had undergone natural menopause were also at significant increased risk for CI (OR= 3.55 and 8.09 respectively). This might be due to hormonal imbalances which women experience.

Keywords: Cognitive impairment, reproductive profile, menopause, MMSE.

**ASSOCIATION OF OBESITY WITH BACK AND JOINT PAIN AMONG
THE WOMEN VENDORS OF IMA MARKET, MANIPUR**

Nongthombam Achoubi Devi

Department of Anthropology,
Mangolganbi College, Ningthoukhong,
Manipur University, Imphal

Abstract

The women vendors of Ima market of Manipur are vulnerable to musculoskeletal stress and strain. These women have given less importance on their own health. Considering this limitation, the present study attempts to understand the association of body fatness with back and joint pain of these women. A sample of 219 women were included in the present study. The incidence of back and joint pain among these women vendors is found to be 23.8%, and it is found to be associated with obesity. The present study put forth the concerns of chronic pain management among these women through controlling fatness as it may affect their overall health.

Keywords: Obesity, joint pain, women

**TECHNOLOGICAL INTERVENTIONS IN TRAVEL
AND TOURISM PEDAGOGY**

Arvind Upasani

Department of Travel and Tourism,
RTM Nagpur University, Nagpur.

Abstract

Education in travel and tourism has gone into a great transformation since the advent of online and internet based instructional methods. The pedagogy has evolved from teacher's linear lecture to an offline class to the collaborative sharing of online space equally with students and teachers. Different models and theories have come up indicating the need of learner as the major motivating factor in the online mode of class room. The use of technology merely as a tool to impart the information by way of an online lecture is not the transformation of education. The present paper discusses the various technological innovations which have transformed the pedagogy of tourism and travel.

Keywords: Travel and Tourism, Education, Pedagogy, Technology, Online Education, Digital Innovations

**CHANGING TRIBAL LIVELIHOOD STRATEGIES:
AN ETHNOGRAPHIC STUDY FROM UDAIPUR, RAJASTHAN**

Krishna Kant Yadav
Research scholar
Department of Anthropology
University of Delhi,
Delhi, 110007.

Abstract

Dependency of tribals on forest, livestock and farming for their Livelihood has been a historical fact in all parts of India. The forces of neoliberal development have enforced them to reduce their livelihood dependence on forest and land based natural resources. Today, a large number of tribals, belonging to the most marginalized sections of the Indian society, are forced to migrate from their native land and survive on daily wage. Even though the state has made certain constitutional provisions such as PESA and FRA etc. To ensure their rights on the natural resources of land and forest, the situation on ground has only got worse over the period of time. The continuous deprivation of the livelihood base has forced tribals to migrate to other places in search of new means of livelihood. The present paper presents an ethnographic account of one such region of southern Rajasthan which long suffered with the inter-state migration and child labor due to the failing livelihood base at the community and household level. Describing the ongoing changes and their bearing on tribal populations, the paper demonstrates how renowned NGOs livelihood interventions helped the tribals to reduce migration and provide them with sustainable livelihood alternatives.

Keywords: Tribal livelihood, NGO, Migration, FRA, Kotra, Udaipur

**TO STUDY THE PREVALENCE OF OBESITY AND ASSESSMENT
OF PRAKRITI BODY TYPES AMONG THE ADOLESCENTS OF
MANIPUR, NORTHEAST INDIA**

Rajkumar Mahendra Singh

Research Scholar

Department of Anthropology

Dhanamanjuri University

Manipur

Abstract

Overweight and obesity are defined as abnormal or excessive fat accumulation that presents a risk to health. Nowadays there are a number of adolescents who are suffering from obesity. Anthropometric index is much related with obesity. Likewise each adolescent has different Prakriti body types. With this background, the present study was designed to understand the adolescent obesity with Prakriti body types.

Keywords: Obesity, Diseases, Prevention, Adolescent, Prakriti

**PREVALENCE OF POLYCYSTIC OVARY SYNDROME (PCOS) AMONG
THE MEITEIS OF MANIPUR, NORTHEAST INDIA**

Jeena Wahengbam

Research Scholar,
Department of Anthropology,
Manipur University, Canchipur
Imphal – 795003

Abstract

Polycystic Ovarian Syndrome (PCOS) is one of the most common endocrine disorders leading to poor fertility in women of reproductive age. The prevalence of PCOS is on the increase worldwide. It could be because of a lack of awareness of PCOS, as the disorder is heterogeneous. Moreover, unawareness of PCOS may delay diagnosis leading to long-term reproductive health and metabolic complications. Awareness and education about PCOS in young age groups would help contribute toward early diagnosis and prevention of the disorder and reduce the risk for many long-term health-related complications. Therefore, in the present study an attempt was made to assess the prevalence and knowledge of PCOS.

Keywords: PCOS, Prevalence, Prevention, Reproductive health, Knowledge

THE ROLE OF FORENSIC SCIENCE IN ADDRESSING SEXUAL ABUSE AGAINST WOMEN IN INDIA

Suraj Kataria, Sonal Jain, K. N. Saraswathy and M. P. Sachdeva
Department of Anthropology,
University of Delhi
Delhi-110007

Abstract

The Criminal Law (Amendment) Act of 2013 amended existing legislation and standards of evidence about crimes of sexual abuse and the practices of forensic scientists in India in response to the spike in sexual violence against women. Despite being a positive development, this law gave little heed to forensic evidence in sexual abuse cases, which may offer a more accurate, scientific explanation of modus operandi, help with crime scene investigation, and support prosecutions of offenders. This article has two primary objectives: to emphasize the significance of forensic evidence in fulfilling the lacunae in cases involving sexual abuse and to make recommendations on how to establish homogeneous and meticulous procedures and policies on forensic evidence collection and preservation. A broad search of various databases-ScienceDirect, Google Scholar, and PubMed, restricted to the English language was conducted. "Sexual abuse," "women," "forensic science," and "physical evidence" were major keywords used in amalgamation with appropriate Boolean operators. Full-length articles were referred to and incorporated into the study after a critical evaluation of titles and abstracts. Methods showing subjective biases and lacking scientific credibility are no longer appropriate for pursuing justice for sexually abused victims. Some of these methods, like the two-finger test used during the victim's medico-legal examination or the absence of adequate bodily harm to support perpetrator assault and victim resistance, have been generally criticized and labelled inadequate for establishing facts. Other methods still seem to be in the early stages of development and lack a uniform strategy that is widely acknowledged throughout India. The present legislative responses to sexual abuse cases do not offer best practices for the investigation and prosecution of the perpetrator. Regarding the use of forensic evidence in sexual abuse prosecutions and investigations in India, more progressive measures are required. The presence of physical evidence offers a more unbiased, scientific description of events that can assist in the correct reconstruction of sexual abuse crimes and help bolster the case against a perpetrator. The documenting, collecting, analysis and preservation of physical evidence retrieved from the crime

scene, victim, witnesses, and the perpetrator(s) must follow systematic and rigorous protocols. Educated and skilled professionals should also be used in the investigation of these crimes to assure that forensic evidence is correctly gathered and any necessary investigations in a criminal case are properly completed. To coordinate efforts in cases of sexual assault against women, these professionals should collaborate in interdisciplinary teams.

Keywords: Sexual abuse; women; forensic science; physical evidence; criminal investigation

**SCREEN TIME AND ITS ASSOCIATION WITH BODY ADIPOSITY AND
HYPERTENSION AMONG THE SCHOOL GOING ADOLESCENTS OF
MANIPUR, NORTHEAST INDIA**

Aheibam Robertson Singh
Department of Anthropology,
Manipur University,
Imphal, Manipur, 795003

Abstract

The study examines the association of screen time with body adiposity and hypertension among the school-going adolescents of Manipur. Anthropometric parameters and self-response to screen time were collected from 728 school-going adolescents of both sexes aged 15-19 years. 21.3 % male spent > 6 hrs at the screen and 14% female spent > 6 hrs at the screen. The study found the association of abdominal obesity as measured by WC with the screen time among the adolescents of Manipur in male ($p < 0.05$). Longer screen time may deteriorate adolescents' health status as it reduces physical activity time.

Keywords: Screen time, body adiposity, hypertension, adolescents, northeast India.

A FORENSIC STUDY ON PATTERNS OF MARITICIDE IN WEST BENGAL

Babul Bandyopadhyay

Chemistry Division Forensic Science Laboratory
Kolkata -700037

Abstract

The rate of female criminality associated mariticide in West Bengal gradually increased with time, as reported. But no systematic detail was accounted in legal medicine schedule till date. This study depicted the patterns of mariticide through forensic case analysis. The methods of unnatural deaths followed were hanging (n=5), smothering (n=4), strangulation (n=7), burn injury (n=2), bullet injury (n=2), stabbing (n=2), cut-throat injury (n=7) and poisoning (n=8) etc. In eight cases anxiolytic medicines were administered with other means, as detected in forensic examination. In most cases (n=30), the purpose of homicides committed were extramarital love affairs of wives. The fast-changing life style psychology mattered to escape out of the values and ethics of the auspicious marriage tie up and relations at the family institution. This pilot study builds the cornerstone of advanced research.

Keyword: mariticide, female criminality, extra marital love, homicide

**NUTRITIONAL STATUS OF TRIBAL WOMEN: A CROSS-SECTIONAL
STUDY AMONG BHARIA AND KOR KU TRIBES OF CENTRAL INDIA**

Ashok Kumar Yadav

Dr. Harisingh Gour Vishwavidyalaya, Sagar,
Madhya Pradesh

Abstract

This cross-sectional study conducted in Central India is an attempt to comparatively understand the nutritional status of the Kor ku and Bharia women. They are primitive tribe and most vulnerable and disadvantaged sections of society. The study was conducted on a total of 326 tribal women (162 Bharia and 164 Kor ku) aged 16 to 71 years. Nutritional status was assessed through WHO criterion by using anthropometry measurements such as bodyweight, stature, sitting height, mid-upper arm circumferences, skinfolds' thicknesses, waist-height ratio waist-hip ratio (WHR), body fat percentage & BMI using standard protocols. The results showed that there was significant difference found in body fat percentage ($t=2.46$; $p<0.05$) and subscapular skinfold ($t= -2.86$; $p<0.05$) between Bharia and Kor ku tribe. The prevalence of undernutrition was greater among Kor ku women (40.2 %) than Bharia women (33.3 %).

Keywords: Tribal, Women, Nutritional status, Anthropometric measurements, BMI

**COMBATING COGNITIVE DYSFUNCTION IN CHRONIC KIDNEY
DISEASE PATIENTS THROUGH PHYSICAL ACTIVITY:
NEED AND IMPORTANCE**

Shikha and U.V. Kiran

Department of Human Development and Family Studies,
School of Home Science,
Babasaheb Bhimrao Ambedkar University,
Lucknow, Uttar Pradesh

Abstract

CKD (chronic kidney disease) is a non-communicable usually caused and manifested by diabetes and hypertension. It worsens over time and leads to both physical and psychological health problems. Decreased renal function is associated with cognitive dysfunction, depression, and poor quality of life. In chronic renal disease patients, a lack of mental and physical activity impairs cognitive performance. So, the challenge is to develop an integrated treatment model for physical activity and exercise that is safe, feasible, and sustainable for chronic kidney disease patients and also educate patients on adherence. Therefore, the goal of this article is to educate patients, their caregivers, and kidney care specialists about the importance of physical activity and exercise in all phases of CKD.

Keywords: Cognitive Dysfunction, Cognitive Impairment, Chronic Kidney Disease, Cognitive Function in Kidney Disease, Physical Activity, and Cognitive Function.

**ONE CARBON METABOLIC PATHWAY GENE POLYMORPHISM IN
OBSTRUCTIVE VENTILATORY PATTERN:
A STUDY AMONG RURAL POPULATION OF NORTH INDIA.**

Saheli Dey and Suniti Yadav

Department of Anthropology

University of Delhi

Delhi-110007

Abstract

Obstructive ventilatory pattern (OVP) as defined by $FEV_1/FVC < 0.8$ is important as it may cause decline in lung functions. Genetic predisposition to OVP through the one-carbon metabolic pathway is one of the important as homocysteine is an inflammatory marker in this pathway. In the present study, spirometry was performed on 969 individuals to identify OVP. MTHFR C677T, CBS844ins68, MTRRA66G, and MTR A2756G gene polymorphisms were screened on the DNA samples from study participants. MTR A2756G and MTRR A66G gene polymorphisms were not following Hardy-Weinberg equilibrium. Only CBS844ins68 genotype posed significant reduced risk for OPD ($p < 0.05$).

Keywords: OVP, MTHFR, CBS, Spirometry, homocysteine

WOMEN'S ROLE AND SDGS IN DEVELOPMENT OF NORTH INDIA

Aishwarya Awasthi

Department of Community Medicine & Public Health KGMU,
Lucknow, Uttar Pradesh

Asif Ahmad Siddiqui

Research Scholar
Department of Environmental Science,
Integral University lucknow

Abstract

The Sustainable Development Goals (SDGs) are the goals accepted by the world's organisations and the UN General Assembly in September 2015. Gender equality and therefore the management of women and girls is one of its vital goals. Indian women are perpetually disadvantaged when it comes to exercising their economic, political, and socio-cultural rights. Therefore, the main focus of the project is to explore the plans and policies initiated by the government of the Union of India that support the initiatives for girls' management and gender equality in the Union of India to attain UN SDGs. The study is explorative and analysed qualitatively by the victimisation of secondary information resources. The paper's findings show that, in the process of achieving the SDGs, the Indian government is making promising efforts to reduce gender disparities and achieve women's leadership in all spheres. These efforts would require effective and correct implementation to curb the menace of gender difference and to attain ladies' management. Within the space of education, women have a major role to play that produces them as the impetus for possible development. In India, the situation of women in terms of their status, education, security, economic condition, and health is different on paper than it is in reality. There is so a lot to do and the sustainable development agenda is the only guideline for it. India and the world should follow it as a plan for effective results.

Keywords: SDGs, Women, North India, Disparities, Agenda, Gender.

ENVIRONMENTAL IMPACT ON HISTORICAL MONUMENTS IN INDIA : CONSERVATION ISSUES AND CHALLENGES

Ajay Kumar Pandey

Assistant Superintending Archaeological Chemist
Archaeological Survey of India, Science Branch, Patna

Abstract

Our country India has rich cultural heritage in comparison to other nation of the world result of which at present there are more than 3650 numbers of ancient monuments and archaeological sites and remains in India. These historical monuments located in different environmental and geographical condition are built up of different building material like some are of marble, while others are of sand stone and bricks of different colour, instead of these some are also of granite and schist stone. Environmental factors affect the condition of constituent material of which the building masonry is built up of, which in turn affect the durability of building material and thus in this way unhealthy environment reduces the life span of historical monuments. Thus environmental factors affecting the historical monuments are classified into three categories: (a) Chemical decay i.e. due to the salt affect, atmospheric pollution by pollutants like SO₂, CO etc.(b) Physical decay i.e. due to the internal stresses of the stones. (c) Biological decay due to the acid secretion by the growth of micro-organism. This paper deals with conservation problem arising due to the impact of environment on historical monuments in India, decay mechanism of deterioration and thereafter possible remedial measures to check further, the rate of deterioration, so that life span of historical monuments in India may be enhanced.

Keywords: Cultural Heritage, Monuments and Archaeological sites, Environment, Deterioration

HASTINAPUR EXCAVATION 2021-22 : A SIGILLOGRAPHY STUDY

Tanmoy Howlader

Research Scholar,
Department of AIHC & Archaeology,
RTM Nagpur University, Nagpur

Abstract

Seals and sealings are one of the primary sources of information about the history of any culture. Hastinapur, (29° 9' N; 78° 00' E) located in the Mawana Tehsil of District Meerut, Uttar Pradesh. Locally known as Ulta-Khera, the mound rises to a height of 18 meters from the surrounding plain which lies on the right bank of Budhi-Ganga. The mound was excavated earlier by B.B. Lal in 1950-52 which brought to light the remains of five sequence of cultures beginning from OCP period to Medieval period. The mound was subjected to further excavation in the season 2021 22 under the direction of Dr. D.B.S. Gadnayaka S.A. Meerut circle, Archaeological survey of India. The recent Excavation has yielded 31 seals and sealings found from different cultural layers. The present paper focuses on the sigillographic study of those seals and sealings and placing them in a chrono-cultural context.

Keywords : Data analysis, Hastinapur, North Indian Sealings, Symbols on seals, Seal, Sealings, Sigillography, Paleography.

**RITUAL HEALER AND HEALING PRACTICE: A STUDY AMONG
SANTAL TRIBAL COMMUNITY, INDIA**

Sunita Soren

Junior Research Fellow

Department: Anthropological Survey of India
Ministry of Culture Government of India

Abstract

The present study has discussed and illustrated the social and cultural aspects of the rituals practiced by the traditional healers and their efficiency during the healing process. The traditional healer is generally designated as the Shaman and the shaman is also referred to as “Ojha” among the Santal community. And this study attempts to illustrate the nature and type of rituals practiced by the Shaman during the healing process and their effects on his patients. The study was conducted in Banksol village which comes under the East Sighbhum district of the Indian state of Jharkhand. Both emic and etic approaches have been considered for the present discourse. A shaman generally believes in supernatural powers, and ritualistic performance has knowledge about folk medicine and treats their patients. Shaman has to deal with some supernatural phenomenon including finding witches who do harm people and make them suffer from diseases, Shaman analyses urine for the detection of diseases he also analyses oil to understand the cause of the disease, perform exorcist spirits, and invoke a spirit through cultural aspects of ritual. The present study reveals that there are two types of the shamanism present in the Santal society one who treats their patients by giving medicine to them and others who treat their patients orally, in which ritual practices were part of the magical perception, new culture involved in the society as they belong from Sarna religion they follow their “Janthar Bonga”, “Marang Buru” and “Sima Bonga”, including Hindu religion god. Another finding is traditional shamanic beliefs still exist among the Santals in the present modern medicine world and the presence of medical pluralism is seen in the Santal community.

Keywords: Traditional healer, Healing rituals, Rituals practice, Exorcist spirits, witchcraft, New cultural innovations.

**COMPARATIVE ASSESSMENTS OF PRINCIPLES OF KINEMATICS
VARIABLES AMONG BASKETBALL, FOOTBALL, TENNIS
AND VOLLEYBALL PLAYERS**

P. Kulanthaivelu

Virudhunagar Hindu Nadars' Senthikumara Nadar
College(Autonomous)
Virudhuhagar, Tamilnadu

Abstract

The major goal of this study was to find out the linear kinematics principles (Splitvelocity, Average velocity, Split acceleration and average acceleration) of basketball, Football, Tennis and volleyball Players. This study gives us a foundational understanding of kinematics principles for future research on different sports. The participants were chosen at random from a diverse range of sports, including basketball (n=5), football (n=5), tennis (n=5), and volleyball (n=5) from Virudhunagar Hindu Nadars' Senthikumara Nadar College, Virudhuhagar, Tamilnadu. A 50-meter sprint test was used for collecting the data gathering. By conducting the aforementioned fitness 50-meter sprint test with participant split times, we get the kinematics variables. This study's linear kinematics variables, such as split velocity, split acceleration, average velocity, and average acceleration, were chosen. The linear regression is used as statistical technique for this study and then normal Scatterchart. The basketball and football players' deceleration, which were 48th meters. All tennis players decelerated at the 39th meter and began to accelerate around the 42nd meter. Compared to other players, volleyball players decelerate sooner. According to this research, football and basketball players were among the top in the category. The tennis players needed to accelerate more quickly. The current study strongly demonstrates that different sports demands different level of velcocity and acceleration due to their nature. Due to the lack of prior studies on linear kinematics application and its effects, this experimental investigation will offer important proof regarding how principles of kinematics variables works on different sports

Keywords: kinematics principles, Split velocity, Average velocity, Split acceleration and average acceleration, linear regression.

KALBELIYA: A SELF-IDENTITY

Kiran Kairi

Anthropological Survey of India
Ministry of Culture
Government of India

Abstract

The Kalbeliyas are a renowned dance performer group belonging to Rajasthan, North India and are majorly settled in different parts of other states of Indian Subcontinent. Despite the creation of the Kalbeliya (Kālbeliyā) dance form in the 1980s, it was recognized as a UNESCO intangible cultural heritage in 2010 predominantly. Their tradition occupation is snake charming and until 50years ago they were nomadic and presently they have adopted a sedentary lifestyle. In the recent times, the Kalbeliyas are also well-known dancing performers in the state of Rajasthan. The Kalbeliyas are Cultural Hindus and practice snake worship. It will be argued in fact that, even if in the past few years, the meaning and the content of Kalbeliya service nomadism have been going through a deep transformation which can be considered to be mainly a creative answer to a whole string of significant social changes occurring in Indian and Rajasthani society, Kalbeliyas' new occupational profile entails new forms of spatial mobility. If spatial mobility is proving to be a meaningless economic strategy as far as snake charming and begging is concerned, it is in fact yet highly effective with regard to the new professional identity of the caste. This paper aims to explain the reason for their identity loss and livelihood difficulties after the promulgations of Animal protection act.

Keywords: Kalbeliya, Cultural uniqueness, Performing Arts, UNESCO, Identity, Livelihood

**A STYLISTIC STUDY OF ANIMALS IN THE
TERRACOTTA ART OF VIDARBHA**

Mohan S. Pardhi

Department of AIHC & Archaeology
RashtrasantTukadoji Maharaj Nagpur University
Nagpur

Abstract

The relation between human and animal is incredibly old. When the prehistoric human was in hunting-gathering stage, animal meat was part of his regular diet. Scenes of hunting animals are found depicted in rock-paintings. Most of the natural rock shelters of the world where the prehistoric man lived are painted with various animal hunting scenes. Gradually he began settling and human societies were formed. In this way, two important revolutions took place, in the beginning of the tenth century BCE; in the form of agriculture and the domestication of animals.

Animals played an important role in the socio-religious and economical life of human society. Animals were used for various purposes such as food, agricultural activity, transport, hunting as well as protection. The importance of various animals is reflected in everyday life of humans as also elevating them to worship. With this, began the practice of animal worship. Animals either in abstract or physical forms were worshipped. Such figurines in clay or terracotta are reported from various Neolithic and Chalcolithic sites of the Indian subcontinent. The present paper deals with understanding the gradual development, use of ornamentation techniques for manufacturing and stylistic study of the animal figurines in a chrono-cultural framework in the Vidarbha region of Maharashtra.

Keywords: Animal figurine, Centaur, Early Historic period, Fish, Parrot, Plaque, Terracotta, Vidarbha.

**ANCIENT BEAD MAKING TRADITIONS FROM ARNI, DISTRICT
YAVATMAL, MAHARASHTRA**

Ekta P. Dharkar

Department of AIHC & Archaeology
RashtrasantTukadoji Maharaj Nagpur University
Nagpur

Abstract

The present research paper is based on the beads recovered from the Excavated site of Arni. The Arni village is located in the Yavatmal district of Maharashtra, India. It is situated 42 kms away from district Yavatmal. The Department of Ancient Indian History, Culture and Archaeology, Nagpur University, under the Direction of Professor Ajay Mitra Shastri, conducted excavations at a site locally known as *PanchaPandavaTekadi*, situated on the bank of river Arunavati in Darwha Taluka. The material obtained was Early Historic datable to 1st-7th century CE. All the cultural periods yielded beads of various shapes and sizes in varied media. The beads recovered from the excavation showed advancement in bead manufacturing technology. The region of Vidarbha has a rich history of bead manufacturing with varied forms of beads from the Megalithic sites of Mahurjhari, TakalghatKhapa, etc. InfactMahurjhari was the bead manufacturing site. The beads from Arni hitherto unpublished are displayed in the Rai Bahadur Hiralal Archaeological Museum of this Department. Various attractive colouredsemi precious stones available in the vicinity were used for manufacturing these beads. This paper aims to study the various techniques used for manufacturing precious, semi precious and terracotta beads. This will also reflect the lifestyle of people inhabiting this region, thereby contributing to Anthropological study.

Keywords: Archaeology, Arunavati, Arni, Bead industry, excavation, Megalith, Satavahana, Maurya, *Panch Pandav Tekadi*.

**ASSOCIATION BETWEEN OBESITY, HYPERTENSION, AND AGE:
AN ANTHROPOLOGICAL STUDY AMONG ADULTS OF TEMPERATURE
VARIANT DISTRICTS OF ODISHA, INDIA**

Chandan Kumar Das, B.K. Srinivas and Jayanta Kumar Nayak
Dept. of Anthropology, Central University of Odisha, Koraput-763004

Abstract

The study aims to (i) assess the prevalence of obesity, and hypertension among the adults of two temperature variant districts of Odisha, and (ii) find the association among obesity, hypertension, and age. The cross-sectional study carried out in two districts of Odisha. A total of 432 adults aged 18 and above (205 from Balasore and 227 from Koraput) from three semi-urban villages each were randomly selected for the study after giving their consent. We observed considerable prevalence of obesity, and hypertensions even among young adults, a likely result of changing lifestyles and poor dietary practices. The obesity indices were statistically related with age and blood pressure parameters. Young adults should be well aware of obesity and hypertension induced health consequences and adjusts their life styles accordingly.

Keywords: Obesity, Hypertension, Adults, Temperature Variant districts of Odisha

**MUSEUM AND PANDEMICS: IMPACT, INNOVATIONS,
LEARNING FROM CRISES**

Banita Behera

Southern Regional Centre, Mysore
Anthropological Survey of India
Ministry of Culture, Government of India

Abstract

The invisible virus created a terror among the most survived 'Wise Man' (human) who survived millions of year and seen uncountable epidemic challenges and now packed in a home with less facility. The question is now where we go from here and does this trauma will leave a permanent epidemic marks on our civilization like happened in history? The world don't want to visit those dark areas happened in early. But now this Novel COVID-19 created a whole new ball game where the entire world came into the pitch and ultimately the entire community leading to psychiatric illness. The potential of museum personals is now has been challenged to create meaningful experiences for the civilizations to overcome from this pandemic situation which is central to their service as a champion tool to identify the social values of the communities. As agents of trusted institutions the museum personals specifically the museum anthropologists are facing challenges to overcome from these challenges of inclusion and diversity and the difficulty of navigating complex social issues in this isolation situation. The healing process of our societies after the COVID-19 crisis will be long and complex for many museums as places of meeting and learning for societies. Museums have important role to play now to repair and strengthening the social fabric of communities which are affected due to this pandemic.

Keywords: Museum, Anthropology, Pandemics, History, Innovation.

**A MEGALITHIC BURIAL AT KALAMBHA, DISTRICT NAGPUR,
MAHARASHTRA : VICTIM OF PUBLIC APATHY**

Shaila O. Bhakte

Department of AIHC & Archaeology
RashtrasantTukadoji Maharaj Nagpur University
Nagpur

Abstract

Vidarbha region has a rich Megalithic Culture. Nearly eleven habitation sites and more than hundred burial sites have been reported from this region. The burial sites include Stone Circle, Cairn Circle, Cairns, Dolmens, Menhirs and Dolmenoid Cists. The present paper focuses on a newly discovered Megalithic site at Kalambha in the Nagpur District of Maharashtra. Though the site had more than a dozen Stone Circles, presently only few of them exist. Some of the stone circles have Cupmarks in considerable number. Large scale destruction of burials has been brought about by increasing land for cultivation and road laying. Lack of public awareness towards this cultural heritage of Vidarbha needs to be addressed. This paper intend to discuss the various factor responsible for the destruction of Megalithic sites in Vidarbha with comparisons drawn from such case studies in South India.

Keywords: Burials, Cairns, Cairns Circle, Cup marks, Dolmens, Dolmenoid Cists, Megalithic, Stone Circle etc.

**REVIEW: FROM THE GENESIS OF CASTE TO THE INCREASING
GENETIC LOAD IN THE POPULATION – HOW ENDOGAMY BECAME
THE INTEGRAL FUNCTION**

Ritabrata Mukherjee

Department of Anthropology
Ballygunge Science College
Kolkata – 700019

Abstract

In a caste-ridden society as of India is concerned, the manifestation of caste not only in the social sphere but also its biological attribute is of utmost anthropological significance. While it is well established that classes have become enclosed units called caste through imitation and excommunication, a hierarchical system created by the imposition of endogamy over exogamy, its implications might be severe even in the spectrum of life, livelihood and life sciences. Because of its enclosed nature, gene flow out of the unit is restricted and as a result the practice of endogamy over generations will lead to genetic isolation. Genetic isolation especially in the small, non-random sample of the population automatically decreases variations and the probability of transmission of recessive genetic disorders to the next progeny increases many folds. The paper tends to explore the biosocial implications of the caste system whose genesis lies in roots of endogamy.

Keywords: Endogamy, gene flow, genetic isolation, genetic load

**CERAMIC PRACTICES AND TYPOLOGY OF VIDARBHA- ANCIENT
WARES AND CURRENT PRACTICES**

Chetana Wadhava

PG Dept of Ancient Indian History, Culture and Archaeology
R.T.M. Nagpur University, Nagpur

Abstract

Ceramics generally comprise of hard, heat-resistant and non-corrosive materials comprising of nonmetallic minerals. The non-degradable nature of ceramics makes them a constant and essential feature of every archaeological excavation and research. From the Anthropological point of view, potteries provide a constant narrative of human creativity, innovation and technological progression. Among the uncountable varieties of ceramic wares, pottery essentially made of moist clay and hardened by heat is an omnipresent feature of human existence from Neolithic period till present. Although, the easy availability and accessibility of clay provided humans with material for pottery, the varying nature of soil lead to the evolution of several fabrics and techniques in pottery. The region of Vidarbha, a part of Central India and considered very rich in minerals and metals, was also a place of origin of various pottery types typically known for their nature, shapes and techniques. This poster aims to showcase the representative potteries of Vidarbha from earliest times and their current practices.

Keywords: Ceramics, Vidarbha, Wares, Neolithic, Central India

**EMPIRICAL STUDY ON POTENTIAL OF THE MANSAR SITE NAGPUR
FOR ARCHEOLOGICAL TOURISM**

Bhagyashri M. Hiradeve

Research scholar

Department of Travel and Tourism RashtrasantTukadoji Maharaj
Nagpur University

Abstract

The Present research paper is based on the potential of the archeological tourism at Mansar. Mansar is excavated site in Nagpur district of Maharashtra, India. An archeological site is a place where the remains of an old civilization exist, sometimes they are visible but mostly they are undercover, Mansar is one the excavated site the situated 45 km from Nagpur on the Nagpur – Jabalpur highway, it is first ticketed monument in whole vidarbha and famous archeological site. Where large excavation has been taken place, the region around the mansar is rich with archeological sites. This massive complex Mansar discovered during the excavation in 1994.the ancient town has now come on international tourist map. Over 3,000 big and small artifacts were discovered between 1996 and 2008 from the site. This paper aims to study potential of Mansar site particularly for the archeological tourism, now a day's archeological tourism or archaeotourism is a form of cultural tourism which aims to promote public interest in archeology and the conservation of historical sites.

Keywords: Archeology, Tourism, Mansar, destination, Nagpur, excavation, archeological tourism.

STUDY ON DIETARY BEHAVIOUR AMONG OVERWEIGHT AND OBESE OF DISTRICT SAGAR, MADHYA PRADESH, INDIA

Basant Kumar Sen and Rajesh Kumar Gautam
Department of Anthropology
Dr. Harisingh Gour Vishwavidhyala

Abstract

Food culture and behaviour is largely determined by environment and geo-climatic setup. Obesity is an outcome of overconsumption or energy imbalance. Sedentary life style and easily availability of energy dense food has further enhanced the problem of obesity and now it's a pandemic. More than 1.9 billion adults were suffering from overweight in 2016, while more than 650 million were thought to be obese around the globe. Balanced diet or energy intake helps in the prevention of weight gain and obesity. Furthermore, increasing prevalence of obesity is the crucial problem of contemporary world. It lead to many health related problems which affect the health care systems and the economy also. To find out the association of dietary behaviour with overweight or obesity.

A cross-sectional study was conducted on a total of 1000 respondents which were from both sexes male 417 and 587 female and belongs to BMI ≥ 25 kg/ sq. m and age range between 18-60 years. The samples were drawn from district Sagar of Madhya Pradesh. It was found that mean stature of obese respondents were 157.6 ± 9.14 cm whereas overweight respondents were taller with 159.0 ± 9.45 cm of mean stature. The comparison of dietary habits of overweight and obese indicate that the intake of high fried oily food for obese were higher 35.2% as compared to overweight (23.9%). Hence the difference was significant ($\chi^2 = 15.404$, $df = 2$, $P = 0.001$). Similar findings the prevalence of intake of highly spicy food of obese respondents were higher 52.9% as compared to overweight were (44.2%) and the difference was significant ($\chi^2 = 8.000$, $df = 2$, $P = \leq 0.05$). Dietary behaviour is one of most determinants of increasing body weight and obesity. In rural areas, the intake of oily or fried food and spicy food are one of the main factors for obesity. Whereas, the habit of alcoholism, tobaccoism and street food were higher in urban populations.

Keywords: Obesity, Smoking, Alcoholism, street food and fried food.

APPLICATION OF COMMUNICATION TECHNOLOGY TO VIRTUAL CHILDREN'S THEATRE WORKSHOPS

Radhika Pendse and SanyuktaThorat
Department of Fine Arts, RTM Nagpur University, Nagpur

Abstract

Drama is a form of art where the story is communicated to the audience in a theatre. Theatre is a place where an artist performs Live. Audiences experience drama performances. It is a place where an artist performs and the audience gets entertained. In drama the story is communicated through verbal, nonverbal, hand and body movements. Theatre comprises seating arrangement for audience, stage for actors to perform and proper lights and sound arrangement. This basic form of theatre has been continuing since centuries. There was no necessity felt and no one even imagined that one day this very old arrangement of Theatre would undergo a drastic change, until the pandemic struck. The audience and the artists were locked in their own houses and the theatre went vacant like a barren land with no one to till it. Science and technology brought in the possibilities and helped sustain the audiences as well as the artist. Here is an insight on how the theatre culture experienced change, artists were not deprived from performing and the audience embarked on a new way of getting entertained. Communication technology played a major role in keeping the art, the audience and the theatre alive! This research paper captures how communication technology enabled this paradigm shift and how it continues to impact the way theatre training and performances are conducted.

Keywords: Theatre, Audience, Drama, Artist, Rehearsals, Science, Technology, Communication

**GENDER INEQUALITY : DISCRIMINATION OF THIRD
GENDER/TRANSGENDER IN WORKPLACE**

Nandita Maisnam

Department of Home science,
Biramangol College, Sawombung

Abstract

Transgender employees often face very severe discrimination in the workplace based on their identity or gender expression. This type of discrimination can include a wide spectrum of offensive conduct, such as intra-office speculation and false rumours about transgender employer's gender identity. It can even extend to severe harassment as well as physical or sexual assaults. They often had to deal with reactions from other employees and from management and it has reported difficulty securing and maintaining employment. All members in this groups face severe discrimination and harassment in all respects in the contemporary society and are subject to unfair treatments. Unemployment rates for transgender are high and in the social perspective bathrooms are a common source of difficulty for transgender.

Keywords: transgender, gender, workplace

WOMEN'S ROLE IN ECONOMIC DEVELOPMENT OF MANIPUR

K. Roshinibala Devi

Department of Home Science
Standard College
Kongba, Manipur.

Abstract

Women are the backbone of our society. Gender equality and women's empowerment are essential for the development and well-being of families, communities, and nations. Due to the prevalence of patriarchy, women have been discriminated against not only in India but also in most parts of the world. Women's empowerment requires changing patriarchal thinking and structure at all levels and sections to make it stronger and more widespread. Manipuri women play a significant role in the economic development of the state. This paper highlights the contribution of women in a family and society to lead a quality life and also their role in the development of society.

Keywords: Development, Discrimination, Empowerment, Patriarchal, Economy.

**EMPOWERMENT OF WOMEN: PROBLEMS AND ISSUES
FACED BY MANIPURI WOMEN**

Naorem Sandilal Devi

Home Science Department
Standard College, Kongba

Abstract

Women empowerment refers to increasing and improving the social, economic, political and legal strength of women, to ensure equal right to women and to make them confident enough to claim their rights. But the inequalities between men and women create a number of problems which make women face continuous challenges in their life. Women should be enabled to participate without inhibition at par with men in all activities as individual members of the family, society, state and up to international level. The United Nations Development Programme (UNDP), 2019 reported that India's Gender Inequality Index (GII) of 0.501 reflects equality in achievement between men and women reproductive health empowerment and the labour market. This paper highlighted the problems and challenges faced by the Manipuri women in the society and also analyze the solution of the problems.

Keywords: Women empowerment, Inequality, Discrimination, Gender Violence.

DEPRESSION AND OBESITY AMONG THE MEITEIS OF MANIPUR

Khangembam Taibanganba Meitei and Huidrom Suraj Singh
Department of Anthropology, Manipur University

Abstract

Depression is a psychological condition characterized by chronic sadness, loss of interest in normally enjoyable activities, and an inability to carry out daily activities for at least two weeks (WHO, 2017^a). The present study tries to find the correlation between depression and obesity among the Meiteis of Manipur. A total of nine hundred eleven (911) individuals (male - 460 and female - 451) from five Manipur valley districts. Anthropometric variables (height, weight, Waist Circumference, and Hip Circumference) and their derived indices and measurements (Waist Hip Ratio, Waist Height Ratio, Body Mass Index, Conicity Index, Percent Body Fat, Fat Mass, Fat Mass Index) to assess obesity. In the present study, depression was assessed using the internationally accepted 9-item depression module of the Patient Health Questionnaire known as PHQ-9. The present findings reveal that obesity determined by WHtR (OR= 7.01, 95 CI% 3.07-15.80, p=0.000) and WHR (OR= 6.66, 95 CI% 2.59-17.13, p=0.000) was associated with a higher risk of depression. Overweight and obese individuals based on BMI were more prevalent than normal and underweight individuals though statistically insignificant (p>0.05). Obese (OR= 10.35, 95 CI% 4.47-23.96, p=0.000) and overfat (OR= 3.13, 95 CI% 1.37-7.15, p=0.007) measured by PBF, and obese measured by FMI (OR= 3.85, 95 CI% 1.57-9.43, p=0.003), have a greater risk of getting depression than normal people. After adjusting for all the confounding factors, abdominal obesity and overall obesity have a significantly higher risk of developing depression than normal individuals, highlighting obesity as an important risk factor for depression or vice versa among the Meiteis of Manipur. Furthermore, in-depth studies are needed to establish a clear causal relationship between depression and obesity among the studied population to understand the complex etiology of depression

Keywords: abdominal obesity, overall obesity, overweight, overfat, PHQ-9

**PREVALENCE OF TYPE 2 DIABETES AMONG THE MEITEIS OF
MANIPUR, INDIA**

Ksh BeliyaLuxmi Devi and S. Jibonkumar Singh
Department of Anthropology,
Manipur University

Abstract

The rate of prevalence of type 2 diabetes increases globally and the greatest rise over the years is observed in India. Type 2 Diabetes (T2D) is the most frequent type of diabetes, increasing susceptibility to different diseases. The present study tries to find out the overall prevalence and identify the sign and symptoms of diabetes among the Meiteis of Manipur. Fasting blood glucose level was randomly collected from 1026 participants (Men-517 and Women-509) using a glucometer from five valley districts of Manipur. An interview schedule consisting of personal information and data on signs and symptoms of diabetes were collected from the participant with prior informed consent. The present study shows that 34.40 % have Impaired Fasting Glucose (IFG), and the overall prevalence of T2D is 12.96%, indicating that one out of every ten Meitei individuals is affected by the disease. The prevalence of T2D is higher with an increase in chronological age. The presence of signs and symptoms of T2D were significantly higher among the diabetic patients than the normal individuals. Owing to a lack of awareness and knowledge, the incidence of newly diagnosed diabetes is higher than the self-reported. Therefore, as a preventive measure, there is an urgent need for timely intervention through awareness and imparting knowledge about diabetes education among the people.

Keywords: Hyperglycemia, diabetes mellitus, blood glucose, impaired fasting glucose, Meiteis

WOMEN TORCH BEARERS AND THEIR ROLE IN MANIPUR SOCIETY

Khomdram Anjana Devi
Standard College, Kongba, Manipur.

Abstract

In Manipur, women are more actively involved in economic and social activities as equal participants as their men counterparts. The Meira Paibi (Also popularly known as Women torch bearers) used torches as a weapon to fight against social injustice of various forms in Manipur. In India, various women organizations played an important role fighting against social injustice in the society. One such group is Meira Paibai formed from the one of largest populations in Manipur. In 1904 and 1939 elderly women in the age group of 50-70 years came together in forming the Meira Paibai group and they were also called as “IMAS” meaning mothers in Manipuri. Gradually, women from all ages started getting involved. This paper will describe the significant role of the Meira Paibis women’s movement in organizing resistance to injustice and their efforts to achieve positive peace in Manipur.

Keywords: Meira Paibis, Injustice, Women's Movement, Human Rights, Peace.

IDENTIFICATION OF MICROBIAL FLORA INHABITING THE HUMAN PALMS AS IN APPLICATION OF MICROBIAL FORENSICS

Mrinalini Ningthoujam and S. Jibonkumar Singh

Department of Anthropology
Manipur University

Abstract

The body is a home to distinct bacterial population which exist at various locations. The composition of the microbiome communities across many body sites depends according to a person's lifestyle. The bio-signature which is strongest following the interactions remains detectible for up to a long period of months. The micro-level shows the exchange between personal microbiomes and environment since the contact of the users and the articles they come in contact are prominent. The user's microbial signatures share the microorganisms that are gathered from cell phones, shoes, keyboards and fabrics. The possibility of linking crime scenes to particular humans, identification of humans, characterization of human body fluids, post-mortem interval estimation, biological origin estimation and bio crimes that involves tracking of infectious agents and location of clandestine graves, and evidences of soil and skin trace can be captured and leveraged and associated with the microbiome and humans which provides exciting new possibilities of forensic science. This study is aimed at examining the biodiversity of microflora that is present on the palms of individuals. The techniques of Gram staining and MALDI-TOF MS method which is known as 'matrix assisted laser desorption ionization-time of flight mass spectrometry' are administered and the resultant data gives different and unique composition of each individual studied. The samples were obtained from six random males and females each (12 in total). In this evaluation, culture-based method was implemented to identify a variety of microbial communities dwelling on the palms of different persons. The observations were made from the individuals with differences in the composition of bacterial species. A high potential of microbial flora of the palm is confirmed from the resultant data and are found to be unique for each person. Therefore, this uniqueness of the species that are found on the human skin play a main role in providing important information in microbial forensics in connecting the suspects with the crime scene. The objects which are touched in the crime scene and the articles used by the criminals can be related with the microbial DNA fingerprinting obtained.

Keywords: Skin bacteria, bio-signature, crime scene, forensic microbiology, MALDI-TOF MS

**PREVALENCE OF CHILD SEXUAL ABUSE AMONG THE GIRLS OF
SENAPATI DISTRICT, MANIPUR**

Thoudam Baby Devi and S. Jibonkumar Singh
Department of Anthropology
Manipur University

Abstract

Many cases of child sexual abuse have devastating consequences for the lives of those who suffer it, as it involves the destructuring of the child's behaviour and emotions and, sometimes, serious interference in his or her development. Child sexual abuse, also called child molestation, is a form of child abuse in which an adult or older adolescent uses a child for sexual stimulation. To deal with child sexual abuse cases, the Government has brought in a special law, namely, The Protection of Children from Sexual Offences (POCSO) Act, 2012. There is a predominance of female to male victim. The present study of Girl's child sexual abuse was conducted on Senapati district of Manipur, where authentic or realistic or reliable information are taken from 272 participants of different age group from 6-18 years girls from different community including Meitei, Nepali, Tribal, Non-Manipuri. Research method used are: Personal Interview method, Schedule, Sampling. From the study 10.02% girls child are sexually abuse even though they were not official reported.

Keywords: Abuse, Manipur, Child, Meitei, Nepali, Tribal

**ANTHROPOMETRIC VARIABLES AND PRAKRITI BODY
TYPES AMONG THE PLAYERS AND NON-PLAYERS OF
IMPHAL EAST DISTRICT**

Dhanamanjuri Ningthoujam and S. Jibonkumar Singh

Department of Anthropology
Manipur University

Abstract

Each and every individual has his or her Prakriti body type and remains constant throughout their life and there is possibility that anthropometric body physique has some concordance with Prakriti body types. Aim: To assess the Anthropometric variables and Prakriti body types among the players and non-players. Materials and methods: A cross-sectional study was done on 80 individuals, out of which 50 are players and 30 are non-players. Anthropometric measurements included height, weight, waist circumference and also with the measurement of body fat percentage and fat mass using body fat analyser. Prakriti body type were determined by Prakriti assessment questionnaire. Result: Both the players and non-players are having Pitta Prakriti body type as dominant. The mean height, weight and BMI is found to be higher in players as compared to non-players. The players with the dominance of Pitta body type have achieved more gold medals and has made maximum participation in the national level competition.

Keywords: Prakriti, Players, Body mass index, Adolescent

**ASSOCIATION OF TYPE 2 DIABETES AND OBSTRUCTIVE SLEEP
APNEA(OSA) AMONG THE RURAL MEITEIS OF MANIPUR**

Konthoujam Chanchu Singh

Research Scholar

Department of Anthropology, Dhanamanjuri University

Abstract

Diabetes is a chronic disease that occurs either when the pancreases does not produce enough insulin or when the body cannot effectively use the insulin it produces. Diabetes has become a major health challenge worldwide. Obstructive Sleep Apnea(OSA) is a potentially serious sleep disorder and causes breathing to repeatedly stop and start during sleep. Due to changing lifestyle people become obese, this is one of the major causes of developing OSA. Therefore, in the present study an attempt was made to determine the association of Diabetes and OSA and to see whether there is relationship between the two is in need. A total of 100 participants (Men-40 and Women-60) was randomly collected from three rural areas of Manipur. The present study shows that 4% have diagnosed as diabetes mellitus followed by 15% have prediabetes and 81% were found to be normal. In case of OSA, there are 8% found to be high risk of OSA followed by 35% have intermediate risk of OSA and 57% were found to be normal. Therefore, Diabetes and OSA is relatively low in this study. This is because of physical activity and their main occupation is cultivation. Though there is increased in physical activity, people in this area have lack of education about Diabetes and OSA, and most of them do not attain higher studies. It is much necessary to aware and imparting knowledge about this health issues to prevent from its associated disease.

Keyword: Diabetes, OSA, Obese, Relationship, Sleep disorder, Rural Meiteis, Cultivation

**PREVALENCE OF MENSTRUAL DISORDERS AMONG THE
UNMARRIED MEITEI WOMAN OF MANIPUR, NORTHEAST INDIA**

Yumnam Dhanapriya Devi

Research Scholar
Department of Anthropology,
Dhanamanjuri University

Abstract

Menstrual health plays a key role in women's sexual and reproductive life. But in our society, talking about menstruation is a taboo that an adolescent or a fully grown woman cannot openly talk about it. This lead those to suffer problem associated with menstruation and in worst scenario it might even lead to infertility, pre-term child birth, miscarriage and even loss of life of the woman. This study was aim to estimate the difference in the prevalence of menstrual disorder among urban and rural unmarried Meitei woman of Manipur based on data collected from 175 subjects. (100 Rural and 75 urban). Based on findings, the most common menstrual disorder experienced by the unmarried Meitei women of Manipur is Dysamenorrhoea (78.3%). Which is found significantly associated with occupational status of mother ($p = 0.05$) and age of menarche ($p = 0.031$). The pre-menstrual syndromes viz. sour and spicy food carving is found association with risk for central obesity ($p = 0.02$), educational status of the mother ($p = 0.01$), occupational status of the mother ($p = 0.02$) and place of residence ($p = 0.001$). Pimples and others are significantly associated with eating of non package junk food ($p = 0.05$), place of residence ($p = 0.006$).

Keywords : Menstrual disorder, Dysamenorrhoea, pre-menstrual syndromes, menstruation

**ISSUES OF SCHOOL DROPOUT AMONG ADOLESCENT GIRLS OF
JIRIBAM DISTRICT, MANIPUR**

YumnamLuxmi Devi

Department of Anthropology,
Moreh College, Manipur

Abstract

The present study aims to find out the school dropout adolescent girls age between 11-18 years. The present data are drawn from Anganwadi Centre of Jiribam District, sub-divided into seven sector govern under Integrated Child Development schemes (ICDS). The total adolescent girls who are enrolled in Anganwadi Centre is 1172 (ages 11-18 yrs) among them 142 are school dropout adolescent girls. Frequency and percentage were used to analyse the collected data. The objectives are to find out the age of adolescent girls who are most likely to drop out from school, as well as the causes of dropout from school of adolescent girls. And it is found that school dropout is highly shown in the age group of 15-16years (40.74%). Most common responses for leaving school are due to poor economic condition. This study will provide data availability for Jiribam District, Manipur where the concern governing and related departments can bring out the best schemes for a successful developed state.

Keywords: Adolescent Girl, School dropout, Anganwadi Centre, Jiribam District

**ASSOCIATION OF ADIPOSITY MARKERS WITH THE SCREEN TIME
AMONG ADOLESCENTS OF MEGHWAL COMMUNITY OF UDAIPUR,
RAJASTHAN**

Shweta Jain

Research Scholar
Department of Anthropology,
University of Delhi

Abstract

Excessive use of digital gadget and increased screentime may lead to poor psychophysiological health among adolescents and may increase the risk of obesity. The aim of the present study is to find the association of screen time (TV watching and mobile usage) with the adiposity markers among children and adolescents. In order to study the adiposity markers of adolescents with respect to their life style and self-reported physical activeness through anthropometric measurements, a cross sectional study was conducted on 147 adolescents (76 boys and 72 girls), aged 10-18 years belonging to Meghwal community of different villages of Udaipur, Rajasthan. Our results showed the positive correlation of television watching while eating and mobile usage with increased adiposity markers. A negative correlation of adiposity with exercise was reported. Girls were reported to be more fit than boys. Most of the girls (87%) and boys (70%) belong to normal BMI category. It has been found that there is great importance of physical activity among adolescents. Socioeconomic status and the environment they live in have a greater influence on their lifestyle and, as a result, their health.

Keywords: Adiposity; Adolescents; Physical activity; Lifestyle; Screen-time; TV watching

**MENSTRUAL HYGIENE CONDUCT AND SOCIETAL TABOOS: AN
ANTHROPOLOGICAL STUDY ON RURAL ADOLESCENT FEMALES
FROM DELHI- HARYANA BORDER**

Rashi Thakur and Vipin Gupta
Department of Anthropology, University of Delhi

Abstract

Adolescence is a crucial phase in the life of all individuals, and the burden of the dynamics of pubertal change fall majorly upon female teenagers. This study attempts to examine the knowledge, perception and attitudes towards menstrual hygiene management and the societal taboos of the female adolescent from the rural area of Delhi-Haryana border. The research has aimed to incorporate all aspects and dimensions of the menstrual health of the girls residing in the village Dahesara, in the Sonapat district of Haryana state. The study has allowed us to determine how socio-cultural factors fortify the lives of females, even when it's related to something as sensitive and crucial as their reproductive health. The demeanor of the young girls' mothers has an important role in shaping up their daughters' view towards these cultural underpinnings that constraints them from certain aspects of normal life. Comparatively the results of the present study suggested that the menstrual hygiene management of the adolescent girls of the study population is better than those of their counterparts in other rural areas in the same state.

Keywords– adolescence, menarche, menstrual hygiene management (MHM), school absenteeism

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VI

PSYCHOLOGY

(A)

**ABSTRACT OF
SYMPOSIUM**

ROLE OF SCIENCE AND TECHNOLOGY IN WOMEN EMPOWERMENT AND SUSTAINABLE DEVELOPMENT

B. A. Parikh,

Former Sectional President (Psychology), 2000
Former Vice Chancellor,
Veer Narmad South Gujarat University, Surat.

Abstract

Women Empowerment is a very important area in which we have to work sincerely and honestly for the welfare of our own women. The history of our social, religious life shows that from the days of onset of religions Hindu, Islam or any religion women have been always treated as not only as secondary but the patriarchal society has treated women like life time slaves in the service of men. . The religions and social life, the Males have given our women have treated the women as always in the service of men and the family. The customs, traditions, taboos and ethical norms etc were framed in such a way as to always undermine the status, dignity of women. The history shows that from 1825 onwards there were bold and humanist social reformers who started movements for the up liftment of women in our society. Days passed on this movement have the form of e women empowerment. It means we should make our women self reliant, socially, economically, emotionally bold and independent, and accord our women a respectable, dignified and equal status in our society. The availability of opportunities for education, enactment of several laws for the welfare and safety of women and the advances in medical science and availability of measures for birth control etc, availability of household wear like gas, mixer, oven, washing machine and several others have freed the women from the slavery of physical labor. Even with all these measures women are still not awarded the deserving status of equality and respect. The reason is the old conservative, close minded mental set up of the majority of men and women in our society do not approve this movement. , So to implement the movement for women empowerment we have to make very serious and large scale efforts for washing out the deceased brains and thinking of the people. In this task the tools of science and technology and education, economic independence etc can strengthen this movement.

Keywords: Women empowerment, history

**EFFICACY AND AGE AS ANTECEDENTS OF THE PERCEPTION
ABOUT SUSTAINABLE DEVELOPMENT WITH
WOMEN EMPOWERMENT**

Upinder Dhar and Santosh Dhar
Shri Vaishnav Vidyapeeth, Vishwavidyalaya, Indore (M.P.)

Abstract

Sustainable development refers to the development without compromising the ability of future generations to meet their own needs. Intergenerational equity cannot be achieved without addressing the gender relations which underlie prevailing inequity, nor can intergenerational equity be obtained if inequalities continue to be perpetuated. Gender equity is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world. Inequalities faced by girls can begin right at birth and follow them all their lives. In some countries, girls are deprived of access to health care or proper nutrition, leading to a higher mortality rate.

Gender bias is still deeply embedded in cultures, economies, political and social institutions around the world. Women and girls face unacceptable levels of discrimination and abuse, which is not only wrong, but also prevents them from playing a full part in society and decision-making. Gender disparity being among the most pervasive forms of inequality in the world and without serious steps to tackle it, sustainable development cannot be achieved. Women empowerment means women gaining more power and control over their own lives. It can also be seen as an important process in reaching gender equality, which is understood to mean that rights, responsibilities and opportunities of individuals will not depend on whether they are born males or females. Women are more vulnerable to environmental degradation and climate change but also have different perspectives, concerns and ideas for change. Until these are taken on board, with women empowered to play a full part in decision-making at all levels, environmental sustainability will remain a distant goal. According to the UN Population Fund, an empowered woman has a sense of self-worth. She can determine her own choices, and has access to opportunities and resources providing her with a set of options she can pursue. She has control over her own life, both within and outside the home and she has the ability to influence the direction of social change. The present paper is an attempt to study the psychological perspectives of sustainable development with women empowerment. The answers will be sought to the questions about the factorial structure of empowerment, keeping in view the level of efficacy and age as antecedents amongst women.

Keywords: Women, Sustainable development, women empowerment

**PSYCHOLOGICAL PERSPECTIVES OF SUSTAINABLE DEVELOPMENT
WITH WOMEN EMPOWERMENT : AN OVERVIEW**

Tarni Jee

Indian Psychological Association
Patna- 800020

Abstract

The future of the mankind is each individual's responsibility. Today the very existence of mankind is at threat and it is very difficult to safeguard the dignity of just a society call for concerned effort to be initiated at a national level to orient parents, teachers, educationists, administrators, politicians and other functionaries at all levels to make information oriented education an integral part of the ongoing educational process. Information oriented education is most important to make people "information conscious" which will lead to achieve rapid economic development and technological progress and thus create a special order founded the values of freedom, social justice and equal opportunity. Almost all possible in whatever area, will be more of the existence of information systems. They will expect to be informed, they will be generally aware of how the system work or could work, and will not tolerate failure to provide accurate and timely information due to poor or insensitive system design. Effective information system is absolutely essential for successful planning, decision making and carrying out any meaningful research and studies. While education in all its forms is a vital component for the development of large human population into a resource, it is mostly the higher education which contributes to the QOL. In India there has been a spectacular expansion in the higher education system. In India the common man has not reached the stage when he can say that he is able to appreciate the importance and usefulness of information technology. When the stage is reached, the QOL of common man will be better that what it is today. In India, we started late in developing the information technology and made a slow progress but it suddenly made a phenomenal growth and today we are using it profusely in railways, airlines, banks, industries, in whether forecasting and cyclone warning and in several other sectors. The greater effort is to bring women scientists to the forefront by enhancing their visibility, since science education not only enhances knowledge and empowers women through learning but also crosses cultural and geographical barriers, bringing women to the forefront of development. It also enables women to think critically and analyze the surroundings for their wellbeing.

Keywords: India, Women, Development

PSYCHOLOGICAL PERSPECTIVES OF SUSTAINABLE DEVELOPMENT WITH WOMEN EMPOWERMENT

N. K. Saksena

Former sectional president 2016

Abstract

The United Nations has formulated seventeen goals of sustainable development (SDGs). Many of these goals have psychological perspectives. Human Development Index is also a Well-being concept. These goals include End poverty in all its forms. End poverty in all its forms everywhere, end hunger, ensure food security and improved nutrition and promote sustainable agriculture, ensure healthy lives and promote well-being for all, ensure the inclusive and equitable quality of education and promote life-long learning opportunities for all, achieve gender equality and empower women and girls, ensure availability and sustainable management of water and sanitation for all, Ensure access to affordable reliable and sustainable, and modern energy for all. Besides these seven goals of sustainable development, there are ten more goals. Most of these goals have psychological perspectives. One of these goals is to empower women and girls. We have been hearing about women empowerment in the areas of political, social, economic, religious, and a few more but very little has been discussed about psychological perspectives of women empowerment. These areas of women empowerment may not be very effective if psychological perspectives are not included. If we politically empower women to become Gram Pradhan, they may not be very effective if confidence is not built in their personality system. They may be elected as Pradhan but decision making maybe in the hands of their male family members (husbands, sons, fathers, or in-laws. Therefore, real empowerment of women is not possible without making them psychologically strong also. So is true for other areas of women empowerment (social, economic, educational, etc.)

Keywords: Psychological Perspectives, Women Empowerment, Governmental Measures, Gender Equality, Well Being

**FOSTERING WOMEN'S EMPOWERMENT WITH SCIENTIFIC TEMPER IN
THE DEVELOPMENT OF SOCIAL SUSTAINABILITY**

R.L. Bharadwaj

Former sectional president 2014

Abstract

Women's empowerment happened to be the process of empowering women with strength and power to take own life determining decisions through the infusion of scientific temper – a general approach of expressing observations in scientific manner by promoting awareness towards education, literacy, method and training. Scientific temper has become the need of hour to enhance both quality and quantity of resources available for human development that also construct the path for sustainable development. The benefits of inculcating scientific temper in women might took place from the beginning as a capacity to change the previous observations in the face of new ones through critical thinking skills to see the truth as truth, the purpose and worth of life, thereby to grow people for new generation that might be free from gender related barriers imposed upon them. Sustainable development always depends on the balance of 3Ps or 3Es to maintain human capital by investment and services that creates the basic frame work of the society and also felicitates co-operation lower cost of working together, connectedness, discipline, love and honesty. In balancing 3Ps or 3Es, social pillar gained a status of illusive confoundedness due exposed to unpredictable causes, effect and implications of the society. The power of creating generations, if infused with scientific temper has greater chances to ensure sustainable development by improving social sustainability as the pathway for sustainable development.

Keywords: Women's Empowerment, Scientific Temper, Social Sustainability.

**PSYCHODYNAMICS OF TRIBAL DEVELOPMENT:
CURRENT STATUS AND RESEARCH**

Rakesh K. Srivastava

Former Sectional President 2018

Abstract

The psychological factors affecting the tribal development have been the focus of attention for the social and psychological researchers in the recent past. Like the non-tribals, tribals too have made significant contribution in the development of India. Several studies were done on the tribal development. However, it was found that several measures of tribal development could not attain much success as they lacked the psychological approach. Some more researches are needed on the tribal development by taking the psychological factors like motivation, self-confidence, types of attitude, interaction with others etc. into consideration. The present paper discussed the concept of tribal development in relation to psychology, ethnographic and psychological characteristic of tribals and the importance of psychology in it. It is evident that the aims and objectives set by the Government can't be achieved without the study of psychological characteristics of tribals. Therefore, the study of psychological characteristics in the tribal development is of prime importance and has a great practical interest. Though much has been achieved, more has to be achieved in this direction. The psychological approach towards tribals may prove to be useful in achieving the aims and objectives set by Government of India.

Keywords: Psychodynamics, tribal development, psychological approach, ethnographic.

**WOMEN EMPOWERMENT PROGRESS, DIVERSITY AND GENDER
EQUALITY MAKING THE WORLD BETTER**

S.M.Makvana,

Department of Psychology
Sardar Patel Universtiy, Vallabhvidyangar, Dist: Anand

Abstract

Women empowerment in India cannot be compared with that in other countries. Women were highly respected in the Vedic ages. The focus on women's education was never absent. The word 'sahadharmini' was known from the Vedic days. Sahadharmini means - equal partner. It is thus very clear that women in India in ancient days enjoyed respect, education and reverence. Guaranteeing the rights of women and giving them opportunities to reach their full potential is critical not only for attaining gender equality, but also for meeting a wide range of international development goals. Empowered women and girls contribute to the health and productivity of their families, communities, and countries, creating a ripple effect that benefits everyone. Education is a key area of focus. As time passed the Indian culture was contaminated with the conservative Middle Eastern and British culture. As a result, the power and respect that women enjoyed were lost. Gradually after independence, women started regaining the lost power. Today women are everywhere. The country saw its female Prime Minister and President, the country has many eminent female sportspeople like Saina Nehwal or P.T Usha, the country has been blessed with talented women scientists like A. Chatterjee or B Vijayalakshmi. Women are joining the combat forces in India without any hesitation. However, many women in India are still finding it hard to come out of the clutches of patriarchy - particularly in the rural sector. The empowered women must urge these women to raise voices, protest and seek help from the authorities. Women empowerment has become the buzzword today with women working alongside men in all spheres. They profess an independent outlook, whether they are living inside their home or working outside. They are increasingly gaining control over their lives and taking their own decisions with regard to their education, career, profession and lifestyle. Women empowerment is a debatable subject. At earlier time they were getting equal status with men. But they had faced some difficulties during post-Vedic and epic ages. Many a time they were treated as slave. From early twenty century (national movement) their statuses have been changed slowly and gradually. In this regard, we may mentioned the name of the British people. After then, independence of India, the constitutional makers and

national leaders strongly demand equal social position of women with men. Today we have seen the women occupied the respectable positions in all walks of the fields. Yet, they have not absolutely free some discrimination and harassment of the society. A few number of women have been able to establish their potentialities. While it is true that women, by and large, do not face discrimination in society today, unfortunately, many of them face exploitation and harassment which can be of diverse types: emotional, physical, mental and sexual. They are often subjected to rape, abuse and other forms of physical and intellectual violence. Women empowerment, in the truest sense, will be achieved only when there is attitudinal change in society with regard to womenfolk, treating them with proper respect, dignity, fairness and equality. The rural areas of the country are, by and large, steeped in a feudal and medieval outlook, refusing to grant women equal say in the matters of their education, marriage, dress-code, profession and social interactions.

Keywords: Women empowerment, Diversity, Gender equality, progress, World Better

PRESENT STATUS OF EMPOWERMENT OF TRIBAL WOMEN IN INDIA

Rashmi Mishra

Department of Psychology
P. P. N. College, Kanpur

Abstract

Empowerment is an active and multidimensional process for the groups particularly the disadvantaged groups which had been deprived of the fruits like development of other groups. It is a process of bringing the deprived or disadvantaged groups into the mainstream. In tribal groups, the role of women is very substantial and crucial. They work harder than their men counterparts, yet they get less wages. The educational standard is also much below as compared to their men counterparts. Their Social, Economic, Educational, and political empowerment is the need of the hour. However, there seems to be a shift in their status as a result of certain provisions laid down in our constitution. Anthropological and Cross-cultural psychological studies show that the status of women at the beginning of the civilization at the world level was very powerful. The institution of family preceded the institution of marriage. The families were not only matriarchal but matrilineal and matrilocal also. Eminent Anthropologist Briffault's three-volume monumental book "The Mothers" evinces this point of view. Westermarck's theory of primitive sex communism also proves this point. The students of famous anthropologist Boas Margret Mead and Ruth Benedict conducted several studies and found that in several tribal groups the status of women was much more powerful than their male counterparts. The present government is taking serious steps for the upliftment of tribal women. The appointment of Her Excellency Droupady Murmu as President of India is the right step in the right direction.

Keywords: Tribal Women, Empowered, Present Status, Educational Empowerment, Social and Educational Empowerment

**EFFECTIVENESS OF GENDER SENSITIZATION, AWARENESS AND
MOTIVATION WORKSHOPS CONDUCTED FOR LADY TEACHERS IN
HIGHER EDUCATION- CONTRIBUTING TO SUSTAINABLE
DEVELOPMENT: A STUDY BASED ON FEEDBACK OF
STAKEHOLDERS**

Baby Shari. P. A.

Department of Psychology
University of Calicut

Abstract

University Grants Commission (UGC) had conducted many women empowerment programs in the academic sector in the year 2005 to 2015. A series of workshops were conducted for sensitization, awareness and motivation of women teachers in different regions of the country. Accordingly, trainers were trained and workshops were organized by these trainers at universities and colleges as a funded program. It was organized with good facilities and arrangements. Later on management skill enhancement workshops were also organized for the middle level managers in education where lady administrative staff also were trained. The present study is an attempt to evaluate its effectiveness from the perspective of participants and check how that has contributed to sustainable development through a gender based lens. Thirty lady teachers had participated in the study and questionnaire as well as interviews were used as study tools. Gender awareness and sensitization is found to have a generalized influence in their knowledge, inspiration for enhancing many skills and changing the social attitude towards society and community. The benefits on management skills were specific and they had cited many examples from their life. The programs were found to be contributing to sustainable development. Details are added in the full paper.

Keywords: gender sensitization, awareness, motivation

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**ABSTRACT OF
INVITED SPEAKER**

PROMOTING RESILIENCE AMONG WOMEN IN INTERSECTIONS

N. Annalakshmi

Department of Psychology
Bharathiar University
Coimbatore

Abstract

In the 21st century, the need for women empowerment are well recognized and the efforts to nurture women are taken at multiple levels. Nevertheless, women in intersections like women in poverty, Dalit women, women with disability, women in old age to name a few are confronted with unique social disadvantages. They often are subjected to multiple risks like discrimination, poverty, and violence. Narratives of women in intersections not only provide us insights into the challenges they face in their lives, but they also reveal the agencies and pathways that promote resilience in these women. Risk and protective factors are present at various levels of socioecological system. Spirituality, social support, enchantment, a sense of belonging to their context, and perspective taking are identified as some factors that promote positive adaptation among women in intersections. The paper discusses the factors that thwart positive adaption among women in intersections, and the protective factors that promote positive adaptation in them. A socioecological model is used as the framework to present the above understanding on resilience among women in intersections. The paper also presents ways of promoting resilience among women in intersections.

Keywords: Resilience, Vulnerability, Intersectionality, Women

IMPACT OF PSYCHOLOGICAL WELL-BEING AMONG GRADUATE AND POST- GRADUATE YOUTH

Sangita Sinha

Department of Psychology
V.K.S.University, Ara
Bhojpur,802301(Bihar)

Abstract

Psychological well-being is the combination of feeling good and functioning effectively. The study examined the psychological well-being in boys and girls student of graduate and postgraduate level. A total of 144 students were randomly selected from various colleges and P.G. departments of Veer Kunwar Singh University, Ara. Of these, 72 students (36boys and 36 girls) were from graduate and 72 students (36boys and 36 girls) from postgraduate. Psychological Well-Being Questionnaire (PWBQ) by Bhogle and Prakash were administered on the subjects. It was hypothesised that 1. There will be no difference between graduate and postgraduate students in the aspect of psychological well-being. 2. There will be no difference between boys and girls in the aspect of psychological well-being and, 3. There will be no interaction effect of the psychological well-being in the types of education and sex. 2x2 factorial design was used and data were analysed by F-test. Result shows that first hypotheses is significant while 2nd & 3rd hypotheses were not significant.

Keywords: Psychological Well-being, Happiness, Positive Thinking.

**SELF-ESTEEM, RESILIENCE AND WOMEN EMPOWERMENT IN LOW
SOCIO-ECONOMIC STATUS**

Abha Singh,

Department of Psychology
P.P.N.(P.G.) College, Kanpur

Abstract

"Empower the woman, Empower the nation." Education is a pivotal force in transforming any nation. Gender equality is the central agenda for sustainable development in 2030. It is essential to think about and discuss Indian women's empowerment. Self-esteem and resilience can play an essential role in women's empowerment. Every person wants to be respected and recognized by family, society, the workplace, and relationships. The paper analyses low socioeconomic status, self-esteem, resilience, and women empowerment.

Keywords: Self-esteem, Resilience, Woman Empowerment, Low Socio-economic Status.

ROLE OF MENTAL HEALTH IN WOMEN'S EMPOWERMENT

Ritu Modi

Department of Psychology,
University of Allahabad, Prayagraj-211002

Abstract

According to a world mental health report 2022, women are more susceptible to violence and extreme stress. Women are more likely than men to attempt suicide on a global scale. Women were less likely than men to utilize the internet. In the majority of nations, greater gender equality and women's empowerment are urgently required. There is extensive data regarding what helps to prevent violence against women and children, including interventions for strengthening relationships, parenting, and life skills; empowering women; enhancing neighbourhood and school safety; and altering patriarchal social norms and practices. As mental health comes as a sustainable development goal, making an action plan for good mental health is essential for women empowerment.

Keywords: World mental health report 2022, Women Empowerment, Mental health promotion, Indian perspective

SCOPE OF ATTENTION FOR YOUNG ADULTS

Trayambak Tiwari

Cognitive Science Laboratory
Department of Psychology
Banaras Hindu University, Varanasi - 221005

Abstract

Many everyday jobs require maintenance of attention for long durations. These jobs may drain attentional resources drastically and/or lead to task unrelated thoughts, dullness and sluggishness – cognitive states that affects human performance. Although the concept of attention is not new, it entered into the field of psychology in 1880's by Sir William James who defined "attention as taking possession by mind of one out of several simultaneously possible objects or train of thoughts". Since then, there are numerous models of attention enriching our understanding about the nature and processes of attention particularly, how human being in general selects and process variety of incoming information. Numerous attempts were made by the researchers over the year to combat these negative performance consequences. Here we try to highlight the importance of maintaining attention which in turn influences many aspects of human cognition. In addition to this, major findings of our laboratory will also be deliberated. These findings are related to the scope of attention specifically how one can restore their attention while working for longer period of time.

Keywords: attention, human cognition, sustained attention

PERCEIVED CHALLENGES OF SOCIAL INCLUSION IN COLLEGE-LEVEL MUSLIM WOMEN STUDENTS

Shabana Bano
Department of Psychology
Banaras Hindu University
Varanasi, 221 005

Abstract

The problem of poor education among Muslims seems to be multifaceted. The feeling of deprivation is one of them. A variety of factors have been identified to account for the observed relative deprivation among Muslims. The Sachar committee report has used the framework of identity, security and equity to explain multi-dimensional nature of Muslim exclusion. It has also been shown that these overlap and feed into each other in many ways to create the lived experiences of social exclusion for the Muslim community. While social exclusion is widely accepted as a process of systematic denial of opportunities to individuals due to their membership of particular groups based on race, gender, region, age, caste and religion. It is also conceived as the boundary maintenance between 'Us' and 'Them' categories, which prevents people of particular groups from equitable access to financial, political, social and cultural resources. Social inclusion, on the other hand, recognizes interdependence between 'Us'- 'Them' categories; it embraces and enjoy the cultural diversity without hierarchy. In the present study, which is part of an ongoing research project, we examine the perceived challenges of social inclusion in college level Muslim women students. The study was carried out with 43 Muslim under-graduate students aged 15-21 years. The Inventory of College Challenges for Ethnic Minority Students (ICCEMS) developed by Ying, Lee and Tsai (2004) was given to participants. It consisted of 52-items related to 13 domains across a range of cultural, academic, social and practical contexts. Result revealed that the greatest amount of challenge was experienced in the "academic" domain. The participants also reported greater challenge in the domains of "career direction", "homesickness", "academic expression", "counselling needs", and "academic demands". The least amount of challenge was reported in the area of "pressure to use substances". The findings suggest that the challenges of Muslim students, particularly in the academic domain, need to be managed with the help of teachers.

Keywords: social inclusion, perceived challenges, students, Muslim women.

**PHYSICAL EXERCISES AND PSYCHOLOGICAL
WELL-BEING OF ADOLESCENTS**

Rajnish Chandra Tripathi

Physical Education,
Government Girl's Degree College,
DLW, Varanasi

Abstract

The present study is designed to examine the role of physical exercises in the psychological well-being of adolescents. The study was conducted with 100 female participants aged 17-22 years using the psychological well-being scale and introducing them an intervention program. The intervention program was scheduled for 12 weeks and 5 days in a week. Physical exercises were introduced them approximately over 1 hour in the morning. The participants were divided into two groups (experimental and control groups). Both groups were exposed to pre and post-test. All the participants were encouraged to attain the session regularly. Physical exercises were taught by the experts. Results of the present study reported that physical exercises enhanced the psychological well-being of female students. It suggests that physical exercises have a greater positive role in maintaining the psychological well-being among college-level women students. The findings will be discussed.

Keywords: physical exercises, psychological well-being, female students

**EFFECTS OF ACUTE EXERCISE AND AEROBIC FITNESS ON
COGNITIVE PERFORMANCE**

Naveen

Psychology Section, M.M.V., Banaras Hindu University, Varanasi
Eshwerjyot Singh
SHSS, Thapar Insitute of Engineering and Technology, Patiala

Abstract

Recent studies have revealed that physiological and psychological changes induced by physical activity can potentially affects human cognitive performance. The current study investigated the effects of acute exercise and aerobic fitness on visual search and working memory performance. A 2 (Acute Exercise: No exercise and 1 mile running) × 2 (Aerobic Fitness: Low and High) mixed factorial design was used. Visual attention and working memory task performance was recorded in terms of reaction time by using Trail Making Test. Results revealed better performance in exercise condition than no exercise condition. In addition, parsons with high aerobic fitness performed better as compared to low aerobic fit persons.

Keywords: Acute, exercise, Aerobic Fitness, Reaction Time, Visual Search, Working Memory.

**MENTAL WORKLOAD DURING MAN-MACHINE INTERACTION: SOME
EMPIRICAL EVIDENCES**

Anju L. Singh

Department of Psychology, Vasant Kanya Mahavidyalaya
Affiliated to Banaras Hindu University
Kamachha, Varanasi-221010

Abstract

This article presents both behavioural and psychophysiological patterns of perceived mental workload during human automation interaction task. A theoretical and empirical role to the human factor issues relevant to man-machine interaction while considering mental workload changes occurring during a simulated task were discussed. These issues have received limited attention in earlier empirical work on mental workload. It also points to the need for discretion in designing transparent interfaces to facilitate human awareness of modes of automated systems. Finally, this study identifies the need to consider critical human-human interactions in designing adaptive systems. Along with behavioural measures (hits and reaction time) EEG/ERP recordings have been utilized to look into cognitive resource allocation performed during the MAT-task.

Keywords: Automation, Vigilance, Sustained attention, EEG/ERP, Human Performance, Mental Workload

**PERSONAL AND ORGANIZATIONAL CORRELATES OF MORAL
DECISION MAKING**

Shreshtha Yadav and Anil Kumar Yadav

Department of Psychology,
Banaras Hindu University

Abstract

Moral decision making has been a rising subject of concern among business researchers and practitioners due to the long-term consequences of immoral practices in organizations. This study explores the impact of Machiavellianism, honesty, empathic concern, peer moral choice making, perceived organizational support, and interpersonal trust on the likelihood of moral decision making and the consequences of moral decision making. Data was gathered from 207 individuals who worked in hospitals as paramedical staff (nurses, ward boys, lab technicians) located in Uttar Pradesh (India). Findings showed that moral decision making is positively correlated with perceived organizational support, interpersonal trust, honesty and empathetic concern and negatively linked with Machiavellianism.

Keywords: moral decision making, partial least square method, well-being manifestation, Honesty.

**A COST-BENEFIT STUDY OF FLICKER CUE USING VISUAL
VIGILANCE TASK PERFORMANCE**

Tarun Mishra

Department of Psychology
Banaras Hindu University

Abstract

Our surrounding environment consist different kind of stimulus which may or may not be target or noise, which completely depends on our individual own interest. When a person select one stimulus to attend while ignoring other stimulus for a prolonged period of time, it is said to be performing sustained attention or sometimes also known as vigilance performance. Present study is also using vigilance performance measures in order to observe the effect of flicker cue with different task loads and cue target onset asynchrony (CTOA). The study took the sample of 90 participants with normal or corrected to normal vision as inclusion criteria. It was ensured before taking consent that participant had no known neurological and mental illness. The study used mixed factorial design with random assignment of participants to different experimental conditions. The results showed that cue facilitation in low task load in comparison to high task load. The study findings can be used in future research of reading, spatial attention and human factors application.

Keywords: Vigilance, Task load, Cue-Target Onset Asynchrony (CTOA) and Spatial Attention.

**ADAPTATION OF PICTURES FROM INTERNATIONAL AFFECTIVE
PICTURE SYSTEM (IAPS)**

Sujeet Pratap

Department of Psychology
Banaras Hindu University,
Varanasi

Abstract

IAPS is a comprehensive database of affective stimuli of twelve hundred pictures approximately. The pictures from IAPS are used in laboratory studies extensively and worldwide. The development of IAPS pictures has been a rather consistent process in order to address the universalities and specificities of affective ratings. The existing or previously developed database has been subject to affective ratings in the light of cross-cultural differences in terms of experience, expression and construal of emotional stimuli. Citing the cross-cultural differences associated with IAPS ratings, the Indian adaptation of the stimuli from IAPS is imperative.

Keywords: IAPS, affective stimuli, adaptation

CONTRIBUTIONS OF PSYCHOLOGY IN SUSTAINABLE DEVELOPMENT

Richa Singh

Department of Psychology
Vasanta College for Women, Rajghat Fort
(Affiliated to Banaras Hindu University)
Varanasi – 221001

Abstract

Environmental problems resulting from unsustainable human activity made us to realise that there is an urgent need for transition to a society and economic system that values nature and stops taking it for granted. Successful implementation of strategies for sustainable development like policies, technical regulation, etc. depends on human perception, decision making and behaviour. Psychology, as the science of human behaviour, can play an important role in understanding and promoting sustainable values, beliefs, attitudes, and behaviour. The Sustainable Development Goals for 2030 provide a roadmap to achieve a better and more sustainable future for all. Many of the goals can be connected to both the science of psychology.as most of these goals are related to how individuals think and behave. So understanding human cognition and motivating them to behave in a sustainable manner, psychology can make substantial contributions to support the achievement of these goals. Psychology has the potential to not only repair the fall outs of unsustainable development but also helps to understand how human actions differ from what rational choice theory expects. It also helps us to recognize how cognitive and affective processes influence the decision making and ultimately the behaviour of the individuals. Psychology is not only a mean to heal individual but also to help build sustainable society and sustainable future.

Keywords: Psychology, sustainable development

**EMPOWERING WOMEN: A NARRATIVE ACCOUNT OF EXCLUSION
EXPERIENCES OF ACID ATTACK VICTIMS IN INDIA**

Tushar Singh

Department of Psychology
Banaras Hindu University
Varanasi

Abstract

With the adoption of the Sustainable Development Goals by the United Nations, inclusion has been identified as a major goal. Psychologists such as Maslow have considered the need to associate with others and form affectionate bonds as very strong and basic. Despite this, the multidimensional phenomena of inclusion and exclusion remain inevitable parts of our society. There exist a large number of groups/sub-groups who face exclusive practices which is further worsened by the complexities involved in the interconnected nature of various social categorizations resulting in interdependent systems of disadvantage and discrimination. One example of such group that is especially vulnerable to exclusion is of acid attack survivors who are marginalized and are often excluded from the mainstream society. With the increased number of acid attack victims and their disproportionate representation, it is of utmost importance to carry out researches that contribute to our understanding of their experiences. The present work, therefore, was carried out to explore exclusion as an outcome of acid attack for its survivors and suggest inclusion as a potential measure to counter it. For the present research, narratives from 30 female victims of acid attack, between the age group of 18 to 25 years, residing in Uttar Pradesh, India were collected. At the time of the research the victims were working at a café being managed by the acid attack victims. The narratives focused on the experiences of inclusion and exclusion of the victims before and after the incident of the acid attack. The narratives were later analysed using thematic content analysis. The results of the analysis highlight various aspects of exclusion of acid attack victims and offer inclusive processes to counter the issues arising from such exclusion. The results further suggest ways to enhance the inclusion of the acid attack victims and highlight the positive influence of the inclusive experiences.

Keywords: acid attack victims, inclusion, exclusion, social support

**ROLE OF INFORMATION COMMUNICATION TECHNOLOGY (ICTs) IN
WOMEN EMPOWERMENT IN INDIA**

Anurag Upadhyay

Department of Psychology,
Udai Pratap Collage, Varanasi

Abstract

While nature created sexual differences, but the gender is a social construct. Women have for years been perceived to be inferior in comparison to their male counterparts. However, time and time again women have proven their metal in several sectors on different stages. In the last decade exceptional ICT growth has been one of the best tools put to use in gender emancipation along with multiple other socio-economic steps. This is a positive sign in the direction that societies have been working towards for a long time. For furthering the benefits of ICT and other policies some effective steps also need to be taken. This will help in innovation and growth of India not just on the technological front but also on the psycho-social front.

Keywords: Women Empowerment, ICT

COLOUR OF LIGHTS AND HUMAN PERFORMANCES

Gaurav Kumar Rai

Scientific Officer

Behavioural Science Domain

Forensic Science Laboratory, U.P.

Abstract

Vigilance decrement is a vigorous fact that attracts the researcher's attention. Several studies have been used some aids to deal with this problem. On the line of those researches this study an attempt to find out the relationship between Lights and vigilance tasks performances. The major objective of this study was to find out the effect of Lights on vigilance task performance under high event rate condition. Blue and Yellow lights was used as independent variables. Accuracy, false alarm, sensitivity (d'), response bias (β) and reaction time were taken as a Vigilance performance measure and Online NASA-TLX scale were using for mental workload assessment. 17 participants were participated in this study. A 30 Minute vigilance task in which, participants required detecting a bigger square in small squares, was used. A 2 (experimental) \times 3 (Three 10 min. blocks) factorials with repeated on the last factor design was used in this study. Accuracy reaction time and response bias show beneficiary effect of yellow light. Whether other physiological marker and mental workload measures was found in line of behavioural performance. The major significance this study would help to understand the relation between blue and yellow lights and vigilance task performance.

Keywords: Vigilance, Lights, Blood Pressure, SpO₂, Body Temperature, Pulse rate, MentalWorkload

**VIGILANCE PERFORMANCE: COGNITIVE DEMAND,
WORKLOAD AND STRESS**

Anil Kumar Yadav

Department of Psychology
Banaras Hindu University

Vigilance decrement has been the main focus of researchers over time. Increasing human-machine interactions and potential risks involved have aggravated researchers to investigate the vigilance phenomenon in various perspectives. Cognitive demand (Event rate) has been identified as an underlying cause of vigilance decrement. Task type and event rate are the important contributors to workload and stress in a vigil task. Successive tasks are more demanding than simultaneous tasks and high event rate more demanding than low event rate conditions. Vigilance tasks are highly demanding and stress inducing. Vigilance task rather than being understimulating has been found to be resource demanding and associated with high workload. It is significantly important to pay cautious consideration on demand factors while designing systems and work environment involving vigilance functions. Research findings suggests that moderately demanding work conditions and systems would yeild better performance than high demanding and low demanding conditions.

Keywords: Vigilance, Vigilance decrement, Cognitive Demand, Event Rate, Workload, Successive, Simultaneous, Stress.

EMPOWERMENT OF WOMEN AND MENTAL HEALTH PROMOTION

Shakila Azim

Dept. Of Psychology,
M D D M College, Brabu
Muzaffarpur., Bihar

Abstract

Only a mentally healthy woman can create a healthy environment in family. Family is the first institution for raising the new generation which is the future of nation or pillars of a strong nation. Women are the key of the family. Healthy mind keeps the body healthy. The prevalence of mental disease is significant worldwide, and most nations overlook possibilities to advance mental health. There are few choices for care and treatment for those with mental illnesses in underdeveloped nations or developing countries, where they are prevalent. Many researchers found that in comparison to men, women are having high percentage of mental illness. Additionally, it was shown that women are more likely to internalise their feelings, which frequently results in depression, loneliness, and isolation. The present study is focused on Primary health care (PHC) initiatives might indirectly support mental health in this situation by addressing its determinants, such as fostering social cohesion, reducing prejudice, and creating job possibilities for empowering women.

Keywords: Women, empowerment, mental health

HEALTHY LIFESTYLE FOR WOMEN EMPOWERMENT

Krishna Kumar

Department of Psychology
L.N.T. College, B.R.A.B.U. Muzaffarpur, Bihar

Health is wealth. Women have been doing everything for their family without taking care of their own health. Women take their meal at last in family. They find themselves happy in feeding their children and family member. But it's a fact that Women empowerment includes the better health of them also. Health and wellness is the ultimate aim of human life. Women are the key of family. Women empowerment can't be achieved without good health of women. Healthy lifestyle is dependent on income, education, employment and safety also. Present study depicts the importance of these factors in healthy lifestyle of women and ultimately the women empowerment.

Keywords: Lifestyle, women, Health.

**EMOTIONAL MATURITY AMONG INTERMEDIATE STUDENTS
OF SAKRA BLOCK OF MUZAFFARPUR, BIHAR**

Vikash Kumar

Department of Psychology
R. C. College, Sakra, B. R. A. Bihar University
Muzaffarpur, Bihar

Abstract

Emotional Maturity play very important role in our daily life. It is a tendency to express emotions with intellectually. It controls the growth of individual developments. The American Psychological Associations (APA) defines this term as a high and appropriate level of emotional control and expression. In other words, 'Emotional maturity defined as how capable a person is to respond to situations, control his/her emotions and behave in a sophisticated manner when dealing with others.' The purpose of this study was to investigate the emotional maturity in an intermediate student's age group of 15 to 20 years of Sakra block of Muzaffarpur district of Bihar and 120 students participated in this study. The emotional maturity scale developed by Dr. Yashwir Singh and Dr. Mahesh Bhargava was used for assessing the emotional maturity of the students and t-test were used to analyze the data with the help of SPSS software. Our study shows that a significant number of male students have high level of emotional maturity than female students and no any significant difference between Hindu and Muslim students that means both community student having similar level of emotional maturity.

Keywords: Emotional maturity, Intermediate students, Gender, Religion.

FEAR OF COVID-19 AMONG FRONTLINE HEALTH CARE WORKERS

K. Viswanath and S. Viswanatha Reddy
Dept. of Psychology, SVU College of Sciences, Tirupati -517 502,
AP, India

Abstract

COVID-19 is a global life-threatening disease. The COVID-19 pandemic negatively affects the mental health of health care workers. The aim of the present investigation to determine the effect of fear of covid-19 on Frontline Health Care Workers with regard to, gender, age, experience and type of management. A study was conducted on 80 (40 male and 40 female) employees working at COVID-19 health care hospitals in Tirupati of Andhra Pradesh. Fear of COVID-19 Scale developed by Viswanath and Viswanatha Reddy was used to assess the fear of COVID-19 of the subjects. Results revealed that gender and age are not shown any significant influence on health care workers with regard to fear of covid-19. Health care workers with below 15 years of experience were expressed more fear when compare with their counterparts of above 15 years of experience it also found that and health care workers working in private management were expressed more fear when compared with the employees working under government hospitals.

Keywords: Gender, Age, Work Experience, Type of Management and Fear of COVID-19.

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ABSTRACT OF
ORAL / POSTER PRESENTATION

**AN ANALYSIS OF PSYCHOLOGICAL INTERRELATION OF HUMAN
DIVERSITIES IN THE LIGHT OF CONSTITUTIONAL ASPIRATION OF
ACCEPTANCE OF HORIZONTAL HUMAN ACCOUNTABILITIES**

Dipali Mankar and Girish Kulkarni
RTMNU, Nagpur

Abstract

We believe that the social contract of constitutional existence is a conscience among the diversified human interests. The social contract may come into existence which may lead to framing of constitution and giving authority to constitutional mandate. This diversified interests of human being either evolved to compliment or coexists if they are able to accept each other as a human diversity or they will go to enter the perpetual struggle of domination over each other. When the acceptability of the human diversities are not strong enough to overcome conflict of economic, social, cultural, practical and psychological interest then this result into a psychological rebel against the intolerant society. Therefore, the research paper tries to understand human behaviourism behind the psychological acceptance as per the constitutional order. Here the accountability of society towards an individual is a matter of concern and the same time the accountability of an individual towards an another individual is equally relevant. The author wants to analyse whether the human diversities which are based upon diversity of individual are acceptable enough to claim rights of an individual against each other and not against the state alone. That is to say the horizontal application of human rights and the freedom of human diversities will be considered together by the researcher.

Keywords: psychological acceptance, constitutional mandate, inter relationship of diversities

**COGNITIVE MACHINE LEARNING AND CIRCADIAN CYCLE:AN
EXPLORATORY MODEL**

Soumen Nanda

Research Scholar ISBM University, Chhatisgadh

Santa Misra

Former Prof Sri Sri University, Odisha

Nibedita Jena

Visiting Prof Ravenshaw University Odisha

Abstract

Cognitive machine learning refers to the combination of machine learning and brain cognitive mechanism, specifically, combining machine learning with mind model CAM (Consciousness and Memory). Considering the differential effects of digital learning and its effects on natural rhythmicity, this paper suggests an exploratory model to the relationship between the effects of circadian cycle on memorization process based on recent machine learning and normal learning processes. The study observing the behavior of 100 tribal and urban subjects implicates the evidence of significant relationship ($r = .60$) between Cognitive cycle and circadian cycle that consists of cascading cycles of recurring brain events.

Keywords: Cognitive Machine learning, Digital learning.Circadian Cycle:, CAM

**EMOTIONAL INTELLIGENCE, MARITAL ADJUSTMENT AND LIFE
SATISFACTION BETWEEN WORKING AND HOME MAKING WOMEN**

Meenakshi Kumari and Meenakshi
P.G. Department of Psychology,
Magadh University, Bodh Gaya

Abstract

The present empirical investigation was carried out on 50 working and 50 home making women in order to compare the groups in terms of emotional intelligence marital adjustment and life satisfaction. It was hypothesized that working and home making women would differ significantly in terms of (i) emotional intelligence (ii) marital adjustment and life satisfaction. For the purpose the working and home making women respondents were administered Emotional Intelligence Inventory by Mangal and Mangal, Marital Adjustment Questionnaire by Pramod Kumar and Kanchana Rohatogi and Life Satisfaction Scale by Q.G. Alam and Ramji Srivastava. Besides these, a PDS was used to seek the personal information of the respondents. The obtained data were treated using t-ratio. The obtained results supported the hypotheses. It was found that working women excelled over home making women in terms of emotional intelligence, marital adjustment and life satisfaction. Thus, it was concluded that working status amongst women significantly influence emotional intelligence, marital adjustment and life satisfaction.

Keywords: Emotional Intelligence, Marital Adjustment, Life Satisfaction, Working Women, Home making women, Questionnaire

**DIGITAL AGE & EMOTIONS: A COMPARATIVE STUDY OF
EMOTIONAL INTELLIGENCE IN RELATION TO GENDER AMONG
INTERNET ADDICTED AND NON-INTERNET ADDICTED GENERATION
Z AND GENERATION ALPHA STUDENTS**

Smita Ghosh

ReasearchScholar, Sabarmati University
Ahmedabad, Gujrat.

Abstract

Are we heading towards Artificial Emotions? Emojis those small ubiquitous symbols a part of digital lingua franca has taken over real emotions in the lives of digital natives. The research study aims at analysing Emotional Intelligence level between Generation Z and Generation Alpha school going students. A total of 120 children from grade 5 and grade 11 were selected as sample. Emotional Intelligence Scale was used for data collection. The study concluded that there is a significant difference in emotional intelligence of both the generations. The study also suggested that there was a relation between exposure to technology and lack of emotions especially empathy.

Keywords: Emotional Intelligence, Generation Alpha, Generation Z, Digital Natives, Internet Addiction

A PSYCHOLOGICAL STUDY RELATED WOMEN EMPOWERMENT

Ramendra Kumar Singh

Dept of Psychology, D.K. College,
Dumraon, Buxar, Veer Kunwar Singh University, Ara (Bihar)

Abstract

Women empowerment is multi-dimensional process. It is essentially the process of upliftment of psycho-social political and economic status of women. The Present study was conducted on 100 women's of Buxar district in Bihar. Amongst them 50s were working and other 50s were non-working. It was hypothesized that working women were more empowered than others. It was also hypothesized that there will be a significant difference between working women and non-working women in comparison of their level of lives satisfaction and decision-making consciousness. To measure the significant difference between both groups "t test" were used. Life satisfaction scale by Hardev Ojha (2005) was used to achieve the research objectives. Besides a PDS was prepared by the researcher himself to gather other necessary informations. The findings proved the hypothese. The result also indicates that the decisions making power get affected due to their low psychological empowerment lives.

Keywords: Women, psychological study

EMPOWERING WOMEN FOR SUSTAINABLE DEVELOPMENT

Jichhu Paswan

Dept. Of Psychology, K C T C College, Raxaul,
Brabu, Muzzfarpur. Bihar

Abstract

Women's management could be a method and property development encompass sociocultural, economic and environmental aspects and therefore covers a huge wide domain. To this point gender problems are primarily dealt with as a social issue. This can be mirrored within the areas of economic condition reduction, education and health care within the Millennium Development Goals. UNDP coordinates world and national efforts to integrate gender equality and women's empowerment into economic condition reduction, democratic governance, crisis hindrance and recovery, and surroundings and property development. The Sustainable Development Goals (SDGs), otherwise called the worldwide Goals, is a universal decision to action to finish economic condition, defend the earth and make sure that all people fancy peace and prosperity. UNDP focuses on gender equality and women's management not solely as human rights, however conjointly as a result of they're a pathway to achieving the Millennium Development Goals and property development. These seventeen Goals hinge upon the successes of the Millennium Development Goals, whereas together with new areas like global climate change, economic difference, innovation, property consumption, peace and justice, among alternative priorities. The goals as interconnected usually the key to success on one can involve tackling problems additional unremarkable related to another.

Keywords: Gender equality, Human rights, Global climate change, Innovation, Peace and justice

**WOMEN'S EMPOWERMENT VIA THE SEEKING
OF HEALTH INFORMATION**

Nishi Kanti

Dept. of Psychology,
Mddm College, Brabu, Muzaffarpur, Bihar

Abstract

Women's empowerment is a significant topic nowadays. Journey of women empowerment started in 1917 in our country. To empower women, a variety of strategies have been developed. Searching for health-related information is among the most significant tasks in this regard. Numerous studies have noted a wide range of talents as the results of seeking out health information. It appears that the qualitative paradigm is acceptable to utilise in studies in this area because health information seeking develops within personal-social interactions as well as the setting of the health system. The purpose of this study was to investigate how women might become more empowered by seeking out health information.

Keywords: Empowerment, Health, Women,

WOMEN EMPOWERMENT: ROLE OF EDUCATION

Shri Nandini

Research Scholar, Dept. of Psychology,
T M Bhagalpur University,
Bhagalpur, Bihar

Abstract

Education is that the key factor for ladies empowerment, prosperity, development and welfare. Discrimination of ladies from womb to tomb is well-known. There's continued inequality and vulnerability of ladies all told sectors and ladies oppressed all told spheres of life, they have to be empowered altogether walk of life. So as to fight against the socially constructed gender biases, women must swim against the system that needs more strength. Such strength comes from the method of empowerment and empowerment will come from the education. And rural development will come from women empowerment. This paper aims to form the attention among the women's about different empowerment and identifying the impact of education in women overall empowerment in Bhagalpur district. Totally 455 women respondents between 20-50 people were selected for the study. A finding of the study shows that educational qualification play significant role in women empowerment and it concludes that if women's empowerment is to be effected, it is allotted only through the medium of education. Hence, it's of foremost importance to lift the amount of education amongst women.

Keywords: Empowerment, Welfare, Prosperity, Womb to tomb

**EVALUATION OF BEHAVIOURAL APPROACHES TOWARDS LEGAL
RECOGNITION OF MARITAL RAPE AS CRIME IN INDIA**

Payal Thaorey and Shikha Gupta
Post Graduate Teaching Department of Law
RTM Nagpur University

Abstract

Marriage is a social institution that stemmed from the need to regulate human sexual behaviour i.e., restrict unlimited polygamy and polyandry. Since the dawn of civilization women have been idolised as moral, traditional, conventional and as someone who conserves the family harmony and values. And therefore, the exemption II to Section 375 of Indian Penal Code gives protection to the husbands who commits rape (marital rape) on their wives. Marital rape refers to “forcible sexual assault or violence by one spouse towards the other.” This exemption violates the woman’s right to her reproductive system, abuses her psychological, emotional and physical health, and also fundamentally infringes on her right to non-discrimination and dignity of her person. The assertion of a man’s masculinity- aggression that he has to get what he wants irrespective of the other person’s choice and the concept of “obligatory sexual interaction” by the virtue of marriage is what makes the society to turn a blind eye on such a heinous crime. This paper will discuss and examine the criminological and anthropological aspect of marital rape and will also aim to suggest framework to combat the social and legal issues relating to marital rape.

Keywords: criminal psychology, behavioural, marital rape, consent, aggression, sexual assault.

YOGA PSYCHOLOGY ON HUMAN NATURE

Birendra Choudhary
S.L.K. College, Sitamarhi, Bihar

Abstract

The Study was conduct to assess the effects of Yoga Psychology on the Human, Nature a coping tool of interested on the issue of the Human Nature has been rising due to the past pace of advancement of the present country which has been Rightly Called the Human Nature. Staying healthy and alive in the battle field. Life in the present age is an endless round of obstacles. Conflicts, bureaucratic routine, frustrations, anxieties and inconveniences. The even present enemy is not armed with machine guns or tanks, and kills and maims not with bullets but with stress. Stress is almost inescapable, reaching into our social relations, vocational environment and family life. Stress occurs when one feels that environmental stimuli are likely to tax or exceed one's personal coping capacities. In this abstract an attempt has been made to present a brief ascription of meaning of Yoga Psychology the Human Nature the reactions comprising (i) Changes in the adequate of cognitive functioning, (ii) reports of disturbed affects, (iii) motor behavioral reactions, and (iv) physiological changes in the light of experimental evidences. Moreover, this paper attempts an evaluation of Yoga as a patent technique in manage Nature causes about 80 percent bodily disease. As a matter of fact. Yoga Psychology occupies a prominent place in newly developed "Behavioral Medicine" in tackling stress related problems as it is inexpensive and without any side effect.

Keywords: Yoga, yoga psychology, cognitive functioning

THE EMPOWERMENT OF WOMEN: THROUGH YOGA PRACTICES

Rajni Srivastava

Dept. of Psychology,
DAV College- Kanpur

Abstract

The purpose of this paper is to highlight power of yoga which can empower women, with implementing yogic exercises into their daily regiment to promote a healthier body. The practice of yoga is much more than a system of physical exercise to health, it is also a path of spiritual growth. 'Yoga' Good health enables women to enjoy the life & to have opportunity to achieve the goals for themselves. This paper is to encourage the women for (a) self-reliant (b) independent decision making (c) to have positive self-esteem (d) generate confidence in any difficult situation (e) to take active participation in various social, political development along with strengthening yoga practices, pranayama, and meditation.

Keywords: Empowering, Women health, Yogic exercises, Self-esteem, Secision making

**CHARACTER STRENGTHS AS PREDICTORS OF RESILIENCE AMONG
LEARNING-DISABLED CHILDREN**

Aasa.T.and N. Annalakshmi
Department of Psychology,
Bharathiar University,
Coimbatore-641046.

Abstract

The present study is an attempt to examine whether character strengths predict resilience among LD children. The study included a purposive sample of LD children (N = 100, aged 7-13 years, both girls and boys) from Kerala. Self-report measures on character strengths and resilience were administered among LD children. Multiple regressions will be carried out to understand the success attributes that predict resilience among LD children. The present study suggests the relevance of developing intervention based on character strengths for children with LD. Results, implications, and directions for future research will be discussed in the full paper.

Keywords: Learning disability, Multiple regression, Character strengths.

ASMR: THE TINGLING SCIENCE OF RELAXATION

Aviti Jain, Anil KumarYadav andTriyambak Tiwari
Cognitive science laboratory
Department of psychology
Banaras Hindu University

Abstract

Autonomous Sensory Meridian Response (ASMR) is an atypical sensory response resembling electrostatic sensations primarily tingling sensation on the scalp, nape, back of the neck and shoulders resulting from exposure to specific auditory, visual or tactile stimuli. Present review paper signifies the sensory determinants of ASMR, along with an understanding of the effects of ASMR on personality, mood, mindfulness, anxiety and para-social attractiveness. This paper further explores mechanisms of ASMR using FMRI/EEG studies through brain connectivity and cognitive processes. An attempt has been made to uncover the aspects for future researches and implications of ASMR in real world scenarios.

Keywords: ASMR, Anxiety, Mood, Para-social attractiveness.

**IMPACT OF JEEVIKA PROJECT ON SOCIO-ECONOMIC
EMPOWERMENT OF RURAL WOMEN IN BIHAR**

Arman Alam

Division of Social Psychology
A N Sinha Institute of Social Studies, Patna-01.

Abstract

Bihar is one of the poorest states in India and ranks very low with respect to various development indices (Niti Aayog, 2021). Most of the population in Bihar lives in rural areas and they have low sources of income which leads to poverty. The “Jeevika” is a project which works under the Department of Rural Development, Government of Bihar. This project comes under the National Rural Livelihoods Mission. The aim of the project is to enhance the socio-economic status of rural women. This project has brought a new platform for women’s empowerment. The present study is to find out the impact of the Jeevika Project on the socio-economic empowerment of rural women in Bihar.

Keywords: Jeevika Project, Socio-Economic Empowerment, and Rural Women

**A STUDY OF THE STATUS OF WORKING WOMEN IN THE FAMILY IN
TERMS OF FINANCE AND DECISION MAKING IN PATNA (BIHAR)**

Khurshida Orooj

Division of Social Psychology
A N Sinha Institute of Social Studies, Patna-1.

Abstract

Today women not only in India but all over the world are preferring to engage in employment to be financially dependent and contribute financially to their families. In other words, working women especially married working women are performing their duties and responsibilities both at home and workplace as well as contributing financially to their families. But, in general, the attitude of family members towards working women has remained the same. Thus, in terms of finance and decision-making, it was very important to understand the personal space of working women in the family in terms of their participation in family decision-making. Therefore, the present study was to find out the status of working women in the family in terms of finance and decision-making in Patna (Bihar).

Keywords: Working Women, Family, Finance, and Decision-Making.

**SPIRITUAL INTELLIGENCE AND PSYCHOLOGICAL WELL-BEING OF
POSTGRADUATE FEMALE STUDENTS**

Prajakta Joshi and Hina H Khan
P.G. T. D. of Psychology, RTM University, Nagpur

Abstract

Youth is a sensitive period in human life where they face lots of challenges, so their well-being is very crucial, especially for the women who are key drivers of the family's development. India, being a spiritual country, spirituality reflects in thoughts, beliefs, and actions of the people, which eventually determine their well-being. Present study aimed to investigate the relationship between spiritual intelligence and psychological well-being among (N=30) postgraduate female students of Nagpur University. King's spiritual intelligence inventory and Ahmad's psychological well-being scale were used. Results revealed significant correlation between spiritual intelligence and psychological well-being ($P < 0.01$) among female students.

Keywords: spiritual intelligence, psychological well-being, youth

**EFFECT OF FAMILY COHESIVENESS ON MENTAL
HEALTH OF ADOLESCENTS**

Digvijay Kumar

Counsellor/Psychologist N.V. Barahiya, Lakhisarai
Ram Dhyarai
Department of Psychology J.P.U, Chapra (Bihar)

Abstract

To see the effect of Cohesion in family environment on mental health and its indices of adolescents Hindi Version of 'Mental Health Battery' (MHB-SS) by Singh and Sengupta (2012) and 'Family Environment Scale' (FES-BC) by Bhatia and Chadha (2019) were administered on 200 adolescents undergoing study in 10th to 12th classes of Government Inter colleges of Siwan District of Bihar. The sample was drawn from both rural and urban Inter colleges of this district. Out of the total sample of 200 adolescents the sample of 100 students was taken from male adolescents and 100 students were taken from female adolescents. The age range of adolescents was from 14-16 years. The analysis of results revealed that Cohesion in family environment influences mental health of adolescents. Mental health as a whole, emotional stability, adjustment, autonomy, security-feeling, self-concept and general intelligence of adolescents are significantly improved by cohesion in their family environment.

Keywords: Adolescents, Mental health, Family, Environment, Cohesion.

**THE EFFECT OF REGULAR EXERCISE ON EMOTIONAL STABILITY
OF WORKING WOMEN IN PATNA (BIHAR)**

Hena Hussain

Department of Psychology
Oriental College, Patna City, Patna

Abstract

The study was conducted to see the effect of regular exercise on the emotional stability of working women in Patna (Bihar). For this purpose, a total of 60 working women (30 who exercised regularly, and 30 who did not exercise) were purposively selected as a sample from various government and non-government offices located in the PMC area of Patna district of Bihar. The obtained results revealed that; those working women who exercise regularly have very good emotional stability than those who did not exercise, and when emotional stability is good then their mental health will also be good.

Keywords: Working Women, Regular Exercise, and Emotional Stability.

**AN OVERVIEW OF PLURALISTIC IGNORANCE AMONG ADULTS
ABOUT CLIMATE CHANGE EFFECTS**

Narayani Srivastava, Anil Kumar Yadav and Trayambak Tiwari
Cognitive Science Laboratory,
Department of Psychology,
Banaras Hindu University

Abstract

Climate change has been recognized as an ominous threat to human survival. Despite this fact there prevails a pluralistic ignorance about anthropogenic causes of climate change. Further to avoid the negative emotions like guilt and despair, people tend to ignore the climate change messages. The current review paper aims to highlight the psychological apathy of adult population towards climate change and explore the strategic measures to leverage the social cognition of individuals to become more climate hopeful which evokes the sense of climate efficacy.

Keywords: Climate Change, Climate Efficacy, Climate Hope, Pluralistic Ignorance

**A STUDY OF ATTITUDE TOWARDS DOWRY AMONG URBAN- RURAL
WORKING AND NON WORKING WOMENS EMPOWERMENT: IN BIHAR**

Mandeep kumar

Research scholar

Dept. of Psychology,

Veer Kunwar Singh University, Ara (Bihar)

Abstract

The Present study aims to instigate the attitude of urban-rural working & non working women towards Dowry. The study was done on 280 (Urban-Rural) working and non working women to know their attitude towards dowry. The sample consisted of 280 urban -Rural working & non working women from district Patna, Jehanabad, Nalanda, Arwal, Nawada States of Bihar. Sampling techniques used for investigation as stratified random sampling method. The scales used were personal data schedule (PDS), Attitude towards Dowry scale (ATDS) developed by R. R. Sharma. Attitude can be affected by different variables such as Urban-Rural Working & Non working women's Empowerment Background, nature of family, education, caste, Government Employee, Non-Government Employee, etc. Effect of these variables were seen on attitude towards Dowry through mean, S.D, T-test, correlation analysis on various dimensions. It was seen that negative attitude towards Dowry was present among urban- rural Working & Non working women's Empowerment peoples of Bihar States. Positive attitude was present among Rural Non working women's Empowerment people of rural background. It was observed that (urban- rural) Working & Non working women's effect people's attitude towards dowry.

Keywords: Dowry, Attitude, Women, Urban, Rural, Working, Non-Working, Empowerment

CAUSES AND PREVENTION OF OCCUPATIONAL STRESS

Shalini Sinha

Dept of psychology
Magadh University, Bodh Gaya

Abstract

Occupational Stress can lead to one's Physical or mental State in responses to workplace that pose a challenge to that employees causes occupational mess include environment organizational Climate and a conflict arises from the job demands of the employees physical Symptoms of Stress include fatigue increased blood pressure, rapid heart rate, dizziness, headaches to back pain, inability to concentrate and confusion immune suppressions and chronic pain. Psycho logic disorders may lead to poor work performance, higher absenteeism, less work productivity even injury Stressful working conditions can lead to behavioral Physical and psychological Strains. Adverse' health effects include psychological disorders, cardiovascular disease, diabetes hypertension week immune System increased risk of Occupational injury and health service utilization.

Keyword: occupational stress, environment, Organizational.

**A SYSTEMATIC REVIEW OF RESTORATIVE EFFECTS OF NATURAL
AND BUILT ENVIRONMENT ON COGNITIVE FUNCTIONS**

Dhanjit Sharma and Sujeet Pratap
Cognitive Science Laboratory
Department of Psychology,
Banaras Hindu University, Varanasi

Abstract

Exposure to nature has a positive impact on cognitive functioning as claimed by attention restoration theory (ART: Kaplan, 1989). Exposure to nature and natural landscapes improves the cognitive functioning. Research findings validate ART and other related theories to explain the restorative ability of nature. Time spent in natural environment or even viewing pictures or videos facilitates concentration. By using some filters like design (Experimental/ quasi-experimental), experiment setting (natural, Urban/Built) the present review suggests that exposure to nature has positive influence on cognitive functioning.

Keywords: Attention Restoration, Directed Attention, Restorative Environment, Nature.

A STUDY ON PSYCHOLOGICAL EMPOWERMENT OF WOMEN IN BIHAR

Binay Kumar

Department of Psychology
U.R. College, Rosera, LNMU, Darbhanga

Abstract

Empowerment of women and closing the gender gaps is a necessity for the development of a society. “Women empowerment” is a very commonly used phrase in developing countries. In India issues related to women are also very emergent. Women empowerment can also be called gender empowerment. In 21th century gave much emphasis to women as equal partners and participants in the development process, and thereby, the conceptual thinking shifted from development to empowerment of women. Women empowerment can be done in different ways such as economical, social, psychological, political, cultural etc. Psychological empowerment is a blend of Self confidence, Courageous, Self reliance, feeling in security in the family, Career oriented, self image and it ultimately leads to wellbeing and the happiness of women. 50 percent reservation to women in panchayati raj institutions and urban bodies laid the foundations of a social revolution as it aimed at providing equal rights, equal social status and equal opportunities to women. This paved the way for women’s respectful partnership in local self-governance as policymakers. In the traditionally male-dominated society of Bihar, female literacy and educational level is increasing and more women are employed in the different sectors of the economy. In the above-mentioned context, the current study has measured the level of empowerment of working women of urban Bihar. Unskilled working women, engaged in blue-collared jobs are mainly at the receiving end in society. In this paper will be explored to understand psychological empowerment of women many ways in Bihar.

Keywords: women, psychological, empowerment, Bihar

**WOMEN EMPOWERMENT THROUGH EDUCATION:
ISSUES AND CHALLENGES**

Subala Paswan

Dept. of Psychology
R. P. S. College Chakeyaj, Mahnar
B.R.A.B.U. Muzaffarpur, Bihar

Abstract

Education is the most important tool for women empowerment. Education can play a vital role in the empowerment of women in this global era. Education is milestone of women empowerment because women education increased from 1901 to 2011 according to the census of India report. Development in any country will mean the empowerment in the quality of life of the people as a whole as also of the individual. The status of women in any society is a significant indicator to the level of culture and social Justice and economic and social development. Therefore, education for women has become a necessary for achieving development goals. A Nation's development is determined by its economic, social and technological development.

Keywords: Women Empowerment, Education, issues, Challenges

PSYCHOLOGICAL EMPOWERMENT OF WOMEN IN BIHAR

Ram Nand Prasad Singh

Department of Psychology

R.C.S. College, Manjhaul, LNMU, Darbhanga, Bihar

Abstract

Women empowerment is one of the modalities of women equity. Psychological empowerment is needed for the inner self-empowerment of an individual woman. Until and unless women are mentally strong and psychologically sound, they will not be able to overcome the hindrances in the path of their empowerment in Bihar. A psychologically distressed woman would never be able to withstand the onslaught of difficulties at home or at work because of low self-esteem and higher stress levels. Many districts in Bihar because of the cultural boundary is strong in these areas. The decision-making power and resilience in stressful situations may also get affected because of the low psychological empowerment levels. Thus, a need to psychologically empower women be they homemakers or working women is essential in Bihar. Present State Governments try to improve women empowerment in the social and economic sector. It will elaborate the psychological empowerment in women involving the indicators such as self-esteem, resilience, stress levels, decision-making power, locus of control which directly or indirectly affects the psychological well-being of women. Various psychological factors need to be given importance in women's psyche to improve their quality of life. Thus, the paper here systematically reviews and critically discusses Psychological Empowerment of Women in Bihar that investigates psychological empowerment and empowerment-related concepts. Lastly, as Albert Einstein has rightly said, "The woman who follows the crowd will usually go no further than the crowd. The woman who walks alone is likely to find herself in places no one has been before," let us be the helping hand and let women decide whether they want to join the crowd or walk alone.

Keywords: Women, empowerment, Bihar

WOMEN EMPOWERMENT TO HUMANIZE THE WORLD

Mamta Suman

Department of Psychology

G.D. College, Begusarai, L. N. M. U. Dharbhanga, Bihar

Abstract

The Process of Women Empowerment can change this self-destructive trajectory and build a better world where life and Love are the basis of our society. Girls and women should be empowered they should be helped to take the lead alongside men and bring the ship called Humanity to safe harbor, Women Empowerment is all about that, it's the only key to humanize the world."The side of every great man there is a great Woman and by the side of every great woman there is a great man ".Since Gender Equality is a Human right women Empowerment becomes the First step, the First truly invative and decisive action to be taken in an old tired and sick world like ours.

Keywords: Women Empowerment, Humanize, Great, Life

PHILOSOPHY AND PSYCHOLOGY

Pratima Singh, Department of Philosophy
Anju Lata Singh, Department of Psychology
Vasant Kanya Mahavidyalaya,
Banaras Hindu University

Abstract

The event of psychology parting its ways from philosophy is based on the premise of exclusive subject matter of observable human behaviour. The posturing of philosophy, though, guides the human behaviour in terms of its subjective character, which offers the scope of synthesis and analysis of the possible permutations and combinations of human behaviour. This is further supported and extended through realism, empiricism, interactionism and causation. The eventually laid down significance of the cognition by Rene Descartes, the modern philosopher, in terms of *cogito ergo sum*, along with the previously supporting evidences, defines and shapes the philosophy of psychology.

Keywords: philosophy, psychology, cognition

IMPACT OF EMOTIONAL MATURITY AND LIFE SATISFACTION AMONG SUBSTANCE ABUSERS

Kamini Kumari

Department of psychology
Magadh university, Bodh gaya, Bihar

Abstract

Emotional maturity is defined as the ability to understand and respond to one's own emotions as well as the emotions of others. And how people struggle and deal with adversity and challenges, as well as how to preserve their mental capacity for a precious and healthy life. Life satisfaction is the strong cognitive elements and Favourable assessment of an underlying state that is thought to be relatively consistent and influenced by internal and external factors, with its assessment based on past experience, current situation, and future expectations for one's well being. Substance abuse is influenced by one's own feelings and satisfaction, and it refers to the repetitive, Uncontrollable and obsessive pattern of harmful abuse of any type of illegal, psychoactive, mood-altering substance. The ultimate goal of this study was to investigate the role of life satisfaction and emotional maturity among substance abusers. The sample consisted of 60 male substance abusers and non-abusers (30 substance abusers and 30 non-abusers) ranging in age from 18 to 40 years. Substance abusers from the Hitaishi Happiness Home in Patna were sampled, as were non-abusers from the abusers' families. The respondents were chosen using the purposive Sampling method. Dr Q G alam created the life satisfaction scale and Dr yeshvir Singh and Dr Mahesh Bhargava (Hindi version) created the emotional maturity scale. Based on the paper's findings, it is possible to conclude that there is a significant impact.

Keywords: Emotional maturity, life satisfaction, substance abusers

MANAGING ANXIETIES FOR SOUND SLEEP

Ajay Kumar

Department of Psychology
Langat Singh College, Muzaffarpur

Abstract

Now a days, rare people have no worries for their life and career. The bed time is proper time to think whatever they work or miss during day time. But several pressures for tomorrow hamper their sound sleep and for this reason they sleep at late night and causes many physical and mental health. There is a need to try to resolve these worries managing by few psychological tips. It is necessary to jot down what's running in their mind and then set it aside for tomorrow. Stress and behaviour management, positive thoughts and emotions, setting priorities, delegating assignment and meditation are some psychological equipment to control the anxiety during bed time. Besides these tips regular physical activity and avoiding being active too close to bed time work as medicine's effect. Occasional sleepless night must not be repeated again and again. In spite of all efforts if they have trouble in sleeping, they must have contact to their health care provider for identifying and treating it.

Keywords: jot down, setting priorities and psychological equipment.

**A SCOPING REVIEW ON PSYCHOSOCIAL ISSUES
OF PEOPLE WITH APHASIA**

Bulbul Raj, Tara Singh, Tarun Mishra and Vijay Nath Mishra
Cognitive Science Laboratory
Department of Psychology, Banaras Hindu University

Abstract

Aphasia is a language disorder caused by damage in part of brain that controls speech expression and comprehension. In most cases it occurs following the stroke. This review article summarizes the issues of people with aphasia at personal level i.e., impairment, psychological, psychiatric and physiological issues, social and environmental level. It also discusses how these issues affect the quality of life of persons with aphasia as well as their caretakers.

Keywords: Aphasia, Stroke, Quality of Life, Caretakers, Psychological Issues, Depression.

**‘YOGA THERAPY, CLINICAL PSYCHOLOGY - PSYCHO-AILMENTS
AND THEIR REMEDIES DESCRIBED IN INDIAN SCRIPTURES’**

Rajeev Sharma

IAS (retired), Vrindavan, Lucknow

Abstract

Modern psychologists estimate that roughly 95% or even more world population is suffering from one or more types of mental illnesses. Further, day by day, it is becoming evident that root cause of our most of the ailments, including cancer, lies in our mind. Under such circumstances how we can treat soma without treating mind. Yoga therapy which includes yoga, naturopathy and yogic diet is being accepted world over to treat psycho and soma both. History of clinical psychology starts with Lightner Witmer who suggests use principles of psychology in treating mental illnesses. David Shakow, applied principles of psychology to treat Schizophrenia patients. But Indian scriptures particularly Vedas, Shreemad Bhagwat Geeta and ShreemadRamcharit manas describes these mental illnesses much earlier in details, describing their causes, their consequences and their remedies. Psycho problems like anger, depression, greed, confusion, fear, laziness, pride, lust, temptation, loneliness, etc. are not only described in Shreemad Bhagwat Geeta; but it also shows us path to tackle them. In ShreemadRamcharitmanas- Uttarkand- dohasankhya 121 and 122 are dedicated to mental illnesses, their causes, their consequences on man and their remedies. Approximately two dozen psycho impulses are described here which results into one or more somatic ailments. This work is further authenticated by Louise Hay in her work ‘Heal Your body’ and ‘You can heal your life’ where she identifies psycho impulses behind every somatic disorder. She specifically asserts that without cleaning our mind somatic disorder cannot be managed. But what process is to be adopted for cleaning psycho and soma simultaneously? Yoga therapy is an answer where yoga practices clean our psycho; naturopathy rejuvenates our damaged soma or body; and yogic diet further strengthens our mind as well as body.

Keywords: Indigenous, Yoga therapy, Clinical psychology, psychosomatic ailments, Naturopathy.

THE RELATIONSHIP BETWEEN INTERNET ADDICTION AND SOCIAL ADJUSTMENT

Rajeev Kumar Gupta

Department of Psychology
Jai Prakash university,
Chapra, Bihar

Abstract

This study was done by J.P. university Chapra. The university was conducted to determine the association between Internet addiction and social adjustment, and test anxiety among male college students. This descriptive correlational research was conducted on all male students of college under J.P University Chapra studying B.A for the academic year 2018. The sample consisted of 250 students, selected by simple random sampling. Data were collected using three questionnaires assessing Internet addiction, social adjustment and test anxiety. The obtained data were analyzed using Pearson correlation and regression analysis. Results: The results showed that there was a significant positive association between Internet addiction and test anxiety. There is also an inverse relationship between social adjustment and test anxiety. The results of the step-by-step regression analysis showed that among the variables under study, the Internet addiction variable predicted 0.31 as well as the social adjustment variable 0.36 the variance of test anxiety. It concluded that the level of test anxiety in students can be controlled through necessary training to make better use of internet and prevent its addiction.

Keywords: Internet addiction, social adjustment, anxiety, collage students

EMOTIONAL INTELLIGENCE FOR WOMEN EMPOWERMENT

Manikesh Kumar

Post Graduate Deptt. Of Psychology
Vaishali Mahila College, Hajipur
B.R.A.B.U. Muzaffarpur Bihar

Abstract

It is well known that nature has empowered every human being with some special quality. There is a need to indentify that quality and polish it to achieve the maximum of it. Women have been considered as better at Emotinal Intelligence since the advent of civilization. Their cerebral hemisphere and areas of brain, associated with language, is found to be more developed in comparison to men. They have the ability to act and speak in accordance with the situation and people present around them. Present study investigates about this attribute of personality as a tool for women empowerment. How EI can be used to get better results in society, workplace and family. Women have already been using it and they should be trained to use EI as a tool for empowerment everywhere and in every situation by them.

Keywords: Emotional Intelligence, Women Empowerment.

ATTENTIONAL BIAS TO POSITIVE STIMULI: A LITERATURE REVIEW

Jahnvi Suprabhat and Sujeet Pratap
Cognitive Science Laboratory,
Department of Psychology,
Banaras Hindu University, Varanasi

Abstract

Attentional bias is the preferred attention due to saliency and relevance of stimuli. In general, attentional bias has been studied in the context of negative stimuli and with respect to various forms of psychological disorders but studies with positive stimuli is relatively low reportedly. The present review focuses on positive stimuli primarily in terms of emotion, natural stimuli and music. This study offers insights into the various ways in which attentional bias to positive stimuli could be studied. The limitations of the above studies along with their future directions have also been discussed.

Keywords: Attentional bias, positive stimuli, natural stimuli, emotion, music

ISSUES AND INITIATIVES IN WOMEN'S EMPOWERMENT

Sunita Kumari

Department of Psychology
R.B.B.M. College, Muzaffarpur, Bihar

Abstract

Women is often considered as the better half of man. But actual condition of women in the world and particularly in developing countries like India dose not tally with this consideration. More than one hundred twenty-five billion people in the world today, the great majority of whom are women, live in unacceptable conditions. While women are responsible for 70 percent of the food production, and are the driving force behind 68 percent of small enterprises with nearly 35 percent of the family's dependent on them, yet they constitute only about 13 percent own land. In India, of the total about 30 percent people who are below poverty line; 70 % are women. Women's poverty in India is directly related to the absence of economic opportunities and autonomy, lack of access to economic resources, including credit, land ownership, and inheritance, lack of access to education and support services and their minimal participation in the decision-making process. Various other manifestation of women's poverty in India includes hunger and malnutrition; increasing mortality from illness; homelessness and inadequate housing; unsafe environments and their social discrimination and exclusion from the mainstream. Therefore, the eradication of poverty of women in India can not be accomplished through ant-poverty programmes alone but it will require their democratic participation and changes in the economic structure in order to ensure their access to resources, opportunities and public services.

Keywords: Women, Poverty, Empowerment, Economic resources and Education, etc.

**EDUCATIONAL ASPIRATION AS PREDICTOR OF PSYCHOLOGICAL
PROBLEMS AND RESILIENCE AMONG ORPHAN
AND NON-ORPHAN ADOLESCENTS**

M. Akilandeswari and N. Annalakshmi
Department of Psychology,
Bharathiar University, Coimbatore

Abstract

The present study attempts to find whether educational aspiration predicts psychological problems and resilience among orphan and non-orphan adolescents. A purposive sample of 282 orphans from 6 orphanages and 287 non-orphans (both boys and girls between 12-17 years) residing with their family members from a mid-sized city in South-India were recruited for the present study. The participants completed self report measures of educational aspiration, psychological problems and resilience. Regression analyses were carried out and the results revealed that educational aspiration negatively predicted psychological problems and positively predicted resilience for both orphan and non-orphan adolescents.

Keywords: Educational aspiration, psychological problems, resilience, orphan adolescents

**A STUDY OF AWARENESS OF MARRIAGE CULTURE HERITAGE
AMONG URBAN-RURAL PARENT'S: IN BIHAR**

Mandeep Kumar

Dept. of Psychology, Veer Kunwar Singh University,
Ara, Bihar

Abstract

Marriage culture for certain countries arranged marriage is an important part of their culture and heritage. Marriage is a ritual that marks a change in status for a man and a woman. and the acceptance by society of the new family that is formed (Rosman & Ruble, 1981). Marriage like other custom, is governed by rules (Rosman & Ruble, 1981). Heritage includes, but is much more than preserving ,excavating, displaying, or restoring a collection of old things . It is both tangible and intangible, in the sense that ideas and memories -of songs, recipes, language, arts, dances and many other elements of who we are and how we identify ourselves – are as important as historical societies. Nowadays, people don't want to make the wedding ceremony by using their traditional practice. They are several factors that have been involved which are education, source of economic in urban areas, and the modernisation, mostly all members of society from rural areas have moved to urban areas because of factor of work. In rural area, the number of work is decrease. Beside that, the living standard of live has been changed in this new era. Bihari is located in the eastern part of India and shares its border with the country Nepal, and States such as Uttar Pradesh, west beBengal and Jharkhand. This state has a lot of cultural influence when it comes to weddings. However, traditional weddings in Bihar are colourful song, dance, arts, handicrafts dress, rustic, traditional, vibrant and lengthy too Both the families part in take various traditional ceremony that are truly Indian

Keywords: marriage, cultural heritage, urban, rural parents

**OCCUPATIONAL STRESS INDEX OF POLICE
PERSONNEL AND DOCTORS**

Ashwin R. Jaiswal and Shafiq Y. Pathan

Department of Psychology

Vasantrao Naik Government Institute of Arts and Social Science,
Nagpur

Abstract

The research aimed to study occupational stress in police and doctors and identify the correlation between its subscales. Total 120 Participants (60 police and 60 doctors) from Amravati, Maharashtra, India are included. Occupational stress is measured through the Occupational Stress Index scale of Dr. A.K. Shrivastav and Dr. A.P. Singh. The results indicate a significant difference was found between police and doctors on the occupational stress index and its sub-scales except for intrinsic impoverishment and strenuous working conditions. Police personals were found higher in role overload, role ambiguity, role conflict, group and political pressure, under participation, powerlessness, and unprofitability.

Keywords: Occupational Stress, Police personnel, Doctors

PROBLEMS OF OLD AGED

Sumitra Kumari

Rameshwar Mahavidyalaya,
BRABR University, Muzaffarpur

Abstract

Ageing is a process in every individual which is totally irreversible and every people must understand the consequences of being old and be aware of the problems related to it. Although there is a great advancement in technology in the field of health care, mobility and also great treatments are available at our hands, still people face a lot of problems in dealing with old age problems. In this paper, we will address the problems related to old age like loneliness, financial dependency, lack of mobility, physical and mental health problems, rigid mentality, generation gap in the family, economic problems. We will also discuss the ways of eroding these problems and how these can be acceptable widely. Different statistical analysis will be shown with which we can understand the different level of problems.

Keywords: old aged problems, generation gap, economic problems, abuse.

**FACTORS THAT SUPPORT AND CHALLENGE RESILIENCE AND
GLYCAEMIC CONTROL – A SYSTEMATIC REVIEW**

Abhirami T. R and Annalakshmi. N
Department of Psychology,
Bharathiar University, Coimbatore

Abstract

The present study is a systematic review that aims to understand psychological and social factors that support and challenge resilience and glycaemic control. 211 articles were obtained from online databases such as Google Scholar, PubMed, ScienceDirect, and ResearchGate during the time frame of the last 20 years. 58 studies that meet the criteria were included in the current study. According to the researches, family cohesion, perceived social support, self-esteem, hope, and other factors supported resilience and glycaemic control whereas family dysfunction, stress, negative emotions, poor benefit seeking, and other factors weaken them. Implications and future directions will be discussed.

Keywords: diabetes, health psychology, positive psychology, resilience

TECHNOLOGY AND ITS INCLUSIVE ROLE IN REDEFINING EDUCATION IN THE CHANGING WORLD

Prashant Shekhar

Research Scholar,
University Department of Philosophy (Education)
B.R.A. Bihar University Muzaffarpur

Abstract

Technology has impacted almost every aspect of life today, and education is no exception. The teacher lectures from a podium at the front of the room while the students sit in rows and listen. Some of the students have books open in front of them and appear to be following along. A few look bored. Some are talking to their neighbors. One appears to be sleeping. Classrooms today do not look much different, though you might find modern students looking at their laptops, tablets, or smart phones instead of books. A cynic would say that technology has done nothing to change education. However, in many ways, technology has profoundly changed education. For one, technology has greatly expanded access to education. In medieval times, books were rare and only an elite few had access to educational opportunities. Individuals had to travel to centers of learning to get an education. Today, massive amounts of information (books, audio, images, videos) are available at one's fingertips through the Internet, and opportunities for formal learning are available online worldwide through the Khan Academy, MOOCs, podcasts, traditional online degree programs, and more. Access to learning opportunities today is unprecedented in scope thanks to technology. Technology is a powerful tool that can support and transform education in many ways, from making it easier for teachers to create instructional materials to enabling new ways for people to learn and work together. With the worldwide reach of the Internet and the ubiquity of smart devices that can connect to it, a new age of anytime anywhere education is dawning. It will be up to instructional designers and educational technologies to make the most of the opportunities provided by technology to change education so that effective and efficient education is available to everyone everywhere.

Keywords: Technology, Laptop, Online, Education, Aspect, Internet, Classroom.

**QUANTUM COGNITION AS FUTURE PROSPECT
OF DECISION MAKING**

Prashant Singh and Tarun Mishra
Cognitive Science Laboratory
Department of Psychology
Banaras Hindu University, Varanasi, U.P.

Abstract

Decision-making is a high order cognitive process which consists of belief and action. Classical probability models of cognition are ineffective to model decision making process, at least in some circumstances. The purpose of this literature review is to provide the empirical evidences already existing in literature of decision making, where quantum cognitive models have proven to be more effective. The proposed models promise well in predicting and explaining the conjunction fallacy, order effects, and the violation of sure thing principle as compared to classical models of cognition. Instances, where we sounded irrational earlier, as per classical probability framework, it seems we are quantum probabilistic.

Keywords: Quantum cognition, Decision making, Quantum probability, Classical probability

**MENTAL HEALTH OF TEACHERS IN RELATION TO THEIR
SPIRITUAL INTELLIGENCE**

Digvijay Kumar

Counsellor/Psychologist, J.N.V. Barahiya, Lakhisarai
Ram Dhyan Rai
Psychology, J.P.U, Chapra (Bihar)

Abstract

Mental health is a state of emotional, psychological and social wellness. It is confirmed by satisfying interpersonal relationships, effective behaviours, a positive self-concept and emotional stability. Spiritual intelligence is the human power of soliciting vital questions regarding life's meaning and concurrently in contact with the perfect connection between people and the world they live. To seek the relation of spiritual intelligence with mental health of teachers Mental Health Battery constructed and standardized by Singh and Sengupta (2012) and Spiritual Intelligence Scale constructed and standardized by Dhar and Dhar (2010) were administered on 100 teachers of Government High Schools of Siwan district of Bihar. The analysis of results revealed that female teachers are significantly higher than male teachers on mental health and spiritual intelligence. Teachers high on spiritual intelligence were found significantly higher on mental health than teachers lower on spiritual intelligence irrespective of sex.

Keywords : Mental Health, Teachers, Spiritual, Intelligence, Sex.

PROBLEM AND CHALLENGES FACED BY WORKING WOMEN

Kumari Shobhna

Dept of Psychology

Veer Kunwar Singh University.

Abstract

The main goal of the study was to understand the problems and issue faced by working women. The main objective also includes identifying the key Socio-economic attributes contributing to women's Status Safety and security and to study women's involvement in Various activities organization for improving family, community and society. A based methods approach involving face to face interviews focus group discussions and questionnaire technique including but both close-ended and open ended questions was chosen for effective elicitation of data from the respondents. The study was based on primary data to find out the possible solutions for working women which could help them to outcome the problems that they face in the work place. The result of the study showed that different age group of working women have different kind of problems and challenges and different categories as married, single, divorce, single parent etc. some problems are definitely common like mental and physical Stress lack on proper balance between employment and family care. But some challenges are age or Category Specify like prejudiced and stereotyped thinking Safety and Security.

Keyword: Working women, organization and mental problem.

PROBLEM AMONG OLD AGE PEOPLE IN INDIA

Apratim

Dept Of Psychology
D.D.M College Danapur Cant.

Abstract

As per the Indian tradition families have been described to provide social security to old age members of the family. Today changing family Structure is caused increased problems of old age people. Emerging prevalence of nuclear families in recent year the old rich family members are exposed to psychological and Financial in Security The study paper provide insight into the Social and economic Conditions of problems of the oldest people residing in the city and assists the scope for social work intervention for old age people. When individuals reach old age, the various problems that they have to experience include decline in health Conditions, retirement financial problems loneliness 'and dependence upon other. People Include, social economic psychological health crime abuse and other miscellaneous problem. There are formation of measures and policies the alms at alleviating the problems of the elderly provides them Security protection and focus upon their well-being.

Keywords : Aged people, Abuse, Health crime, psychological

**A CASE STUDY ON SUSTAINABLE DEVELOPMENT
& EMPOWERMENT OF WOMEN IN BIHAR**

Ravi Kant Anand and Govind Kr. Paswan
Department of Geography
R.C.S. College, ManjhaulNMU
Darbhanga, Bihar

Abstract

Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world. Fulfilling this right is the best chance we have in meeting some of the most pressing challenges of our time—from economic crisis and lack of health care, to climate change, violence against women and escalating conflicts. Women are also harder hit by the economic impacts of COVID-19, as they disproportionately work in insecure labour markets. Nearly 60 percent of women work in the informal economy, which puts them at greater risk of falling into poverty. Sustainable development depends on an equitable distribution of resources for today and for the future. The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) adopted by world leaders in 2015, embody a roadmap for progress that is sustainable and leaves no one behind. Achieving gender equality and women’s empowerment is integral to each of the 17 goals. Only by ensuring the rights of women and girls across all the goals will we get justice and inclusion, economies that work for all, and sustaining our shared environment now and for future generations. Women are key managers of natural resources and powerful agents of change. In Bihar, it shows how women are often more directly dependent on natural resources, with responsibility for the unpaid work of securing food, water, fuel and shelter for their household. Julie Nelson argues that "Women and nature are largely invisible in mainstream economics". The paper enumerates women’s empowerment as a key factor for achieving sustainable economic growth, social development and environmental sustainability. This paper will support to policy makers to enhance the growth of women in Bihar.

Keywords: Gender, Empowering woman, Sustainable Development, Environmental etc.

**PSYCHOSOCIAL FACTORS RELATED TO SELF-CARE MANAGEMENT
IN TYPE-2 DIABETIC PATIENTS – A SYSTEMATIC REVIEW**

Rinu Harshidha K and Annalakshmi. N

Department of Psychology,
Bharathiar University, Coimbatore

Abstract

The present study is a systematic review that aims to understand the psychosocial factors related to self-care management, health related behaviors and resilience among type 2 diabetic patients. 180 articles were obtained from online databases such as Google Scholar, PubMed, ScienceDirect, and ResearchGate during the time frame of the last 25 years. 62 Studies meet the criteria were included in the current study. According to the researches, family support, good socio-economic status, good self-care management support resilience and other factors like lack of self-care management, poor self-efficacy, negative emotions weaken the resilience. Implication and future directions will be discussed.

Keywords: diabetes, health psychology, self-care management, resilience

**SCIENCE AND TECHNOLOGY FOR THE SUSTAINABLE
DEVELOPMENT WITH WOMEN EMPOWERMENT**

Smriti Nande

Department of Psychology
B.R.A. Bihar University, Muzaffarpur, Bihar

Abstract

Sustainable Development is the only way to bring happiness and prosperity to the people and is practiced among all countries throughout the world. Without Women Empowerment, even sustainable development is futile. Because women are that 50 percent of the population who are responsible for 100 percent life of the humanity on this planet. Science and Technology can be the most important tool for sustainable development. Furthermore, sustainable development is the term, which should be defined globally and has been done by the United Nations. So, this paper envisages all the aspects of Sustainable Development with Women Emporment by means of Science and Technology.

Keywords: Science, Technology, Women Empowerment, Sustainable Development.

**RESILIENCE IN PARENTS OF AT-RISK CHILDREN:
A LITERATURE REVIEW**

Sithara A. K. and N. Annalakshmi.
Department of Psychology
Bharathiar University, Coimbatore

Abstract

The current study evaluated the resilience in parents of at-risk children. Out of 490 articles retrieved from electronic databases such as, PubMed, ScienceDirect, Google Scholar, ResearchGate, and PsycInfo, 66 studies met the inclusion criteria set for this review. Results showed that some parents displayed resilience over the course of their lives despite having significant levels of anxiety, stress, health issues, and depression. The risk and protective factors and the impact of intervention programmes on the enhancement of resilience are discussed in detail.

Keywords: resilience, risk and protective factors, parents, at-risk children

SUSTAINABLE DEVELOPMENT WITH WOMEN EMPOWERMENT

Arihant Nachiketa

Department of Psychology
Magadh University, Bodh-Gaya, Bihar

Abstract

Women's contribution to sustainable development must be recognized. Women have a strong role in education and socializing their children, including teaching them care and responsibility with regard to the use and protection of natural resources. Women's and girls face unacceptable levels of discrimination and abuse, which is not only wrong, but also prevents them from playing a full part in society and decision making. Gender bias is still deeply embedded in cultures, economics, political and social institutions around the world. Women play a key role in the management, conservation, exploitation and utilization of natural resources as consumers and educators, despite having serious limitations in access and control of these resources.

Keywords: Contribution, Responsibility, Protection, Exploitation, Educators.

CARE OF OLD AGE WOMAN

Veena kumari

Dept of Psychology, S. G. D. M. Bailey Road Patna
Ramakant Pandey
Dept of Biochemistry P.U. Patna

Abstract

Woman is a unique identity of living system. Daughter, sister, wife and after all mother is back bone of human life. Due to the Calcium deficiency the bone of woman skeleton gradually degraded and become hollow. Due to this deficiency old age woman is suffering from various diseases time to time on regular routine basis. So there should be a proper care of old age woman is needed in her daily life. Because of lowering down of metabolic activities and blood circulation, physiological disorders are continuously going on, which creates muscular pain, digestive disorder, anemia, lowering down of eye-sight and so on. Proper sanitation deficiency may cause pathogenic attack, skin diseases, may cause fungal and bacterial diseases due to attack of ecto and end parasites. So, the near and dear should care them for their long life.

Keywords :old age woman, diseases, and proper care.

WOMEN EMPOWERMENT THROUGH SCIENCE AND TECHNOLOGY

Sabita Kumari

Academic Counselor,
IGNOU, Darbhanga

Abstract

Women can be empowered only if they are given education and made aware of their rights and hence, they themselves priorities their lives. Violence has to be completely eradicated from her life, then and only then can the dream of empowerment becomes a reality. Women have to be given due respect in a society to have actual empowerment. Women have always been suppressed, underestimated and valued less in the society and also within her family. Although efforts have been taken to improve the status of women, the constitutional dream of gender equality is miles away from becoming a reality. Even today, “the mainstream remains very much a male stream”. The dominant tendency has always been to confine women and women’s issues in the private domain. Women empowerment refers to increasing the spiritual, political, social or economic strength of women. It often involves the empowered developing confidence in their own capacities. An important factor in achieving these reforms will be a greater presence of women in decision-making bodies, be they scientific or political. The voice of women in governance is required to create the political will essential to bring about changes that will benefit all of society.

Keywords: Women Empowerment, Science, Technology

**FACTORS AFFECTING SUSTAINABLE DEVELOPMENT:
BEHAVIORAL-COGNITIVE PERSPECTIVES**

**Atul K Gangwar, Sushil K Sah, Trayambak Tiwari,
Tara Singh, Indramani L. Singh**

Cognitive Science Laboratory, Department of Psychology, Banaras Hindu
University, Varanasi, India.

Anju L. Singh

Department of Psychology, Vasanta Kanya Mahavidyalaya, Banaras
Hindu University, Varanasi, india.

Abstract

Sustainable development, promotes attitude of safe-guarding resources for next generations. Curbing the pollution, is a foremost step towards sustainable development. Human behavior is critical in curbing pollution. Thus, discussion of human cognitive abilities and attitudes can benefit us in multiple avenues. In this article we discuss various roles of cognitive and meta cognitive abilities in curbing the problem of pollution. Inclusion of these abilities, in policies, for curbing pollution would increase the utility of efforts. Suggestions regarding the behavioral glitches of sustainable development have also been discussed. Article concludes that cognitive abilities and attitudes play vital role in sustainable development.

Keywords: Sustainable Development, Pollution, Human Behavior, Cognition.

**EDUCATED WOMEN AND CHANGING BEHAVIORAL PATTERN
& ATTITUDE. AN EMERGING TREND**

Anuja Vivek

Department of Psychology
Marwari College. Ranchi University

Abstract

There has been a sea change in the context of gender bias, vis a vis women education, as large number of girls are competing with the boys in getting education. Whether urban or rural India, girls in large numbers are willing to go for education and even the parents in rural areas are more willing to educate their daughters and are sending them to schools. The government has also launched several schemes to promote girl/woman education. The result is that women are now competing with men in all spheres of life. They have rather outwitted their male counterparts. However, a new trend is emerging and women are becoming more pronounced in their attitudinal responses as well in their behavioral pattern. They are more assertive, ever aspiring and highly ambitious. They want to have their own way whether it is household or it is profession. This all has happened due to various factors and the social change which is taking place here in our country. Even the parents are nurturing a different value system among their daughters to shape them with an independent personality without any inhibition and deterrent. This no doubt, has significantly infused and provided a booster to the much sought after phrase "Women Empowerment". But the irony remains that it has also given leverage to the growing social problems, like divorce, alimony litigation, inlaws bashing and several related affairs. Another problem which has also gained currency is that casting aspersions on someone's character with a threat, just for sake of their own gain n advantage. The laws and legal system of our country are also biased in favour of women, to which the educated women are becoming more adept to take the advantage. The emerging trend is witnessing an attitudinal change in the behavioural pattern of educated women.

Keywords: Emerging trend, Seachange, Gender-bias, Attitudinal response, Outwitted, Casting aspersions, Behavioral- pattern.

**EMPOWERING WOMEN OF INDIA IN ENTREPRENEURSHIP OF REAL
ESTATE THROUGH MACHINE LEARNING ALGORITHMS**

Mandakini Singh

Kandivali (East), Mumbai-400101

Abstract

In India, a woman is given equal opportunity as a man when it comes to women's empowerment. Indian women have progressed from being solely homemakers to entrepreneurs, inventors, and innovators. They do not only rule the traditional industries but also carve out a space for themselves in the real estate sector. Accuracy of algorithms can be verified by the Confusion Matrix. It helps entrepreneurs of Real Estate business to predict the cost of exiting or upcoming projects. The proposal finds that Random Forest algorithm outperforms the k-NN (k-Nearest Neighbors) algorithm with better accuracy of 96.64%.

Keywords: Classification Accuracy, Confusion Matrix, k-Nearest Neighbors, Machine Learning, Multi-regression, Random Forest

**DEVELOPMENT AND VALIDATION OF SCALE FOR TEACHERS'
KNOWLEDGE OF SLOW LEARNERS (STK-SL)**

Neha Rawat and U.V.Kiran

Department of Human Development and Family Studies ,
Babasaheb Bhimrao Ambedkar University, Lucknow

Abstract

Teachers' knowledge of Slow Learners (SL) contributes to successful mitigation and optimum learning. The need of an hour is to develop a test for quantitative assessment of knowledge of SL among teachers. The study focused on the development and standardization of scale for ascertaining the level of understanding of SL among teachers. After two rounds of judgments by experts, and a pilot study, a final list consisting of 30 items having 10 items of both positive and negative polarity in each domain was prepared and administered(n=660). The item test reliability and test-retest reliability were found to be ≥ 0.890 and ≥ 0.823 respectively for all the test items. The developed scale can be successfully used for assessing teachers' knowledge which could provide a baseline for implementing remedial programs and teachers' enrichment programs for in-service training.

Keywords : Slow learners, knowledge, learning, scale, teachers

MENTAL HEALTH OF FARMERS OF SIWAN DISTRICT OF BIHAR

Ravi Kumar

Department of psychology,
J. P. University, Chapra.

The majority of the population of Siwan district of Bihar is dependent on agriculture for livelihood. To compare the status of mental health of farmers of different castes and educational level of this district 'Mental Health Battery' constructed and standardized by Singh and Sengupta (2012) was administered on 200 farmers. The sample was drawn from ten villages of Siswan, Raghunathpur and Siwan Sadar blocks of Siwan district. The analysis of results revealed that caste and education of farmers bear significant relationship with their mental health. Backward caste farmers were found significantly higher than forward caste and Scheduled caste farmers on MH. There was found positive relationship of education with mental health of farmers.

Keywords : Health, Mental, Farmers, Siwan, Bihar

**CONFLUENCE OF PSYCHOLOGICAL CORRELATES IN INDIVIDUALS
WITH CORONARY HEART DISEASE**

Hina Hafiz Khan

Department of Psychology,
Rashtrasant Tukadoji Maharaj Nagpur University

Abstract

Globally, Cardiovascular diseases, especially coronary heart disease, are on the rise. This study aimed to better understand the mental health of heart disease patients by identifying factors that contribute to their stress. The study also explores various psychological factors associated with coronary heart disease. This research was conducted on 120 people with CHD from hospitals in Nagpur. Positive-negative affect scale, the perceived stress scale, and the emotion regulation scale were employed. Data were analyzed using Moderated Mediation in PROCESS Macro. Results reveals that cognitive reappraisal moderates the relationship between negative affect and perceived stress. Perceived stress is influenced by cognitive reappraisal, expressive suppression positive and negative affect. Positive affect moderates cognitive reappraisal's influence on negative affect and perceived stress.

Keywords: Coronary heart disease, emotion regulation, perceived stress, affect

MAPPING OF RESEARCH PRODUCTIVITY IN HUMAN BEHAVIOURAL OF LOCKDOWN (COVID-19)

Kutty Kumar

Library and Information Science
College of Veterinary Science, Sri Venkateswara Veterinary University,
Proddatur

B. R. Doraswamy Naick

Library and Information Science
Jawaharlal Nehru Technological University, Kakinada

Abstract

The purpose of this article was to investigate how much academic work was accomplished during the lockdown (Covid-19) years. From January 2017 through August 2020, a total of three years' worth of annual research publications document the enormous significance of lockdown behaviour. The 'R' programming language is used to analyse data obtained from the PubMed bibliographical database. During this time period, 83 scholarly papers were published across 68 journals, 3 reviews, and 2 preprints, with a total of 542 authors (5 sole authors and 532 coauthors; documents per author = 0.15) and a collaboration index = 6.82. According to the corresponding authors, the countries with the highest frequency are India (0.375), the United States (0.375), China (0.125), and the Netherlands (0.125). Davalos, A., Ang, M., and Matilla-Escalante, D.C., are the most productive authors. After analysing the keywords used by the authors of these studies, we can see that they were interested in studying human behaviour in general, not just that of the lockdown period; this includes topics like attitudes toward health, familiarity with preventative care, and feelings of isolation. During this time period under review, the field of behavioural lockdown saw an average annual growth rate of 27.67% in scholarly attention.

Keywords: Behavioural, Human, Research output, PubMed, Journals.

WOMEN: A ROLE MODEL TO THE ENTIRE SOCIETY

N. Swathi

University College of Engineering & Technology for Women
Kakatiya University, Warangal, Telangana State, India

Abstract

Women constitute half of world population. Their role is indispensable in the society. Their full participation is essential to achieve sustainable development. Women have to be given due respect in a society to have actual empowerment and also refers to increasing the spiritual, political, social or economical strength of women. It also empowered developing confidence in their own capacities. The voice of women in governance is required to create the political will essential to bring about changes that will benefit all the society.

Keywords: women, society, empowerment

EFFECT OF LONELINESS ON MENTAL HEALTH DURING COVID-19 PANDEMIC

Shanker Kumar Mishra

Department of Psychology
T.P. College, B.N.M.U, Madhepura, Bihar

Abstract

The world has faced a global public health crisis for the last three years, as the corona virus disease 2019 (Covid-19) emerges as a menacing pandemic. Covid-19 is proving to be a particularly cruel disease not just because of its pathophysiology but also due to its potentially devastating consequences for engendering loneliness. Besides the rising number of cases and fatalities with this pandemic, there has also been significant socio-economic, political and psycho- social impact. Billions of people are quarantined in their own homes as nations have locked down to implement social distancing as a measure to contain the spread of infection. Those affected and suspicious cases have been isolated. This social isolation leads to chronic loneliness and boredom, which if long enough can have detrimental effects on physical and mental well-being. The timelines of the growing pandemic being uncertain, the isolation is compounded by mass panic and anxiety. There is already evidence of heightened psychological problems amongst Indian youth in the wake of this pandemic. Accordingly, it will be important for psychologists to assess how age-based threats to loneliness evolve in the era of Covid-19. This communication deals with the loneliness on mental health during Covid-19 pandemic across different social strata, its implications in the modern digitalized age and outline a way forward with possible solutions to the same.

Keywords: Effect, Loneliness, Psychology, Mental health, Covid-19, Pandemic.

A STUDY OF SOCIAL CHANGE & WOMEN EMPOWERMENT

Sanni Kumar Verma,

Dept. of Psychology, Veer Kunwar Singh University Ara (Bihar)

Ramendra Kumar Singh

Psychology D.K. college, Dumraon, Buxar (Bihar)

Abstract

Change is the eternal truth of the world, which takes place in the structure and function of the society. Social change occurs both at internal & external level of society. According Merrill & Aldroz (1975) "when majority of the society begins to perform actions that are different forms those performed by their close ancestors until Sometime ago, such change is called social change." In other hand women empowerment is multi dimensional process. It's essentially the process upliftment of psycho-social, political and economic status of a women. The present study was conducted on 100 women Ss selected from Buxar district in Bihar. Amongst them 50 Ss were villagers (from rural area) and other 50 Ss from urban area of Buxar, district Bihar. It was hypothesized that there will be a significant difference between rural and urban women in comparison of their life satisfaction and mental health. It was also hypothesized that urban women were more empowered and satisfied than rural (villagers) women. 't' test was used to measure the significant differences between both groups of women. Life satisfaction scale by Hardev Ojha (2005) and mental health scale by Jagdish & A.K. Srivastava (1983) was used to achieve the research objectives. Besides a PDS was prepared by the researcher himself to collect other necessary informations. The findings proved the hypotheses. The result indicates that urban women are more empowered on the level of life satisfaction and more sound on the level of mental health. The findings prove that the decision making power get effected due to their psychological empowerment.

Keywords : Empowerment, life satisfaction, mental health.

**SOME PERSONALITY TRAITS OF YOUNG ADULTS AS RELATED TO
THEIR ADVERSE CHILDHOOD EXPERIENCES:
A PSYCHOLOGICAL STUDY**

Aradhana Gupta

Department of Pediatrics
G.S.V.M. Medical College, Kanpur, U.P.

Abstract

Adverse Childhood Experiences (ACEs) are potentially traumatic events that can have negative, lasting effects on health and well being. These experiences range from physical, emotional and sexual abuse to parental divorce or the captivity/ detention of a parent or guardians. If adverse childhood experiences are not prevented or managed properly, the consequences may be very detrimental during the entire span of life of the victims. The distress of ACEs can cause children to develop stress, affecting them not just emotionally but physically and mentally also. The objective of the present study was to find a relationship between adverse childhood experiences and the personality of young adults (age range 18-25 years). Another objective was to see whether male and female respondents differ significantly on their relationship between ACEs and personality pattern. The study was conducted upon 60 young adults (30 males and 30 females) who had ACEs and 60 young adults (30 males and 30 females) who had no adverse childhood experiences. These 120 respondents were sampled after administering a tool on sample of 600 respondents. The extreme groups (high and low) on ACEs were selected for main study. Personality Assessment questionnaire (PAQ) was used for studying personality pattern of the adult respondents. PAQ (Adult form) contains 63 items for assessing 7 areas of personality pattern; hostility/aggression, dependency, negative self esteem, negative self adequacy, emotional unresponsiveness, emotional instability and negative world view. All these 7 areas of personality have 9 items each. The respondents are supposed to answer on 4 points –Always true of me, sometimes true of me, rarely true of me, almost never true of me. Thus the score in each of these 7 areas range between 9 and 36. Centre of youth welfare (2015) developed a tool ACE-Q Teen SR (Adverse Childhood Experiences Teen Self Report) was given to all the participants for measuring childhood experience of stressful life events that would affect their development and health. This tool is divided into two sections- Section 1 having 10 items and section 2 having 9 items. The respondents were asked to give the number of stressful life events that they experienced adversely during their childhood in each of the two sections.

The scores of the respondents were statistically analyzed using 't-test'. Findings of the present study suggest that out of seven negatively worded personality traits- hostility / aggression, dependency, negative self esteem, negative self adequacy, emotional unresponsiveness, emotional instability, and negative world view- ACEs were found to be related with five of them except two that is, dependency and negative world view.

Keywords: Childhood, traumatic, divorce

STUDY OF PSYCHOSOCIAL FACTORS IN CRIMINAL BEHAVIOUR

Kaveri Sinha

L.N. Mithila University, Darbhanga

Abstract

Criminal behaviour is the subject matter of psychology and sociology (Michael and Adler, (1933). Eysenck in his theory of criminality proposed the personality factors like extraversion, neuroticism and psychoticism as the prime cause of criminal behaviour. The combined effect of high extraversion and high neuroticism interferers with learning social rules and conditioning, and increase the likelihood of criminal behaviour (Levine and Jackson, 2004). Social disorganisation theory correlates criminal behaviour with unemployment, low socio-economic status, less education opportunities, etc. (Deehant,n.d.; Kitchen, n.d.2009). The purpose of the study was to find out the root cause of high criminal behaviour prevailing in Begusarai- Barauni Industrial area of Bihar. There has been steady rise in numbers of murder, theft and physical assault these days in the area. The mixed research design was adopted and Eysenck personality questionnaire and Socio Economic Status Index by Verma, Sexena and Mishra(English) were applied on two grpous of 40 subjects in each who were selected by purposive sampling: one having criminal record while the other have no criminal record. Both groups were matched for age, gender, education and socio economic status. The results confirm the impact of personality traits and social factors on criminal behaviour.

Keywords: Criminal, Psychology, Sociology

**A STUDY OF DEATH-ANXIETY AND DEPRESSION
AMONG OLD AGE PEOPLE**

Umesh Kumar Vidyarthi

Dept. of Psychology
J.P. University, Chapra

Abstract

The main of the study is Death Anxiety and Depression among old age people. Death anxiety is the morbid abnormal or persistent fear of death or dying. It is also referred to as thanatophobia (fear of death) and necrophobia (fear of death or the dead). Lower ego integrity, more physical problems, and more psychological problems are predictive of higher levels of death anxiety in elderly people. Depression refers to a range of mental conditions characterized by persistent low mood, absence of positive affect and a range of associated emotional, cognitive, physical, and behavioral symptoms. The total sample consisted of 240. The sample was selected form Saran and Siwan district. A standardized tool of Death Anxiety by Prof. K.D. Broota and for Depression by Dr. Aaron T Beak was used for data collection.2X2X2 factorial design and F-Test used for data analyzed.

Keywords: Depression, Death, Mood

SOCIO-DEMOGRAPHIC VARIABLES AND JOB SATISFACTION OF COLLEGE TEACHERS

Santosh Kumar

Jai Prakash University
Chapra, Bihar

Abstract

The study aimed at assessing the impact of socio-demographic variables on job satisfaction of college teachers working in different constituent and affiliated colleges of Jai Prakash University, Chapra. The main objective of the study was, therefore, to examine the influence of socio-demographic factors on the level of their job satisfaction of teachers working in constituent and affiliated colleges. A sample of 400 teachers were drawn from different constituent and affiliated colleges of Jai Prakash University, Chapra by stratified random sampling technique. The empirical information about socio-demographic characteristics of the respondents was collected by sending PDF format of questionnaire containing questions related to socio-demographic factors. To assess the level of job satisfaction, Minnesota Satisfaction Questionnaire (MSQ) developed by David J. Weiss et al. (1967) was applied. On the basis of statistical treatment, it was found that the job satisfaction of the teachers varies across various sub categories of demographic variables, such as, age, gender, tenure, and education. The chi-square test was applied to explore association between demographic variables and job satisfaction. Statistical treatment of the data revealed that socio-demographic variables have no significant impact on the level of job satisfaction of college teachers whether working in constituent colleges or affiliated colleges.

Keywords: Teacher, Chapra, College, Job

ADOLESCENCE HEALTH PROBLEMS

Lipika De

Univ. Dept. of ATSW,
T.M. Bhaglpur University, Bhagalpur- 812007
Dr. Niranjana Prasad Yadav
Univ. Dept. of Psychology,
T.M. Bhagalpur University, Bhagalpur-812007

Abstract

Adolescence is an important for promoting health and preventing disease, one that is sometimes overlooked. Most of the nation's 42 million adolescents, who are between the age of 10 and 19, are generally healthy. In recent years, the United States has been declines in sexual risk behaviours, teen births, smoking and use of some substance as well as higher academic achievement for younger adolescents. However, all adolescents can benefit from guidance on how to improve their health and development during these years – and for some serious challenges remain. Adolescent health encompasses changing transitions within multiple domains, including physical, social, emotional, cognitive and intellectual. The fast – paced development of these different domains can lead to phenomenal growth during this period. This growth can also occur at different rates, which can put adolescents at a higher risk for risk – taking behaviours and emerging mental health issues. It is important to understand and adolescent development, environmental influences, and the risk and productive factors that can affect adolescent health so that organizations and individuals who work with youth can support the health and healthy development of all adolescents. Survival chances for adolescents vary greatly across the world. In 2019 the possibility of dying among aged 10 – 24 years.

Keywords: Adolscene, Health, Risk

**PSYCHOSOCIAL AND MENTAL HEALTH ASPET OF
WOMEN HEALTH-A REVIEW**

Kanchan Kumari

V.K.S. University Ara

Latika Verma

Dept of Psychology, M.M. Mahila College Ara (Bihar)

Abstract

Gender a critical determinant of mental health and mental illness the patterns a psychological distress and Psychiatric disorder among women are descent from those see among men. Women's mental health is multifactorial which is determined by both biological and Social factors, Examining the clinical profile on mental disorders in women brings to light the fact that men and women are affected disproportionately by mental illness The greater vulnerability of women can be owing to physiological changes as well as social factors such as poverty Sexual abuse stress intimate partner violence and so on. Girls from nuclear families and women married at a very young age are at higher risk for attempted suicide and Self harm. Social factors and gender Specific factor determine the prevalence and course of mental disorders in female suffers. Around two-third of married women were victims of domestic violence. Concerted efforts at social, political, economic and legal levels can bring change in the lives of women and contribute to improvement of the mental health of these women. It is important to view mental health program in a gender - based approach to circumvent the unique challenges posed by women's mental health today a part from this exploring other modes of service delivery such as mobile phone technology which has the potential to be effective and improve accessibility to Services can boost mental health delivery for women.

Keywords: Mental Health, Women Health

**ROLE OF CREATIVE THOUGHTS IN FIGHTING
AGAINST ANY PANDEMICS**

Salini

L. N. Mithila University,
Darbhanga

Abstract

Creativity is no more a biological trait, it considered more as 'variant' being perpetually influenced by environmental and cultural conditons. Creativity is special traits presence in everyone it helps to fight from every negative situations. Creative people searches new ideas about anything in their everyday daily life. Moreno (1889-1974) clearly stated that only creative man and animal can survive in this highly complex world. Creativity throughout potential in us in every flautuating situation and enables us to fight that situation. This pandemic is also a very big crisis situation for us. We have to put our full potential to deal with this world crisis. To deal with this type of pandemics we need not only depend on the rules laid down by the government. We also need to plan new approaches to dealing with this pandemic based on our creativity. We don't have to depend on the evidence they show (WHO), because as this pandemic is unfolding in new forms every new day. Until this pandemic vaccine is ready, we have to start our working lifestyle by protecting ourselves from it and keeping the Government guidelines. Creativity plays a key role because through creativity we can discover new and innovative ways of dealing with this pandemic everyday. Because the economic conditions of the people of India is not good, if we didn't work we have to face a lot of trouble. How many days will we eat our deposited money.

Keywords: Pandemic, Creativity, India

**MARITAL ADJUSTMENT OF COUPLES IN RELATION TO THEIR
EMPLOYMENT AND INTERNET ADDICTION**

Nibha Kumari and Ram Dhyan Rai
Department of Psychology
Jai Prakash University, Chapra

Abstract

With the objectives of investigating into the effects of employment and internet addiction on marital adjustment of couples Marital Adjustment Questionnaire constructed and standardized by Kumar and Rohatgi (1999) and 'Internet Addiction Test' constructed and standardized by Young (1998) were administered on a randomly selected sample of 200 couples of rural and urban areas of Saran District of Bihar. The application of 't' test revealed that internet addiction adversely influences marital adjustment of couples. Employment of wives insignificantly improves marital adjustment but employment of husbands significantly improves marital adjustment of couples.

Keywords: Marital, Couple, Bihar

**THE PREDICTION OF TENDENCY TO SUBSTANCE ABUSE ON THE
BASIS OF SELF-ESTEEM AND EMOTIONAL INTELLIGENCE**

Archana Kumari

Deptt. of Psychology, Patliputra University, Patna

Dharmraj Ram

Deptt. of Psychology, T.P.S. College, PPU, Patna

Abstract

The purpose of present study was to evaluate the prediction of tendency to substance abuse of self-esteem and components of emotional intelligence. In this correlational study, the sample of 153 students of Patliputra university of Patna were selected by simple random sampling. Addiction Potential Scale, Rosenberg's self-esteem scale, and Bradberry's emotional intelligence questionnaire were administered among selected sample. Research findings represented that there is a negative significant correlation between tendency to substance abuse and self-esteem and also between tendency to substance abuse and self-management and relationship management. Results of this study show the predictive role of self-esteem, self-management and relationship management in tendency to substance abuse.

Keywords: Prediction, Substance Abuse, Emotional Intelligence

**HAPPINESS AND PSYCHOLOGICAL WELLBEING: THE ROLE OF
PERSONALITY FACTORS ON THE RELATIONSHIP BETWEEN
HAPPINESS, AND PSYCHOLOGICAL WELLBEING
AMONG YOUNG ADULTS.**

Shafiq Yusufkhan Pathan

Department of Psychology,
Vasantrao Naik Government Institute of Arts and Social Sciences
Nagpur, Maharashtra, India

Abstract

Psychological wellbeing reflects in all human behaviour, and it is important to know that wellbeing can be associated with happiness and personality factors. This study aimed to analyse the association between happiness, and psychological wellbeing and examine the role of personality factors in the relationship between happiness and wellbeing. To this end, Ryff's psychological wellbeing scale, Lyubomirsky's subjective happiness scale, and Rammstedt's brief version of the Big Five personality inventory were used with a sample of 260 young adults aged 17–39 from Nagpur (Maharashtra State). The findings show that the psychological wellbeing and extraversion factors have a significant influence on the inhabitant, and that psychological wellbeing is significantly correlated with happiness and the four personality factors of the Brief Big Five Personality Inventory. The relationship between wellbeing and happiness was mediated by extraversion, agreeableness, and openness to experience personality factors.

Keywords: psychological wellbeing, happiness, personality

**SEXUAL MYTHS: A COMPARATIVE STUDY BETWEEN YOUNG
ADULTS AND MIDDLE-AGED PEOPLE**

Aparna V V and Baby Shari. P. A.
Department of Psychology, University of Calicut

Abstract

It has been shown that the main sources of information on sexual matters are typically friends, the environment, movies, pornographic media, and newspapers and magazines. These unofficial sources of information include a lot of incomplete, incorrect, and/or exaggerated information regarding sexuality. People have a variety of preconceived notions about sexuality as a result of this inaccurate knowledge. Sexual misconceptions or sexual myths are one of the most prevalent outcomes of misinformation. Sexual myths are typically exaggerated and false beliefs that people accept as true in regard to sexual aspects which lack any scientific credibility. These false notions and ideas influence people's attitudes and behavior regarding sexuality. Sexual myths may have deep impacts on a person's sexual health and, in turn, their overall wellness. The prevalent attitudes and views about sexuality vary among cultures. The aim of the present study is to identify the sexual myths present in Kerala culture and to compare the difference between young adults and middle- aged people on the basis of sexual myths. The participants of the study were 30 young adults and 30 middle aged people from Kerala. A checklist of sexual myths was used to collect data. In comparison with the young adults middle aged were carrying more sex related myths. The findings are discussed in the full paper.

Key words: Sexual myth, Sexuality

WHO TALKS AND HOW: UNDERSTANDING THE PSYCHOLOGICAL FACTORS IN RELIGIOUS HATE TALKS

Kavitha G Bhaskaran and Baby Shari. P. A.

Department of Psychology
University of Calicut

Abstract

Tolerance towards diversity in every strand of society is needed for the progress of the nation and peaceful life of its people. Literature shows that religious fundamentalism can act as a destructive force when it comes to the case of tolerance. Religious extremism and hatred can lead to stereotypes, discrimination, intolerance and violence between people who hold different world views. It also leads to stereotypes and restrictions towards women who are a major resource of the nation. This can negatively affect the development, harmony and peace of different institutions and ultimately that of the country. From the history it is evident that public speeches by particular people can influence masses. Previous research related in leadership and conformity have shown that how different type of leaders influence their followers. In the present scenario social media increases the visibility of public events and every speeches can reach to the audience easily, thus there is increase in listeners and followers. When it comes to religious hate speech the number of viewers seen to be increasing and the comment session shows that there are people who admire the speaker and willing to follow him. Mere observation reviled that people who stick with extreme religious world view are highly influenced by religious speeches available in social media, even without fact checking. Present study in intended to understand the psychology of how religious hate speeches are delivered and psychological importance of who deliver it in the context of Kerala, a state which is known to its literacy rate and political awareness. Sample will be collected from social media platforms in the form of videos. Analysis will be done on both the verbal and nonverbal aspects of the speeches. Comments from the audience also will be analyzed to find out more about the above mentioned problem.

Key words: hate speech, religious extremism

**LEVEL OF ANXIETY AND DEPRESSION AMONG CAREGIVER
PARENTS OF INTELLECTUALLY DISABLED CHILDREN OF
MAYURBHANJ DISTRICT IN ODISHA**

Karishma Jit and RenuDewan
Department of Psychology
RanchiUniversity, Ranchi

Abstract

The present study investigated the level of anxiety and depression among caregiver parents of intellectually disabled children of Mayurbhanj district in Odisha. The sample for the study was selected by stratified random sampling. The parenting style was based on liberal and authoritarian type of parents. The main objective of the study was to assess the level of anxiety and depression among caregiver parents of intellectually disabled (ID) children. A 2x2 factorial design was used to study the sample of 240 parents of 300 children with the diagnosis of intellectually disabled (ID). The anxiety level of caregiver parents of intellectually disabled children was measured by Sinha Anxiety Scale and depression level was measured by Beck Depression Inventory. 't' ratio was applied for the analysis of data obtained. There was a high significant difference in level of anxiety and depression of caregiver parents of intellectually disabled (ID) children.

Keywords: Anxiety, Depression, Caregiver parents, Intellectually disabled children

A STUDY ON ACADEMIC STRESS AMONG HIGHER SECONDARY SCHOOL STUDENTS

V.Lazar

Department of Psychology
Yogivemana University, Kadapa Andhra Pradesh

Abstract

In this competitive world every student would like to settle in their lives with a better job, students are facing many difficulties and challenges to in their academic performance as they have to study a lot to face their exams. Academic stress is burden to every student, which tends to adverse impact on their mental and physical wellbeing, as it will reduce their academic performance. The present study focuses of academic stress among higher secondary school students. The sample size is 60 higher secondary school students in kadapa. the data was collected by using simple random techniques by using the ASQ (Academic stress scale) developed by Akram, Khan and Baby (2013), and the necessary statistical techniques were used to analyze the data and the result were discussed and found that, there is no significant difference in male and female. There is a significant difference in locality, urban students are having academic stress than the rural students.

Keywords: Academic stress, Gender, Locality, Higher secondary school.

COGNITIVE CYCLE AND CIRCADIAN RHYTHMICITY

Nibedita Jena

Visiting Prof Ravenshaw University Odisha

Santa Misra

Former Prof Sri Sri University, Odisha

Soumen Nanda

Research Scholar ISBM University, Chhattisgarh

Abstract

Cognitive cycle is a basic procedure of mental activities in cognitive level. The brain events have its facilitatory effects on the circadian cycle. Circadian cycle is the cyclic changes in bodily processes occurred within 24 hours of day, considered as automatic pilot that controls most of our behavioral and cognitive manifestations. This study based on the attention span course and RCPM scores of urban and tribal adolescence (N=100), on four shifts of a day like morning, noon, evening and night. The analysis of results revealed that both the groups differed significantly in attention span ($p > .05$) and RCPM scores ($r=.58$). Hence the study confirms the relationship between cognitive cycle and circadian rhythmicity.

Keywords: Cognitive cycle, Circadian rhythm, Attention span.

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VII

EDUCATION AND MILITARY SCIENCES

(A)

ABSTRACT FOR SYMPOSIUM

NATIONAL EDUCATION POLICY 2020 CHALLENGES AND OPPORTUNITIES FOR HEIS

Rajshree S. Vaishnav

P.G. Dept. of Education,
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

Abstract

The Foundation of development of any country is based on education. India has the largest higher education system across the globe. Currently Indian system of higher education is facing numerous challenges like quality of teaching and learning, lack of employability skills among graduates, public-private partnerships, lower quality of research with problem of funding, poor governance and complex regulatory processes etc. Post independence, we have witnessed several educational policies like NEP-1968, NPE-1986 and its revised version POA-1992 which played key role in development of existing system of higher education in our country. After a gap of almost 34 years, the nation has got another education policy as National Education Policy (NEP-2020). It focuses on key reforms in higher education to prepare the next generation to thrive and compete in the new digital age. The main objectives of NEP 2020 for higher education is - to make India a leading knowledge society by utilizing the potential of its vast talent pool expansion of research capabilities and output across disciplines with increase in the GER (Gross Enrolment Ratio) in higher education including vocational education from 26.3% (2018) to 50% by 2035. It emphasis upon multidisciplinary, digital literacy, written communication, problem-solving, logical reasoning, and vocational exposure. It brought tremendous changes in governance and institutional reforms aiming at establishment of multi-disciplinary colleges, universities and clusters of higher education institutions by linking with forthcoming industrial revolution for skilled job creation and augmenting employment avenues. But for the implementation of NEP 2020 lots are challenges comes likewise- Quality Teachers, recruitment and training, private sector funding, opening colleges for increasing GER, Digital infrastructure development, Inter-disciplinary higher education demands for a cultural shift, orientation towards multi-disciplinary education, Funds allocation, reimagining and adopting pedagogical changes, higher order thinking pedagogy training etc. In a nutshell, it is to be said that with proper planning, effective leadership of intellectual persons and scholars the NEP2020 will transform India a New India in the times to come.

Key words: The National Education Policy (NEP 2020), GER, Marginalized, Potential, Implementation

**A STUDY ON PROFESSIONAL COMPETENCE OF
SECONDARY SCHOOL TEACHERS IN RELATION TO
THEIR INTEREST IN TEACHING**

Jayamma H.R.

Department of Education,
Jnana Bharathi Campus, Bangalore University, Bangalore

Sujatha

Bed College Bangalore.

Abstract

In this rapid growing era of technology and communication, teachers are required to improve their competence, because the quality of education is largely determined by the professional competence of teacher. The intention of the research was to study the professional competence of secondary school teachers in relation to their interest in teaching. The sample involved 100 teachers working in secondary schools of Bangalore Urban District by using simple random sampling technique. Both Professional Competence Scale and Interest in Teaching Scale were developed & standardized by the researcher Sujatha & research guide Dr. H.R. Jayamma. Pearson's Product Moment Coefficient of Correlation, independent 't' test and F test were utilized. The Scheffe's post hoc analysis was applied where F was found significant to test the formulated hypotheses. The result found from correlation analysis was that interest in teaching is positively correlated with professional competence. This implies that schools should provide good teaching atmosphere so that interest in teaching among teacher community enhanced this would motivate them to have higher level of professional competence.

Keywords: Professional Competence, Interest in Teaching, Secondary school, Gender

**ROLE OF NGOS IN THE DEVELOPMENT OF TRIBAL STUDENTS
AND THEIR EDUCATION**

Gangadharamurthy K.

Department of Education
Karnatak University, Dharwad

S. S. Sammasagi

University College of Education
Karnatak University, Dharwad

Abstract

This paper examines the level of accountability is practiced by nongovernmental organizations (NGOs) in the development of Tribal Students. NGOs extend education to underprivileged children in India by innovative means to improve the quality of primary Education. Non-governmental organizations (NGOs) play a pivotal role in all necessary fields and in particular in the weaker sections of the society. Some of the NGOs have been working for the cause of deprived people for their health and education. However, the maximum number of NGOs, the so-called non-profit organizations, has been involved in promoting their own interest rather than of the society. At this point, it is needed to examine the role of selected NGOs in tribal education from their viewpoints. Apart from that, the efforts made by the State Government, non-governmental agencies and associations, trusts and individuals have taken interest in tribal educational welfare programmes in Karnataka. This paper is based on study of the NGOs in imparting education to the tribal students.

Keywords: Role of NGOs, Tribal Students, Education, Development.

**BHARATEEYA PRACHEEN AVIGNANA SASTRAS: APPLIED RESEARCH
AVENUES FOR TECHNOLOGIES & WITH A ROLE
TO PLAY IN EDUCATION**

Kocherlakota VRS Murthy

Scientist (Rtd) CSIR- Indian Institute of Chemical Technology,
Tarnaka, Hyderabad-007, India

Abstract

Five thousand years ago Maharshi Vyas has divided the vedas into Chaturvedas and named as Rigved, Yajurved, Adharva, Samaveda, These vedas not only contains the spiritual essences but also the depth treasure of scientific values. The ancient Rishis with their spiritual thoughts gave us a number of Vedic chants and scripts which have sciences that are very useful and essential to mankind. Rig Veda deals with the Ayurvedic Science, Dhanurveda and Upaveda of Yajurveda. Further our Maharishis presented us many vedic& Ancient scripts in the form of Upanishads and Puranas relating to Ganitha sastra, (Numbers), Khagola sastra (Geology), Nakshatra sastra (Astronomy), Rasayana Sastra (Chemistry), and Bowgolika sastra (Physics), Kirana sastra (Cosmology), Vruksha sastra (Agriculture), Loha sastra (Metallurgy), Pasu sastra (Animal), Sthapatya shastra (Engineering), Natya sastra (Dance and Music), the Nyaya sastra (Law), Jyotish shastra (Astrology), Neethi sastra (Administration) and many such allied in relation to scientific and administrative knowledge. The Present day Modern and advanced sciences have great relevance to the Ancient scripts which are embedded with science. There is Great scope to further evaluations towards applied research for technologies and this paper provides some avenues and the scopes for undertaking research especially in Universities and advanced research centers for a continual research and to unearth the Indian Ancient scientific pursuits. The technologies thus developed will be for betterment of life with environmentally friendly technologies embedded with Scientific excellence and to regain the lost glory of ancient scientific values. Bharat to become the role model country in the adoption of Indian traditional scientific knowledge.

Keywords: Applied research, Chaturvedas, Science, Plants, Metals, Management.

PILLARS AND VISIONS OF NATIONAL EDUCATION POLICY 2020 IN SCHOOL SCIENCE EDUCATION

Voore Gurunadha Rao

School Assistant Physical Science ZPHS -Kambalapally
Department School Education, Telangana

Abstract

Recently Government of India announced its new Education policy which is based on the recommendations by an expert committee headed by Dr. Kasturirangan, Former chairman of the Indian Space Research Organization (ISRO). The new policy aims to pave the way for transformational reforms in school education and higher education systems in the country. This was one of the major steps taking to bring a much-needed reform in the education system of the country. Education is the living process through a continuous reconstruction of experiences. It is the improvement of all those capacities in the individual which will enable one to control the environment and fulfil one's possibilities. A well-furnished and futuristic education policy is an indispensable movement for development of the country's economic and social progress, incorporated with cultural diversity, local and the global needs. In the present study researcher has adopted descriptive research and analysed the National Education Policy 2020 based on the available data such as research papers, journals, websites and mainly NEP 2020 through analytical method and conceptual discussion. This paper has discussed the pillars of the new education policy 2020 and mainly focused on school education system and Vision of Science Education. This paper also highlights various innovations and implications of NEP 2020 on the Indian school science education along with its merits are discussed. In the perspective of school education new academic structure, major innovations, curriculum and pedagogy also highlighted in this paper. The National Education Policy 2020 is based on the pillars of access, quality, equity, affordability, accountability and will transfigure our country into a "vibrant knowledge hub".

Keywords: Vision, School education, Science education, National Education Policy 2020.

**LEARNER CENTRIC SWAYAM MASSIVE OPEN ONLINE
COURSES IN HIGHER EDUCATION**

Rekha Sharma

UGC- Human Resource Development Centre
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

Abstract

Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) is a digital initiative of the Government of India. The objective of SWAYAM is to bridge the digital divide and to make teaching and learning resources available to all learners, especially the most disadvantaged ones. This SWAYAM platform hosts about 1000 Massive Open Online Courses through nine National MOOC Coordinators. These courses are interactive, prepared by the best teachers and are available free of cost to any learner and can be accessed by anyone, anywhere at any time. The learners who wish to get a SWAYAM certificate need to register for the final proctored exam with a fee and appear for the exam at the designated centres on specified dates. The students can earn up to 40 per cent credits through SWAYAM courses and credits earned can be deposited in the Academic Bank of Credits. The online courses are in four quadrants viz., e-tutorial, e-content, discussion forum and self-assessment. These MOOCs are based on Learner-centric MOOCs (LCM) Model which includes Learning Dialogs (LeD), Learning Extension Trajectories (LxT), Learning by Doing (LbD) and Learner Experience Interaction (LxI).

Keywords: SWAYAM, MOOCs, Learner Centric

**ROLE OF HIGHER EDUCATIONAL INSTITUTE TOWARDS ENSURING
SAFE CYBER BEHAVIOUR OF STUDENT'S IN INDIA**

Payal Thaorey

Post Graduate Teaching Department of Law
RTM Nagpur University

Abstract

21st century has witnessed a paradox change in the behavioural pattern of human particularly related to cyber world. Humans are ready to dive into an ocean of cyber world which is unknown and unseen for them, without even thinking the consequences of the risks associated with it. Educational Institutions are an integral part of our society and does cater to the educational needs of crores of students every year. The New Educational Policy, 2020 through its Clause 23, 23 (7), 23 (8) emphasizes on creating a blended form of learning wherein technologies and Artificial Intelligence along with traditional teaching modes can be combined together. In 2021, India does have 1.2 billion mobile subscribers out of which more than 50% users are students. Therefore, it becomes essential to discuss the cyber behavior approach of these students, mechanisms for cyber safety of the students and what role the Higher educational institutes shall perform in order to make this society a cyber-safe society.

Keywords: cyber safety, cyber behavior, educational institutes

**IMPACT OF SOCIO ECONOMIC AND BEHAVIOURAL FACTORS IN
FINANCIAL INCLUSION OF RURAL WOMEN WORKERS**

Aparna Samudra

Department of Economics
RashtrasantTukadoji Maharaj Nagpur University

Abstract

The term “financial inclusion” in simple terms can be stated as banking the unbanked populace. Rural women work force participation rate in India is around 42 percent, but they still remain in the fringe of the agrarian society. Financial inclusion would mean greater economic and social empowerment of these women. This research paper through a sample of 397 rural women workers, has estimated the access and usage of banking services in Nagpur district. The data analysis showed that behavioral factors rather than the socio- economic factors had a significant role to play in active access and usage of banking services by these women. Presence of cognitive bias has led these women to opt for sub optimal and irrational financial behavior.

Keywords: Financial inclusion, rural women workers, cognitive bias, behavioural factors

108th INDIAN SCIENCE CONGRESS
JANUARY 3-7, 2023
NAGPUR

B

**ABSTRACT FOR
INVITED SPEAKER**

EFFECTIVENESS OF GROUP DYNAMICS IN TERMS OF PROBLEM SOLVING ABILITY AND DECISION MAKING ABILITY OF HIGHER SECONDARY STUDENTS

Naseha Siddiqui

P.G. Department of Education
RashtrasantTukadoji Maharaj Nagpur University

Abstract

Group dynamics deals with the attitudes and behavioral patterns of a group. It can be used as a means for problem-solving, teamwork and to become more innovative and productive. Since human beings have an innate desire for belonging to a group, group dynamism is bound to occur. In the present study Group Dynamics module was used for teaching Social sciences to Higher Secondary school Students. The effectiveness of module has been studied in terms of Problem solving and Decision making. The null hypothesis was formulated. For the sampling ninth class Hindi and Marathi medium school students of Nagpur city were selected. The data has been collected by using Problem solving ability test and self-developed decision making questionnaire. The data was analyzed with the help of 't' test. The result of the study revealed that Group Dynamics is effective in development of Problem solving and decision making ability among higher secondary school students.

Keywords: Group dynamics, Effectiveness, Problem solving, Decision making

**CONTRIBUTION OF WOMEN IN ATMANIRBHAR BHARAT:
ISSUES AND SOLUTIONS**

Maya Gupta

Department of Education
Jadavpur University
Kolkata

Abstract

Much has been said and discussed about Atmanirbhar Bharat in the last couple of months since its formulation by the Honourable Prime Minister of India, Shri NarendraModiji in May 2020. Women are natural caregivers and managers but are underrepresented in the work arena. Only 30% of women are represented in the paid workforce, the remaining falling into the unpaid labour bracket. Hence, the way forward towards an AtmaNirbhar Bharat is by increasing the women workforce. The route is much more complex than the solution. Several barriers need to be understood and crossed to achieve this. Some of them are; Right to education, Right to freedom of choice, Parity in the pay scale, Parity in leadership roles, Developing the concept of self-reliant, Increase awareness of higher education and career opportunities, pathway opportunities in STEM, Family/Community support, Different approaches for urban and rural sectors. It's the reality of today that a big migrant population (inter as well as intra state) has returned to their villages and small towns; and are facing the issues of unemployment and livelihood. So, Atmanirbhar Bharat (Self-reliant India) has a role in women's life and vice versa. Hence, for the inclusion of women, it is mandatory to understand the current situations and challenges facing women; and accordingly take appropriate actions, recommendations and solutions to reach every woman at the grassroots level.

Keywords: Social issues, Cultural issues, Economic issues, Digital media, Electronic media.

**SECONDARY SCHOOL TEACHERS' PERCEPTION ON
PSYCHOLOGICAL EMPOWERMENT OF WOMEN IN RELATION TO
FEW BIOGRAPHICAL VARIABLES**

Sujatha

Department of Post Graduation in Education, Bangalore City College of
Education, Kalyannagar, Bengaluru-560043.

H.R. Jayamma

Department of Education, Jnana Bharathi Campus,
Bangalore University, Bangalore.

Abstract

The aim of this research is to examine secondary school teachers' perception on psychological empowerment of Women in relation to few biographical variables that is type of management, salary and teaching experience. Psychological Empowerment of Women is one of the modalities of women equity. Psychological empowerment is needed for the inner self-empowerment of an individual woman. The current research was followed by a descriptive survey method and quantitative approach as the substantial method of the study. A total of 105 secondary school women teachers were selected out of which 35 teachers working in government, 35 teachers working in aided and 35 teachers working in unaided institutions. Psychological Empowerment of Women Questionnaire developed by Aryan Gholipour (2010) was used to find out the psychological Empowerment of Women of teachers was used to collect data. The collected data was analyzed utilizing independent 't' test in all cases the level of significance was fixed at 0.05 and 0.01 confidence levels. It was concluded from the 't' test analysis that there exists significant differences in the Psychological Empowerment of Women of secondary school teachers working in Government, Private Aided and Private Unaided Schools. The Psychological Empowerment of Women mean scores of teachers working in unaided schools had more than teachers working in private aided schools and government schools. There exists a significant difference in the Psychological Empowerment of Women of secondary school teachers drawing less and more salaries. Teachers drawing more salaries had more empowerment perception than teachers drawing less salary. The results also confirmed that there exists a significant difference in the Psychological Empowerment of Women of secondary school 2 teachers having less and more experience in teaching. Teachers having more experience had more empowerment perception than teachers having less experience. The study suggests some specific directions for school management departments to improve their teachers' Psychological Empowerment of Women.

Keywords: Perception, Psychological Empowerment of Women, Secondary School Teachers, Salary, Teaching Experience

INDIA IN THE POST COVID WORLD ORDER

Abhaya K. Srivastav and Abhai Raj Singh

Deptt. of Defence & Strategic Study

Dav College, Kanpur

Abstract

As the world increasingly acknowledges India's rising power status, India is adapting its foreign policy to meet the international challenges of the 21st century and to increase its global influence and status. For many years, India took pride in its role as leader of the Non-Aligned Movement and viewed itself as the primary defender of the rights of the less developed countries. In the past few years, New Delhi has expanded its strategic vision, most noticeably in Asia, and has broadened the definition of its security interests. In late 2019, the world engulfed in SARS Cov 19 pandemic, in which developed nations severely hit by new virus, it was india who give some respite by providing medicines and medical accessories to the world. And even provide vaccine. It is notable here that previously manufacturing and supply of vaccine was monopoly of western nations, but within no time India not only developed but also supply vaccine to needful countries, irrespective to consider whether they are poor or rich countries, Today, India stand 5th economy of the world, surpassing United Kingdom which is 6th nowadays. This paper in length will analyse New Delhi's position in new world order.

Keywords : Influence, strategic vision, engulfed, pandemic, SARS Cov19, monopoly vaccine.

**THE STUDY OF ROLE OF RURAL WOMEN FARMERS FOR THE
ECONOMIC DEVELOPMENT VS WOMEN EMPOWERMENT**

Rashmi Tyagi

Educationist Alumni IIT Roorkee
Shashi Verma,
Maharani Sudarshan Maha Vidyalaya
Bikaner Rajsthan

Abstract

Agriculture is the backbone of the Indian economy. Women play a vital role in building this economy. Rural Women form the most important productive work force in the economy of majority of the developing nations including India. Rural women often manage complex households and pursue multiple livelihood strategies. Women make essential contributions to the agricultural and rural economies in all India. Their activities typically include producing agricultural crops, tending animals, processing and preparing food, working for wages in agricultural or other rural enterprises, collecting fuel and water, engaging in trade and marketing, caring for family members and maintaining their homes. Many of these activities are not defined as “economically active employment” in national accounts but they are essential to the wellbeing of rural households. In the present paper the study was carried out for the women labourer in a village of western UP wherein lots of disparity was identified between the wages of man and women labourers. Keeping in view the disparity the issue was discussed in the Gram Panchayat resulting into equal wages for man and woman thus sensitising women empowerment and gender issue as well.

Keywords : Agriculture, Economy, Women labourer, Disparity in Wages, Women Empowerment

**ANTHROPOLOGICAL APPROACH TOWARDS ADOPTION AND
CHALLENGES IN ICT IMPLEMENTATION IN EDUCATION**

M.Muninarayanappa and Manoj kumar K
Department of Commerce & Management
Bengaluru City University Central College Campus
Dr. Ambedkar Veedih, Bengaluru-560001

Abstract

One of the areas in which these technological advances are dramatically influencing people's lives is information technology and telecommunications hence the claim that we are in the midst of a digital revolution that is driving us towards an information society. The development of human learning abilities has been changed over the past 70 years of technological innovation starting from the widespread use of the radio, through television, and finally to the mass implementation of ICT. Thus, this paper aims to find out teachers' attitudes and beliefs, students' attitudes and beliefs and parents' attitudes and beliefs towards implementation of ICT in education.

Keywords: Behavior, Development, ICT, educational technology, digital, technology, diffusion of innovations.

EFFECTIVENESS OF A TRAINING MODULE IN TERMS OF LANGUAGE ANXIETY AND VOCABULARY FOR CLASS IX STUDENTS

Shraddha Sukhadeve

Department of Humanities
Priyadarshini College of Engineering, Nagpur,
RashtrasantTukadoji Maharaj Nagpur University, Nagpur

Renu Bayaskar

PG Department of Education
RashtrasantTukadoji Maharaj Nagpur University, Nagpur

Abstract

This research is an attempt to identifying the levels of English language anxiety among the students of Maharashtra state board, standard IX, semi-English medium analyzing the effect of a designed training module impacting their vocabulary levels and English language anxiety making use of experimental method for the intended analysis. Foreign Language Classroom Anxiety scale (FLCAS, Horwitz and Horwitz, 1986) and a self-designed criterion referenced test were the tools used. Findings revealed that the designed training module was more effective than the traditional method of teaching which increased English language vocabulary level and reduced English language anxiety of the sample.

Keywords: English language anxiety, vocabulary, semi-English medium.

SCIENTIFIC ANALYSIS OF FACTORS CAUSING STRESS TO INDIAN SEAFARERS' COMMUNITY

Mihir Chandra and R S P Singh

T. S. Chanakya, Indian Maritime University,
Navi Mumbai Campus

Abstract

Stress is a serious type of condition that needs an immediate attention in order to prevent its negative effects in the academic life of the students. The objective of this study is to identify the factors which cause stress to Indian seafarers. Extensive literature review indicates that this apparently is the first focused study on Indian seafarers. Data was collected online through structured questionnaire from the seafarers. A total of 202 valid responses were received which were first analysed employing Exploratory Factor Analysis(EFA) using jamovi 2.3.13. EFA reduced 17 variables to 4 factors which were named Life on Ship, Frequent Changes, Family Issues and Job Insecurity, based on the common features of the variables aligned to each of the factors. The outcome of EFA was then subjected to Confirmatory Factor Analysis(CFA) which confirmed that the model was a good fit with Comparative Fit Index (CFI) value of 0.900, Tucker-Lewis Index(TLI) value of 0.879 and Root mean square error of approximation(RMSEA) value of 0.0784. This study is very significant as these findings would help the shipping companies to take steps to mitigate the stress of the seafarers. It will also help the seafarers to their stress in a better way, once they know what causes it. In addition, the family members would become aware about the Also, the family should have realistic expectations from their seafarer members to avoid adding to their stress.

Keywords: Life on Ship, Frequent Changes, Family Issues, Job Insecurity

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ABSTRACT FOR
ORAL / POSTER PRESENTATION

VIRTUAL LABORATORY FOR TEACHING CHEMISTRY

Nikhil Vinayak Ingle,

M.Ed. Student, P.G. Department of Education,
Rashtrasant Tukadoji Maharaj Nagpur University

Abstract

The development of technology has transformed the way we deliver our instruction to the student's. Many researchers and teachers like our advocating for integration of technology into their instruction as it provides promising results. One key aspect as to which technology can be of great help is through virtual laboratory activities. In this Research, teaching of Acid, Base by PH scale practical was taught with the help of traditional teaching and as well as Virtual laboratory activities simulation based for class 9th student of Nagpur region. The Experimental Research methodology was used to measure the effectiveness of virtual laboratories for teaching chemistry. Experimental research method independent variable is virtual chemistry laboratory, dependent variable is academic achievement, and Co-variable is intelligence, study habits, scientific aptitude. Pre-test, Post-test were used. The control group was taught using traditional teaching methods while the experimental group was exposed to a virtual classroom-based module. The sample of 60 students were divided into two groups-controlled group and experimental group of class 9th students by stratified random method. Tools Used where criterion reference test pre-test and post achievement test, Reaction test, intelligence test, study habit, scientific aptitude test. Statistical analysis was done by mean, standard deviation, t-test, chi square. On the basis of data collection the main score of pre-test and post-test for both control and experimental group data was analysed. On the basis of data analysis, it is found that virtual laboratories are effective for teaching chemistry in terms of academic achievement of class 9th students.

Keywords: Virtual laboratories, Simulations, acid-base, pH Scale.

QUALITY PARAMETERS OF TECHNICAL EDUCATION

Danishullah Khan Zafarullah Khan

M.Ed. Student, P.G. Department of Education,
RashtrasantTukdoji Maharaj Nagpur University

Abstract

Over the last decade, rapid reforms have been undertaken in the higher education sector such as policy framing, pedagogical transformations, accreditations and faculty standardisations. Higher education institutions including universities finding more challenges due to enhanced competitions worldwide. Innovations in higher education model are finding importance than ever before due to enhanced higher education institutions and the advancement in technology adopted mass education opportunities. After privatization of higher education, there is an enhanced competition between institutions of HEI's to attract students. Universities and higher education colleges are competing with each other in terms of their physical and intellectual assets. The courses offered by universities are always kept in mind to meet the requirement of present scenario. Graduate students of universities should meet the requirements of industries, IT sector with the sufficient capacity to give effective results. It has been seen that graduate students of RashtrasantTukdoji Maharaj Nagpur University are being unable to fulfil the requirements of industries and corporate sectors while through same curriculum other universities students match the requirements. Therefore in this research, the study is conducted among higher education colleges affiliated to RashtrasantTukdoji Maharaj Nagpur University about Quality parameter of Technical Education available for the students. It concludes by revealing lacunae i.e. the weak points where university is lagging behind, which may lead to Quality parameter of Technical Education becoming more effective.

Keywords: Higher Education Institutions (HEI), Quality Parameter, Technical Education, Privatization

**MENTAL HEALTH, SOCIAL BEHAVIOUR AND CREATIVITY OF
STUDENTS OF PERFORMING ART GRADUATES**

Snehal Sheshrao Tajne

M.Ed. Student P. G. Dept. of Education
Rashtrasantukadoji Maharaj Nagpur University

Abstract

Our mental health plays a huge role in general well-being. Being in a good mental state can keep human healthy and help prevent serious health conditions. In this research the comparison between mental health like stress, anxiety, aggression, social behavior like adjustment, family and peer relationship. Creativity scores of artists and non-artist of Higher Education Students. It includes 100 artists and 100 non artist selected by using random sampling. In this research aggression adjustment, anxiety, stress, emotional intelligence, Creativity in inventories were used. Data were analyzed by t-test and critical ratio test. The conclusion of the research includes that the artist and non-artist significantly differ on emotional intelligence. It also explores the relationship between engagement with the creative arts and health outcomes, specifically the health effects of different art interventions. The study found that there are indications that artistic engagement has significantly positive effects on mental health.

Keywords: artist, non-artist, under graduate students, post graduate students, mental health, social behavior, creativity.

THE HISTORY OF WOMEN EMPOWERMENT

Jyoti Kumari

Hari Narain Singh Institute of Teachers Education,
University Name –Aryabhatta Knowledge University, Patna

Abstract

The history of women empowerment does not start from an exact date, it is a cumulative process. However, there are certain movements, porters, revolutions that furthered the cause of women empowerment much more speedily. In the ancient days and even in the recent past women, in hundreds of countries, were allowed to vote, as time passed, more and more women come together and made their voices heard gaining voting rights significantly lifted the position of women in society. Many suffrage movements campaigned daily in support of women's voting right. In the US, individual like, Elizabeth Stanton and organization like national American women suffrage association, National women's party played a key role in securing the voting rights for women. In the U.K the women's social and political union aggressively campaigned for women's suffrage.

Keywords:The History of women empowerment.

THE IMPACT OF THE SOCIAL MEDIA TECHNOLOGY ON HIGHER EDUCATION

Renu Kumari and Manoranjan Kumar
Research Scholar
Department of Education
Dr.Z.H.T.T. College, Darbhanga.

Abstract

Social media has gained incredible popularity over the past few years as an open source of information and knowledge sharing platform. Educational institutions are using social media space to interact with young minds. We are seeing educators leveraging the potential of social media technologies to enhance the overall teaching-learning process. It not only provides students access to useful information but also connects them with learning groups and other educational systems that make their overall learning process more interesting and engaging. In India social media's use for educational purposes has been neglected, the outbreak of the COVID-19 pandemic pushed the world to implement online teaching using varying technology applications including social media as an essential tool in the learning process. This shifted the Indian educational institution and government's understanding of social media's role in education to the extent that they formally recommended that the educational departments, schools, universities. Social platforms like Facebook, LinkedIn, Twitter, YouTube and Instagram are being used by almost everyone. This study investigated the teachers' and students' perceptions regarding these concerns by adopting a survey method through an online questionnaire

Keywords: social media. Techonology. Teaching Learning process,

**SCIENCE AND TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT
WITH WOMEN EMPOWERMENT**

Divya Rani Hansda

Department of Home Science
LNMU, Darbhanga

Abstract

Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development". There is a dual rationale for promoting gender equality. Firstly, that equality between women and men equal rights, opportunities and responsibilities is a matter of human rights and social justice. And secondly, that greater equality between women and men is also a precondition for sustainable people-centred development. The perceptions, interests, needs and priorities of both women and men must be taken into consideration not only as a matter of social justice but because they are necessary to enrich development processes." Science and technology have been an integral part of Indian civilization and culture. Women and men have been active in science from the inception of human civilization. One of the defining marks of humanity is the ability to affect and predict our environment. Science is the creation of structure. For our world and technology, the use of structure has been stepping stone to our progress. Women and men have researched and solved each emerging need. At a glance, women in general might look like one of the many housewives simple, docile, unassuming and humble. But make no mistake, for behind this simple straight face is a razor sharp brain, and an uncanny ability to execute, to convert thought into action without much ado.

Keywords : Sustainable Development, Women, Empowerment, Science

EMPOWERMENT OF WOMEN THROUGH VOCATIONAL EDUCATION

Kiran Kumari

Research scholar

Department of Education

L.N.M.U .Darbhanga.

Abstract

Women education in India has a major preoccupation of both the government and civil society as educated women can play a very important role in the development of the country. Education is milestone of women empowerment because it enables them to responds to the challenges Vocational Education and training are essential mechanism of any strategy to improve farm and nonfarm productivity that improves rural incomes. Skill is the bridge between job and workforce. Skills development is a key to improving household productivity, employability and income-earning opportunities for women and also for enhancing sustainable rural development and livelihoods. The key lies in women empowerment through economic self-sufficiency and higher awareness levels on social, political and legal issues through mobilization. Empowerment is the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. Empowerment of women means developing them as more aware individuals,

Keywords: Women empowerment, Skills development, Vocational Education,

**EFFECT OF DIGITAL DEVICES ON MENTAL HEALTH OF
ADOLESCENTS**

Saroj R. Pandey

Research Scholar, PG Dept. of Education, RTM Nagpur University,
Nagpur

Rajshree Vaishnav

Professor, PG Dept. of Education, RTM Nagpur University, Nagpur

Abstract

Technological advancement has eased and upgraded the process of education but still inappropriate use of mobile and digital devices in terms of duration, frequency, & the posture adopted by the students, creates variety of health risks. Hence, the present study was designed to explore the effects of using mobile and digital devices on sleep quality, stress, anxiety and aggression among adolescent students. Two groups design was used where adolescents from various school in Nagpur city who constantly using mobile and digital devices were compared with those not using it constantly. Pittsburgh sleep Quality Index (PSQI) was used for calculating sleep quality, Vijaya Lakshmi and Shruti Narain stress scale is used to assess stress, Menifest anxiety scale was used for measuring level of anxiety and Aggression scale developed by Roma pal and Nqvi was used for measuring level of aggression among adolescents. Results reveal that adolescents using mobile and digital devices constantly have poor sleep quality, increased stress, anxiety and aggression.

Keywords: Mobile, Digital devices, electromagnetic field radiation, adolescent, anxiety, stress, aggression

**NAVIGATING NEW RESPECTABILITIES: COLONIAL MODERNITY AND
THE MAKING OF 'LADY' DOCTORS IN KERALA**

Anjana Menon

Research Scholar

Department of History, Maharaja's College, Ernakulam, Kerala

Abstract

Kerala's engagement with the colonial modernity shaped by English education brought forth with it a new set of values and thereby a new moral regime. This was highly visible in the case of women who remained a major 'subject' and 'object' of the colonial 'concerns'. Women's entry into the paid occupational sectors and the impact therefore has generally been analysed with respect to the post liberalisation period and generally from an economic perspective. However, women's work has existed historically across time and space and demands a cultural reading. The current paper attempts to understand the rapid cultural changes and how women navigated the same with respect to new opportunities and the possibilities of paid employment in terms of "respectabilities" in the society from an anthropological perspective. The introduction of English education and plethora of job opportunities for men who had mastered clerical skills, parallel with the tightening of caste system, decline of the feudal janmi structures, emergence of cinema, novel and modern art underscored by the nationalist spirit and a changed outlook of the intelligentsia among other reasons systematically paved the way to nuclearization of families in Kerala in the twentieth century. This trend brought with it wide spread process of 'housewifization', whereby educated women were decorated as 'ideal house wives'. This process was often internalised by women themselves (as may be seen in O Chandu Menon's Novel Indulekha). Unpaid Care work thus became standard vocabulary of femininity and the woman of the house earning a living was popularly considered as a 'disgrace' to the family name and incompetence of the masculine. However many women managed to navigate this new cultural space created by ethos of colonial masculinity by effectively employing care work to professional regime. They thus managed to rework the understanding of femininity thereby gradually shaping the contemporary Kerala.

Keywords: Care work, feminization of labour, lady doctor

**THE INITIATIVE OF VIDYAMANDIR CLASSES FOR STRENGTHENING
STEM EDUCATION IN DELHI GOVERNMENT SCHOOLS:
A CRITICAL REFLECTION**

Sunita Singh, Rashmi Pal & Kajal

Department of Education,
University of Delhi

Abstract

Quality is one of the aspects identified as one of the main goals in Sustainable Development Goals (SDG 4) by the United Nations (UN) which *aims at ensuring inclusive and equitable quality education*. This study is a part of a research project which explores the initiative of Quality interventions for STEM education in Schools of Specialised Excellence (SoSE) of Delhi Government. This paper critically examines the initiative for strengthening of STEM education through VidyaMandir Classes (VMC) in the SOSE schools. The paper manages to discuss dimensions of excellence (including excellence in Indian context), infrastructure as a foundation, students' perception on VMC classes and its impact on learning.

Keywords: STEM Education, VidyaMandir Classes, SDG 4, Access, Equity and Quality Education

**IMPACT OF PARENTAL ENCOURAGEMENT IN STUDY HABITS OF
NUCLEAR AND JOINT FAMILY STUDENTS OF ELEMENTARY LEVEL**

Minal Pande

Department of Humanities,
Shrimati Kishoritai Bhoyar Adhyapak Mahavidyala, Kamptee,
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, India

Tikshya Shyamkul

PG Department of Education
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, India

Abstract

Family is considered as an auspicious place in the Indian society where a child is groomed right from its birth. Various values are being incorporated through various agencies in the developmental stages of the child through observations and then proper schooling. Ancient Indian families were seen to follow the tradition of the joint family system but with the need of time nuclear families are seen to be the tradition in contemporary Indian society. The type of family system in which the child is raised does play an important role, education was a part of the Indian culture right from the ancient days and hence to understand the impact of the joint family system and nuclear family system on the study habits of the Elementary level students the current study is been based. This stage of elementary level of education is considered to be a transformational stage and the parental encouragement has a great deal of impact on the study habits and their academic achievements. Academic achievements are the path to success in their future life and today's modernization demands it. Parents play a vital and important role in the development of an individual. Family is also an important factor that helps an individual to develop and make progress in life.

Keywords: Family, joint family, nuclear family, child , impact ,study habits, parental encouragement, Indian society

**INTELLECTUAL PROPERTY RIGHTS BUILDING FOUNDATION STONE
& STEP TOWARDS ENCOURAGING WOMEN EMPOWERMENT**

Poonam Anil Ingolay

Abstract

“Woman is the full circle. Within her is the power to create, nurture and transform”—Diane Mariechild. Present era is the technology era wherein the research and development play a vital and impeccable role to uplift the society at large. It promotes and encourage the innovations to reach heights inclining and designing a better standard of living of the human beings. In this techno- savvy world woman have contributed in each field. Woman empowerment has been an important element and part of Indian social civic system. In R&D sector woman too have played a major role since time immemorial from the journey of relishing the successful mission mangal to greater inventions in Physical sciences or be it life sciences, to boost up and strengthen more confidence in woman so that there is an equal growth in innovative aspects the Government has laid down directions and framed such new policies in consonance with the protection of intellectual property rights management laws to seek more intellectual participation from woman researchers to protect the IPs with a futuristic view having a strong backup and combination of a fine human intellect who is capable of multitasking i.e. a woman empowerment providing a greater range of platform and exposure. “The data is clear: if you give a woman an opportunity, she will make a huge difference.” rightly quoted by Carly Fiorina

Keywords: Intellectual Property Rights, Newer Mechanism, Empowerment of Woman,

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VIII

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