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### Editorial.....

It is heartening to note that our journal is able to sustain the enthusiasm and covering various facets of knowledge. It is our hope that IJMER would continue to live up to its fullest expectations savoring the thoughts of the intellectuals associated with its functioning .Our progress is steady and we are in a position now to receive evaluate and publish as many articles as we can. The response from the academicians and scholars is excellent and we are proud to acknowledge this stimulating aspect.

The writers with their rich research experience in the academic fields are contributing excellently and making IJMER march to progress as envisaged. The interdisciplinary topics bring in a spirit of immense participation enabling us to understand the relations in the growing competitive world. Our endeavour will be to keep IJMER as a perfect tool in making all its participants to work to unity with their thoughts and action.

The Editor thanks one and all for their input towards the growth of the **Knowledge Based Society**. All of us together are making continues efforts to make our predictions true in making IJMER, a Journal of Repute

**Dr.K.Victor Babu**  
**Editor-in-Chief**

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## COACH-ATHLETE RELATIONSHIP ON COACHING LEADERSHIP STYLE AND PLAYERS MOTIVATION OF HAWASSA KOREM YOUTH HANDBALL PROJECT

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### **Abstract:**

This study carried out to investigate coach-athlete relationship on coach's Leadership style and players' motivation of Hawassakorem Handball youth project. To conduct study researcher used correlation research approaches. Piloting the study was utilize to check the appropriateness of the items and reliability of questionnaires, thus, motivation Cronbach's ( $\alpha = .694$ ) and coaching leadership style ( $\alpha = .772$ ). The participants of the study were 16 players of club and all those players were selected by purposive judgment sampling techniques, because those project players are appropriate for the study to collect direct evidence about project in the study. Data instrument is standard questionnaire in which motivational from Hajianzehaie (2012) who developed by wills's (1982) and Leadership style by (Zardoshtian (2012) and Nami (2013)). The data was analyzed by using SPSSV20 of Pearson correlation coefficient significant at  $p < 0.05$  levels. So, democratic leadership style and players motivation has positively significant correlation at ( $r = .497$  and  $p = .029 < 0.05$ ), and autocratic leadership style and players motivation has no significant relationship at ( $r = .174$ , and  $p = .093 > 0.05$ ), So, researcher concludes that, when coach lead democratically without any castigation; players' motivated in youth project and when coach lead autocratically without giving any chance to players, which does not develop players' motivation in project. The result suggest that, leading autocratically does not develop players' motivation in youth project, so coach should understand players inspiration when he lead autocratically and should change immediately if it is appropriate.

**Keywords:** Motivation, Leadership Style, Handball, Democratic Leadership Style, Autocratic Leadership Style

### **Introduction**

Handball is believed one of the humanity's oldest games and is the world's most popular form of sport being played with rule and reregulation of the game without expectation. It was through to have developed from some of the oldest games that human race has ever enjoyed exception [1]. Coaching is process of teaching, coaching or training that enables athletes by motivating to improve their performance to achieve success [2]. Motivation is the direction and intensity of one's effort and also refers individual to certain situations [3]. Coaches of different profiles influence athletes' sports motivation differently and athletes who were trained by the more athlete-directed,

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low ego-oriented coaches showed a preferable motivational pattern; they perceived the mastery motivational climate in their teams, were higher on intrinsic motivation, The athletes trained by the less athlete-directed and high ego-oriented coaches perceived fewer signs of the mastery motivational climate in their teams, were less intrinsically motivated, and their task orientation and ego goal orientation were [4].The relationship between coaching behavior and players' motivation use to approach success [5]. Leadership style employed by coaches may have increasing /decreasing motivation of players, Autocratic coaching style involves independent when members are not required to participate and the final outcome is the responsibility of the leader [6]. So, to develop handball in Ethiopia, we should carry out our responsibility to minimize any related factors in the club at any were. As mentioned above also; researcher has carrier out his responsibility to develop motivation on some selected variable of Gurage Zone Butajira Handball project, and interested to investigate relationship between coach's leadership style and players motivation in which to identify either coach's leadership style motivate players or not and also how coach lead players in youth project. So, researcher believes that; the opinions and facts fathered from the respondents would have a big contribution for the improvement on players' motivation and coach's leadership style and the findings would demonstrate the level of the relationship on players' motivation and coach's leadership style and also used to recommend possible alternatives to develop players' motivation.

The objective of the study was to asses' relationship between coach's Leadership style and players' motivation of Hawassskorem youth handball project and which use club with related issue that to improve coach's interest to motivate players and helps coach to lead players by motivating in club. To conduct study a pilot study was used to confirm the reliability of the questionnaires to check the appropriateness of the items and to make the necessary corrections based on their feedback to understand the validity of each question and reliability of instrument on relationship between coaching leadership style and players motivation. Reliability is consistently that achieves the same result with the same or similarity and deference [7]. So, for the reliability of the study, researcher has taken Test-Re-Test to quaternaries with related variable on coaching leadership style and players motivation in which motivation (Cronbach's Alpha=.694 and in coaching leadership style (Cronbach's Alpha=.772), the result indicates that the questionnaires of motivation and coaching leadership style are reliable in the study.

### **Methods and Materials**

study deals with research design, study area, population, sample size and sampling techniques, source of data and data collection instrument (questioners), pilot study, reliability and statically analysis in the study. The study area of Hawassais located in the SNNPRS of the Ethiopia, and also as far as 135 km/83 mile from Addis Ababa of Ethiopia, [8], Study was carried out the relationship between coach and players on coaching leadership style and players' motivation of Hawassakorem youth handball project. To conduct the study, researcher used statically correlation of SPSSV20 to find out coefficient at  $p < 0.05$  level confidence.



Population: The population of the study was sixteen (16) players of Hawassakorem youth Handballproject.

Sample size and sampling techniques: those 16 players were selected by purposive judgment sampling techniques, because those club players are appropriate for the study and less in their numbers to gather direct evidence about club to conduct the study.

Source of Data: The type of data source in this study has employed with both primary and secondary sources with related variables. The primary source were used through questionnaires; And the secondary source were used from various book, journals and websites to conduct study.

Data gathering instrument: In the study, researcher has used standard questionnaires as data gathering instrument, and questionnaires developed by close ended method by using five point likert scales by depending on related variable in the study to collect data from respondents. Research questions and objectives were helped to frame and formulate the questionnaires and questionnaires were developed with related variable in the study regarding authors;Motivation questionnaires developed by Hajianzehai et al [10] and leadership questionnaires were developed by Zardoshtian [12] and Nami, [13]. Before distributing questioners, researcher has taken permission from cub players' and then distributed to collect data from respondents

Analyses: Data was analyses by using SPSSV20 Pearson' product moment correlation co-efficient to find out the relationship between coaching leadership style and players motivation of Gurage Zone Butajira Handball Club at 0.05 level confidence. According to [13], the level  $r>0.3$  is positively correlated and  $r<-0.3$  is negatively correlated and  $r$  between 0.3 and -0.3, there is no correlation in the level of significant. So, researcher wants to decide level of significant according to authors.

**Result**

This study provides discussion related to objectives of the study including the coach-athlete relationship on coaching leadership style and players motivation ofHawassakorem handball project.

Table 1, project Payers age level

		Mean	STD deviation	N
Age	19-22	20.851	1.284	16
	Male	1	.000	16

As shown in table 1, mean of club players' age 20.851 and std 1.284, these indicates that most of players are aged between 20-21 years old in the project.

Table 2, Relationship between Motivation and leadership style

		Democratic leadership style.
Motivation	Pearson	.497*
	Correlation	
	Sig. (2-tailed)	.029
N		16

\*. Correlation is significant at the 0.05 level (2-tailed)



As shown in table 2; it is proved that co-efficient of correlation of democratic leadership style ( $r=.497$  and  $p=.029<0.05$ , 95% significant) was found significantly and shows positive relationship with players motivation in youth project.

Table 3, Correlation between motivation and Autocratic leadership style

		Autocratic leadership style.
Motivation	Pearson Correlation	.174
	Sig. (2-tailed)	.093
	N	16

\*. Correlation is significant at the 0.05 level (2-tailed)

As shown in table 3; it is proved that co-efficient of correlation with autocratic leadership style ( $r=.174$ , and  $p=.093>0.05$ , 95% significant) was found not significant relationship with players motivation in the project. This indicates that players' motivation has no relationship with autocratic leadership style on coach-athlete relationship in the project.

### Discussion

In generally study carried out coach-athlete relationship on motivation and coaching leadership style in which finding of study is discussed bellow:-

Finding in the study indicated that, there was positively significant coach-athlete relationship between players' motivation and democratic leadership style of coach at ( $r=.497$  and  $p=.029<0.05$ ). coaching behavior that allows greater participation of the athletes in group goals in which democratic leaders are those who seek suggestions and ideas from the group through discussion but autocratic coaching behavior which involves independent when giving instruction which means that, members are not required to participate and also players have to obey coaching instruction [3]. Finding in the study indicated that, there was no coach-athlete relationship between players' motivation and autocratic leadership style at ( $r=.174$ , and  $p=.093>0.05$ ). Leading autocratically is not effective, because players were not motivated in youth project [6]. Each leadership style employed by coaches may have increasing /decreasing motivation of players in project. [13]. As authors were stated that, leading democratically in project is usually one of the most efficient and leads to higher output, better contributions from group members, and increased club achievement anddevelops players and help to build them more but when coach lead autocratically, the players are not motivated in youth project.

### Conclusion

To analyzing data, Pearson correlation methods were applied and based on the data gathered, the following major findings were obtained regarding the objectives of the study in youth project. In the study, there was significant positive correlation on democratic leadership style and players' motivation on coach-athlete relationship at ( $r=$



.497 and  $p=.029<0.05$ ) in club. As result indicated that; there was no correlation on autocratic leadership style and players motivation on coach- athlete at ( $r= .174$ , and  $p=.093>0.05$ ), in youth project. So, researcher concludes that, when coach lead democratically without any castigation; players' motivated in youth project and when coach lead autocratically without giving any chance to players, which does not develop players' motivation in youth project. The result suggest that, coach leading autocratically does not develop players' motivation in club, so coach should understand players inspiration when he lead autocratically and should change immediately if it is appropriate.

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## NEW HOST RECORD OF MYROTHECIUM RORIDUM, A LEAF SPOT FUNGUS ON DESMODIUM GANGETICUM(L.) DC. FROM KERALA, INDIA

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### Abstract

*Desmodium gangeticum* is an important medicinal plant of family Fabaceae with relevant source of biologically important compounds and find application in curative treatments for various maladies. The plant was found infected with a severe leaf spot during September 2018. The present study was aimed to identify the associated pathogen, morphological characterization and its pathogenicity via Koch's postulates. Morphological and microscopic characterisation identified *Myrothecium roridum* Tode ex Fr. as the pathogen associated with the symptom. To the best of our understanding, this is the first report of *Myrothecium roridum* on *Desmodium gangeticum* in India.

**Keywords:** *Desmodium Gangeticum*- Follicolous Fungi – *Myrothecium roridum* - First Report

### Introduction

*Desmodium gangeticum*(L.) DC. commonly known as Salaparni, an undershrub has found its use in the treatment of various ailments since time immemorial (Bakshi et al. 2001, Dharmani et al. 2001, Gosh & Anandkumar 1981). The plant contains various phytochemical constituents which impart antibacterial, antifungal, anti-inflammatory analgesic properties thus enhancing its medicinal value (Jabbar et al. 2001, Purushothaman et al. 1971).

*D. gangeticum* is a well delved in species of the genus *Desmodium* because of its extensive applicability in the Indian system of medicines especially in Ayurveda. The National Medicinal Plant Board of India (NMPB) determined this plant as “high trade sourced medicinal plant species from tropical forests” and also included in the list of vulnerable group of species that needs prompt management attention (Ved&Goraya 2007).

Plant diseases affect cultivation of medicinally important plants not only harming the plant but also deteriorating the metabolite quality thus negatively impacting their medicinal value. During September 2018, a severe brown coloured leaf spot was observed on the plant. The present study was carried out with the aim to identify the pathogen associated with the leaf spot disease of the plant.

### Materials & Methods

#### Sample collection

Leaf samples of *D. gangeticum* showing spots were collected from Kerala Forest Research Institute campus, Peechi, Thrissur. Samples were observed under Leica



stereomicroscope S8APO with attached camera DEL295 for initial symptomatology and characterization of the pathogen.

### **Morphological characterization**

Leaf samples were thoroughly washed to remove any dirt and were surface disinfected with 70% ethanol for the isolation of the pathogen adopting Standard Moist Blotter Method (Doyer 1938). Infected leaf samples of *D. gangeticum* were placed in moistened sterilized blotting papers in sterilized petridishes. Petridishes were incubated at  $25\pm 2^{\circ}$  C for 3-5 days. Fungal colonies arising from the leaf samples were mounted in lactophenol cotton blue and observations were made in Leica DM2000 LED microscope. Photomicrographs of the fungal colony were taken using attached Leica DMC2900 camera on the microscope.

Single spores were aseptically transferred to PDA medium and were incubated at  $25\pm 2^{\circ}$  C for 7-10 days. Morphological characters were studied by referring standard manuals (Barnett & Hunter 1972, Subramanian 1983).

### **Pathogenicity test (Detached Leaf Bioassay)**

Healthy leaf samples were washed and surface disinfected with 70% ethanol. A 5mm disc was cut from the growing colony and placed on the leaf with its mycelium facing the leaf surface. The samples were maintained at temperature  $25\pm 2^{\circ}$  C in sterile petriplates for 3-10 days for the development of symptom.

### **Leaf clearing technique**

Infected leaf samples were treated with 10 % KOH solution for 1 hour in a hot water bath at  $60^{\circ}$ C and were washed with water and treated with 2% HCl solution. Samples were stained with 0.05 % Trypan blue in lactic acid and kept in a hot water bath for 10-15 min. Samples were de-stained with lactic acid and were observed under the microscope to observe the mode of entry of the pathogen.

### **Results**

Leaf spot symptoms were light brown in colour with brown encircling surrounded by a yellow halo (Fig. 1a).

Standard Blotter method resulted in the isolation of fruiting body black in colour with white hairy margins (Fig. 1b). Single spore culturing done on PDA medium resulted in the development of fungal colony having a radial growth of 2cm at 10 days incubation, floccose colony, dark yellow at center followed by concentric white coloured mycelial extension having black coloured oozing at the center with fimbriate margins. Reverse side of the colony were sulcate, dark yellow in colour with fimbriate margins (Fig. 1c).

Microscopic characters of black conidiomata revealed sessile sporodochia. Conidia were light green, cylindrical in nature having blunt ends. The size of the conidia ranged  $5-6 \times 1.2-1.6 \mu\text{m}$  (Fig.1d). Morphological and microscopic characteristics

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confirmed the fungus *Myrothecium roridum* Tode ex Fr. as the pathogen associated with the symptoms (Mangandi et al. 2007, Quezado et al. 2010)

Pathogenicity test via detached leaf bioassay was done for the confirmation of the pathogen. Small specks in dark-brown nature were developed after 3 days of incubation which gradually expanded and coalesced to become dark brown leaf spots. Leaf spots were circular or sub-circular, 5 to 7 mm and dark brown with yellow halo after 7–10 days of incubation and were similar to that of the initial leaf spot symptom, thus confirming *M. roridum* as the pathogen (Fig. 1e).

Leaf clearing technique was done to understand the pathogenesis. Microscopic observation of diseased leaf sample was done (Fig. 1f). Diseased leaf sample showed the mycelium of the pathogen penetrated through the stomata and thereby colonising the leaf tissues.

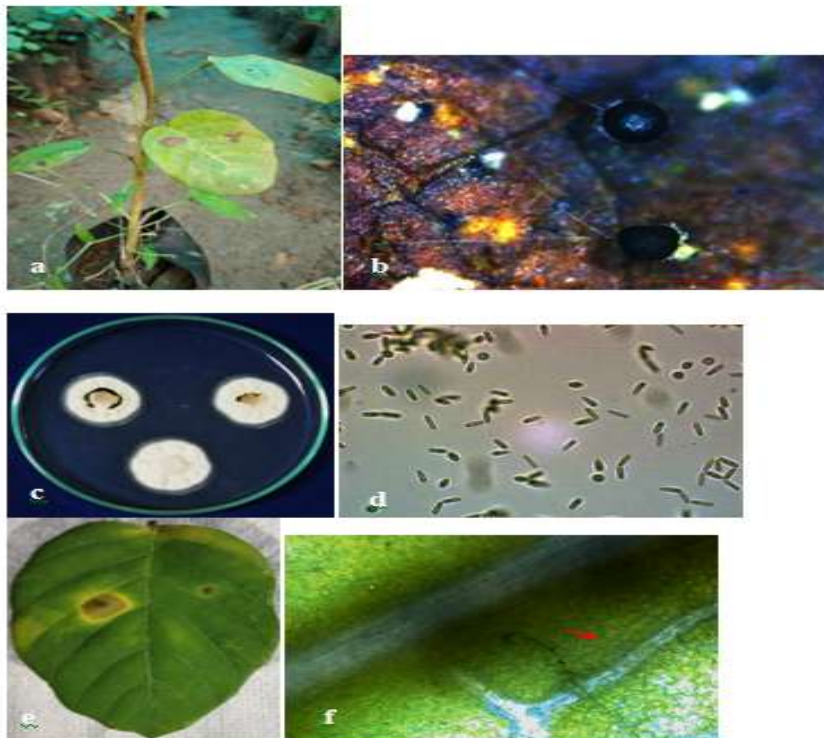


Fig.1 (a) Leaf spot symptoms on *Desmodium* plant (b) Multiple sporodochia of *Myrothecium roridum* (c) Colony morphology of *M. roridum* (d) *M. roridum* spores (scale bar at 20µm) (e) Pathogenicity assay (f) Infected leaf sample





## Discussion

*Myrothecium roridum* a common soil dwelling fungus has been reported to be associated with a number of plant species throughout the world (Farr & Rossman 2018). *Myrothecium roridum* is associated with leaf spot, crown and stem canker and fruit rot on cucurbits and on watermelon causes leaf spot and stem canker (Fish et al. 2012) and supposed to be favoured by warmer environments and wet conditions. The pathogen colonizes the host cells by producing toxins (Murakami et al. 1999, Murakami et al. 2005). Kanaujia, 1978 reported *Parodiellahedysari* (Schw.) Hughes from leaves of *Desmodium gangeticum*. No reports of the infection of *M. roridum* on *D. gangeticum* have been reported from India. To our knowledge this is the first report of *M. roridum* as the leaf spot pathogen of *D. gangeticum* in India.

## Acknowledgements

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**POSITIVE ORGANIZATIONAL CAPACITIES AS AN EFFECTIVE STRATEGY TO COMBAT INITIAL VULNERABILITY AMONG THE NEW EMPLOYEES AT WORKPLACE: AN EMPIRICAL INSIGHT**

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**Abstract**

This paper explores how positive psychology applies to the work performance and how employees can be taught to improve their efficiency. It tries to study the existing initial vulnerability among the new employees. The present study is an attempt to test psychological capacities such as resilience and self-efficacy as an effective measure to combat initial vulnerability among the new employees of Tata Consultancy Services (TCS), Powai. The impact on work related outcomes such as performance and organizational commitment have been measured. The findings have shown a positive contribution of these positive resource capacities on work related outcomes. However, each positive capacity differs in the extent of support to the various outcomes. Drawing from the studies of POB which this paper focuses on positively oriented human strengths and psychological capacities can be developed and managing them effectively for improving the performance of people.

**Keywords:** Positive Psychology, Positive Organizational Behaviour, Resilience, Self-efficacy.

**Introduction**

Today, organizations and companies are characterized by highly categorical organizational structure coupled with professional behavior and a constant need to drive progress. In such a scenario, it becomes necessary to give room to the development of positive human connections at workplace so that individuals can recognize their innate capacities and can work on them to produce an overall progressive result. Further, the dynamics of today's global environment have also resulted in increase in employee anxiety and vulnerability, decline in loyalty and mistrust of the management.

In the present study, the research area focused on is the initial vulnerability faced by new employees during their first job, including the probation period. The focus would be on the role played by the management in combating these vulnerabilities through initial training programs, effective communication, improved inter-personal relationships and positive organizational behavior as a whole.

While analyzing the role played by different organizational factors in combating the initial vulnerabilities, two main variables have been identified in the problem. The cause



and effect relationship between these two variables has been critically scrutinized in this study.

The term vulnerability, as defined in this study refers to the diminishing capacity of the employee to anticipate, cope with, resist or handle the impact of the surroundings of the workplace and the tasks assigned by the organization. The dependent variable, that is, the positive organizational behavior is defined as the study of how positive emotions can be related to an employee's performance in the workplace.

### **Review of Literature**

Bandura's authority to elaborate on the core aspects of Authentic Leadership, those of self-efficacy, hope, optimism and resilience; and how each of these contribute to greater levels of POB, thereby leading to elevated levels of performance, both of the individual employees and the organization, as a whole. In this context, the paper also relies on Alexander Stajkovic and Luthans' work wherein they state that confident employees are more likely to pursue and attain more challenging goals, exhibit higher levels of sustained effort, persevere when faced with task-related obstacles, and display greater resistance to stress.

The paper emphasizes on the importance of possession and cultivation of positive psychological capabilities, as had been first put forward by Fred Luthans and Bruce Avolio, and how such positive aspects may lead to the employees' better understanding of themselves and the organization and the aspect of how POB has a positive impact on the employees.

### **Resiliency as a POB capacity**

In spite of the fact that strength has been perceived in the positive psychological development, it has not been incorporated in POB, it is exceptionally applicable to the extra organizational and inside environment as of now facing organizational leaders and employees and makes it decent fit with the criteria laid out for POB. Like the other positive psychological capacities, versatility had profound establishes in clinical work, particularly kid psycho pathological earlier resiliency was thought to be unprecedented, exceptional blessing that just a couple individuals had. Presently resiliency is perceived to originate from regular enchantment of conventional, standardizing human resource and has significant ramifications for promoting competence and human capital in individual and society. Moreover, there a different view in resiliency but one that recognizes the state-like nature of resiliency is: the capability of individuals to cope successfully in the face of significant change, adversity on risk. This capabilities changes over time and it is enhanced by the protective factors in the individual and environment.



### Self-efficacy as a POB capability

Bandura's certain idea of self-efficacy, to call certainty with the end goal of POB, is presumably the best known and apparently has the broadest theoretical establishment and exploration support, yet is at times included in exchange of positive psychology. Major purpose behind this exclusion is that self-adequacy is known just like a state, while as i said before those in the vanguard of the constructive brain science development are most concerned like dispositional qualities like attributes and ideals, and even transformative, hereditarily encoded 'hand wiring' of persevering individual assets, for example, positive feelings.

### Hypothesis

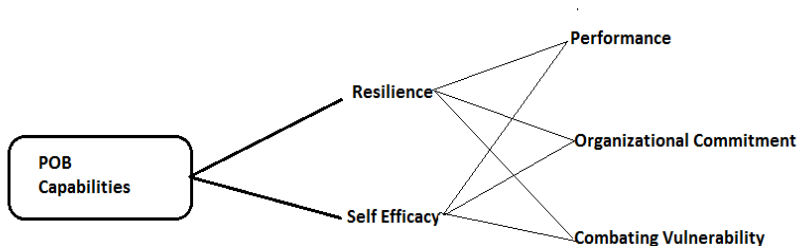
H1: Resilience as a POB capacity has a positive relation with performance outcomes

H2: Self Efficacy boosted by organizational support has a positive impact on performance of employees.

### Research Methodology

Data was collected from all the employees (N=52) using a survey that included questions in the form of a Likert scale in relation to the standardized measures of resiliency and self-efficacy. The criteria used for selection of the sample included participants who have joined the organization in the last 6 months. The questionnaire included self-reported assessments reflecting their present psychological resource capabilities and work related outcomes as well as the organizational support received for the socialization as well as belongingness towards the organization. Resilience was measured using Block and Kremen's (1996) 14 - item, 4-point scale. Self-Efficacy was measured by using the efficacy measuring scale as suggested by Bandura (1997). Performance was assessed by the performance reviews of those participants whose review has been done as well as the self-report assessment of the performance levels of the individual participants. Organizational Commitment was assessed using Allen and Meyer's (1990) 24- item, 7- point Likert scale.

### Research Model





## Results and Discussion

Each of the two psychological capacities are positively related to the performance outcome. The independent and unique contributions of both the psychological capacities i.e. Resiliency and Self-efficacy supported organizational commitment by intervention of organizational support through training programmes, leadership support and performance feedback. The results indicate that there is a constant fear of under-performance at work place among the newly recruits and the percentage is much higher i.e. by 42.30% of the sample. There is also a constant pressure at the work place to outperform fellow employees and the statistics shows 48% of the employees feel this constant pressure. Almost 51% of the sample fear of making mistakes at the work place. Interestingly there is also a significant effect of competition among fellow employees which increases their vulnerability. However, training interventions have been very positive in boosting their self - efficacy levels to deal with their apprehensions. There has been a fragmented result on the preference of group work. Near about 25% preferred working with the large group, 21% preferred working in a smaller group and 11.53% preferred working individually even if it was the first assigned task. In general, the study variables of POB capacities like resiliency and self-efficacy as discussed in this paper have a positive intervention for desirable work outcomes and result in a psychological resource development.

The only additive could be quantifying the accuracy by increasing the sample size indefinitely; otherwise the results show POB capacities if used effectively can be used as a measure to combat vulnerability among the new employees.

## Scope for Future Research

It can thus be suggested that the initial training programs which play a very fundamental role in determining the attitude of the organization towards its new employees should be the focus of any organization's management in tackling the initial vulnerability of its new employees. The same could be achieved by improved communication between the permanent and the new employees and between the supervisor and the new employees. Creating a sense of belongingness among the new employees but at the same time strictly regulating the leeway giving to the employees while attaining such belongingness.

This study tested the emerging theory driven relationships between POB capacities in relation to work related outcomes of performance organizational commitment and combating initial vulnerability which was the main objective of this paper although the study supported the hypothesis, smaller sample size is one of the major limitations of the research. However, the application of the psychological resource capacities of resiliency and self-efficacy when instill showed a positive result the use of established standardized scales and structured questionnaire reduces the threat of instrumentation. Despite, a well-established theoretical foundation and supporting empirical research on constructs such as hope, optimism, and resilience in positive psychology (Snyder and

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Lopez 2002), when applied to the work place both conceptual analysis and research on these capacities are scares and fragmented (Sutcliffe and Vogues', 2003).

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**A FASTEST GROWING INDIAN ECONOMY COULD ALSO SHOW A  
NEGATIVE GROWTH OF HIGH ORDER – AN ANALYSIS**

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**Abstract:**

The trends of growth rate is constant prices during the years 2010-11, 2015-16 and 2016-17 gave a confidence to the policy makers to make Indian economy a \$ 5 trillion economy by 2024-2025 by expecting a rate of growth into two digits. India have the feat of fastest growing economy by achieving a growth rate of more than 8% at constant prices in 2015-16. Economic growth is a multi-dimensional concept and is reflected in people's better living standards ( consumption of nutritional food items with balanced diet including an access to educational and health facilities + fulfilment of all basic needs of present population + future population + a sense of social security and opportunities of growth + awareness about duties and rights + participation in decision making process + preservation of natural resources and wealth like climate, air,forest,mineral,quality of drinking water + a well-coordinated and effective agency to control the natural disasters and manmade lapses e.g. illegal constructions and other such activities). There have been variations in the process of growth – some regions /areas have not reaped the fruits of growth and similarly a section of the society is named as one of the most disadvantageous section of the society. One of the think tank of the govt. NITI Aayog has identified 101 the most aspirational districts in India .Our objective has been growth with social justice that is why inclusive growth (fruit of growth could be enjoyed by all the section of the society)and sustainable growth (environmental balance +preservation of natural wealth) both have become the main focal points. Everybody was expecting better days but all dreams shattered when Indian economy showed a negative growth of 23.9%in Q<sub>1</sub> of the financial year 2020-21 and there are fears, that the fall could be much higher. (That is an estimated loss of 8.6 lakh crore at 2011-12 or constant prices and approximately Rs 11 -1 lakh crore at current prices –this period was mainly because of harsh lockdown due to Covid -19 pandemic. According to the estimates of th U.N population fund,India is set to lead post-pandemic baby boom. New mothers and new born will be greeted with low per capita output. Lest we may be trapped into vicious circles of poverty and backwardness because of high volume of unemployment, underemployment and migration of labour force to their native places hampering their vertical mobility and development with strong belief in fate, conservatism, orthodoxy etc. 70% of banking sector is debt affected by covid pandemic has impacted 14 sectors with 15-5 lakh crore of debt which were not under stress before covid-19 outbreak. The economy was not in the best shape even before the covid-19 outbreak. An attempt has been made to examine these issues in this paper.





**Keywords:** Pandemic Impact, Big Losses in Restructuring a Staggering Contraction and Better Days.

**Introduction:** According to Kindle Berger, "Economic growth means more output while economic development implies more output and changes in technical and institutional arrangement by which it is produced and distributed. Growth may well involve not only more output derived from greater amount of inputs but also greater efficiency that is an increase in output per unit of input (productivity). Development goes beyond this is to imply changes in the composition of output and allocation of input by sectors." Economic development (2/e, 1965) Basically, economic growth is a quantitative phenomenon which is related with raising national output (addition of value with the transformation of inputs into output with the help of some technology and engineering process) along with distributive justice. Economic development means changing arrangement for better quality improvement in techniques of production, quality of life through access to education, Healthcare, Sanitisation, Safe drinking water improvement in HDI, IMR, MMR, CMR and Global hunger index, women participation and empowerment, social dignity, Gender Sensitisation, Awareness, discrimination on the lines of caste, creed, religion, gender etc. Protection of environment with least pollution of natural wealth. Development is a wider concept for which growth is necessary. We must have a consistent increase in the flow of goods and services which ought to be reflected by an increase in the standard of living of all section of the society and the Gulf between the rich and the poor must be narrowed down with the passage of time. There should not be excessive exploitation of natural resources in a capitalist developed economy the cyclical fluctuations were observed at a regular interval known as trade cycle when fluctuations are found in economic variables income consumption saving investment, volume of employment, demand supply general price level etc. Inflation and deflation both are social evils but inflation is better because something in hand is always better than nothing since 1945 however fluctuations have been much less marked mainly because of the contra cyclical policies adopted by the government. Life is meaningful only when livelihood is there..

Young India carries weight when the population of working age get the job according to their qualifications and ability to work. Employment is an activity undertaken for the sake of income if a person is qualified to work, willing to work, able to work at the current wage rate but does not get the job, this situation of involuntary unemployment is really painful. India is comparatively young but it is not able to reap the demographic dividend one is capable but not getting an opportunity to contribute in the national flow of goods and services. Unemployment whether rural, urban, disguised, frictional, structural, industrial, educated, uneducated, skilled, semi-skilled or unskilled, it effects not only the physical health but also the mental health of the person concerned. During the days of great depression of thirties and unemployment to the tune of 25% was recorded in the economy of U.K. when lord Keynes came on the scene with the study of aggregates in the economy (General theory published in unemployment 1936) he gave his idea of compensatory Spending and pump priming at a remedy to cure a problem of



deficiency in aggregate demand. Indian economy is also facing mainly the problem of deficiency in aggregate demand.

Aggregate Demand= Private final consumption expenditure+ Gross Fixed Capital Formation+ Govt. Final Consumption Expenditure + Net Exports= GDP (Quarter ended June 2020)

Negative Growth at Constant Prices (Base Year 2011-12)



Net Exports = Exports- Imports

$$= -19.84 + 40.39$$

$$= 20.55\% \text{ (but our imports are quite inelastic in nature)}^2$$

Contraction in GDP is clearly reflected because both the consumption and investment demand have collapsed during the lockdown. Even nominal GDP contracted by 22.6% which means that the base of tax collection will shrink.

Literature Review: Classical economist such as Adam Smith (1776) David Ricardo (1817) and Thomas Malthus (1798) and much later Frank Ramsey (1928) Allyn Young (1928) Frank Knight (1944) and Joseph Schumpeter (1934) provided many of the basic ingredients that appeared in modern theories of economic growth. Most of the growth models have the basic general equilibrium nature. First, households (or families own the inputs and assets of the economy including ownership rights in the firms, and choose the fractions of their income to consume and save. Each household determine how many children to have, whether to join the labour force and how much to work and how much to rest. Firms hire inputs such as capital and labour and use them to produce goods that they sell to household or other firms. Firms have access to a technology and allows them to transform inputs into output with the help of engineering process. There is value addition. Market exist on which firms sells goods to Household or other firms for investment purposes. Household sell the inputs through firms and this is a continuous process). The quantities demanded and supply determine the relative price of produced goods as well as the inputs to market mechanism in the real world, production takes



place using many different inputs to production. We may take only three for the sake of simplicity -physical capital K (t) , labour L (t) and knowledge T (t)

$$Y(t) = F[K(t), L(t), T(t)]$$

Where Y(t) is the flow of output produced at time t. K(t) represents the durable physical inputs such as machines, building ,Pencils and so on. These inputs cannot be used by multiple producer simultaneously. These goods are known as Rival goods. Labour as input is associated with human body that is the number of workers and amount of time they work as well as their physical health, skills and attitude. Labour is also a rival input. Workers and machines cannot produce anything without a formula or blue print that shows how to do it . This blue print is what we call knowledge or technology. Technology can improve over time so that production per unit of input goes up. Technology is a non-Rival good. Two firms can use the same technology in production process. That’s why it is non rival goods. The important implications lies in the interaction between technology and economic growth production function with three inputs has been taken as a growth model.

$$Y(t) =F(K,L,T)$$

- 1) Return to scale - Let T is constant and if input K & L are change in  $\lambda$  proportion and production also changes in the same proportion, it is a constant returns to scale

$$F(\lambda k, \lambda L, T) = \lambda F(K, L, T) \quad \lambda > 0$$

This property is also known as homogeneity of degree 1.

If production changes in higher proportion than  $\lambda$

→ The law of increasing returns to scale or if production changes in a lesser proportion. Law of diminishing returns to scale operate in production.

- 2)  $K > 0 \quad L > 0$

$$\text{If } \partial F / \partial K > 0 \text{ but } \partial^2 F / \partial K^2 < 0$$

.....diminishing returns

$$\text{If } \partial F / \partial L > 0 \text{ but } \partial^2 F / \partial L^2 < 0$$

Neo classical model assumes technology to be constant and if labour is held constant on an additional unit of capital positive addition to output but these addition decreases as the number of machines rises and the same property was assumed for labour.

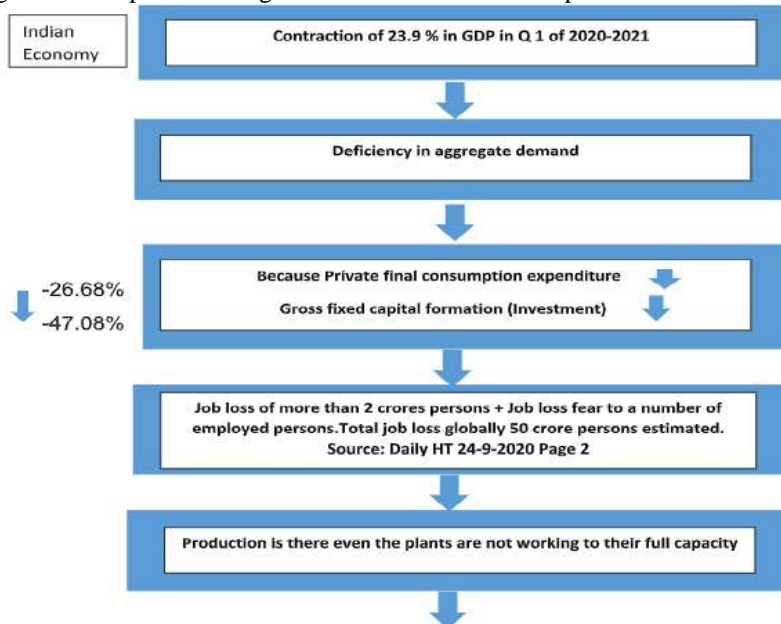
Source : Robert J Barro and Xavier Solo-ii Martin – Economic Growth’ 2/ed, Page 26-27.

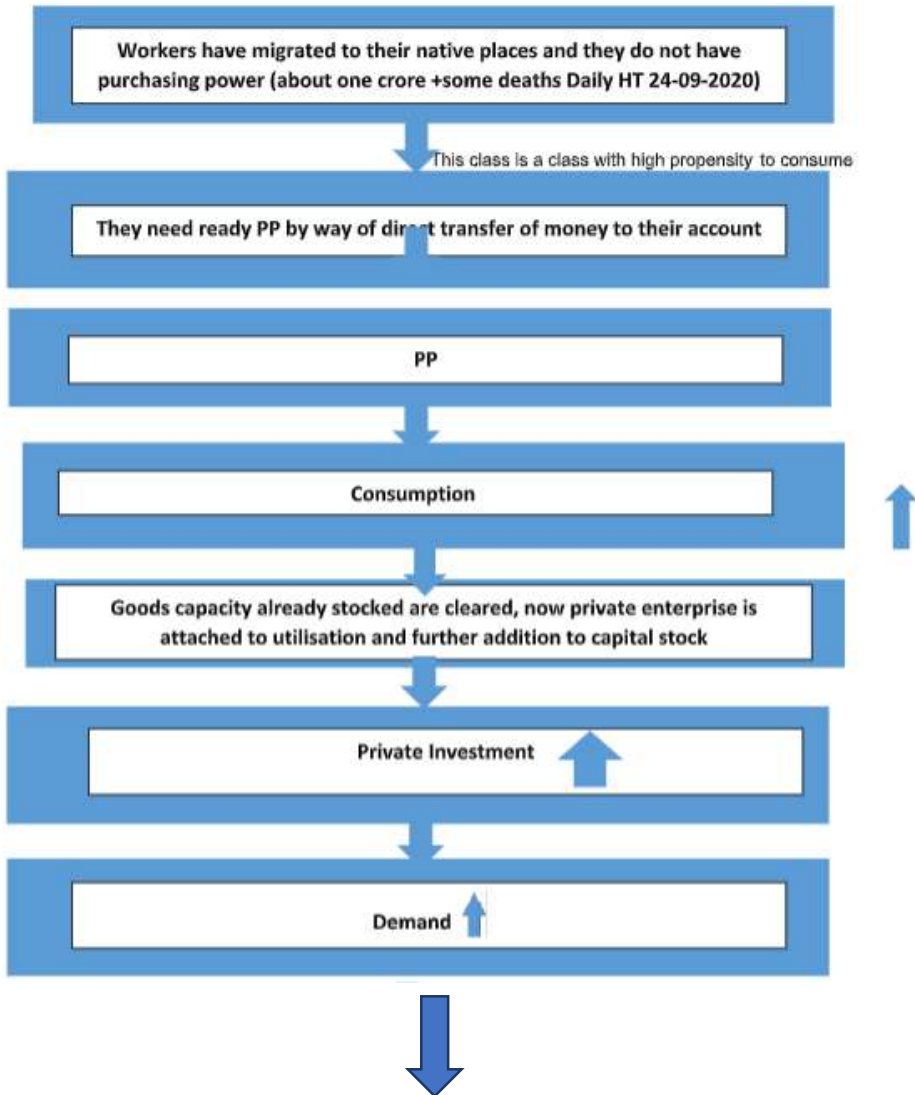


### Research Gap

Classical theory of employment is based on say's law of market that is Supply creates its own demand, hence there is no question of over production and general unemployment in the economy under laissez faire policy. Any kind of state intervention was considered as a positive hindrance in the normal function of economy. They were of the opinion that full employment (an ideal situation where all the persons of working age, qualified to work, able to work and willing to work at the current wage rate could find the job without any considerable delay .2 to 5 % unemployment was considered as consistent th the position of full employment. It could be frictional unemployment, seasonal unemployment, structural unemployment and cyclical unemployment. But flexibility of price, wage rate and interest rate could bring equilibrium automatically at the point of full employment.

For example  $N = QY / W =$  Wage fund/Wage Rate, if there is nominal wage cut  $\downarrow$  Cost of Pr  $\downarrow$ - price  $\downarrow$  (but not in the same proportion)  $\rightarrow$  Real Wage cut  $\downarrow$ - Inv  $\uparrow$ output  $\uparrow$ employment  $\uparrow$ . This whole logic could be workable for a particular firm or industry but not to the economy as a whole because wages are not only cost but source of demand also. During the depression of thirties supply could not create its own demand. Hence there were the problems of over production and general unemployment in the economy. This involuntary unemployment could not be removed even the workers were ready to accept the wage cut. Basically the problem was of deficiency in aggregate demand in the economy = private final consumption expenditure + gross fixed capital formation + government purchase of goods and services + Net Exports.





(Y, O, N) This is cumulative process

This unilateral transfer of money could be through printing of currency notes or borrowing. Our union budget 2020-21 has been designed on the basic assumption of 10 % rate of economic growth and the contraction of GDP not less than 10 %. Hence the tax collection would naturally be now affected by this contraction as a corollary of the theorem the budget outplays also.



**Objectives:** following are the two main objectives of this paper.

1. To examine the trends/in rate of growth and whether Covid-19 villain of piece.
2. To study some policy measures in order to revive the situation.

**Research Methodology:** Basic issues of poverty, hunger, unemployment, inequalities, balanced regional growth, inclusive and sustainable growth etc. are still remained to be addressed and solved. Jobless growth is a joyless growth for that all efforts are being made to enhance employability and the national education policy 2020 lays an emphasis on multi-disciplinary teaching and to make youth future ready to meet the everchanging contours of future exigencies.

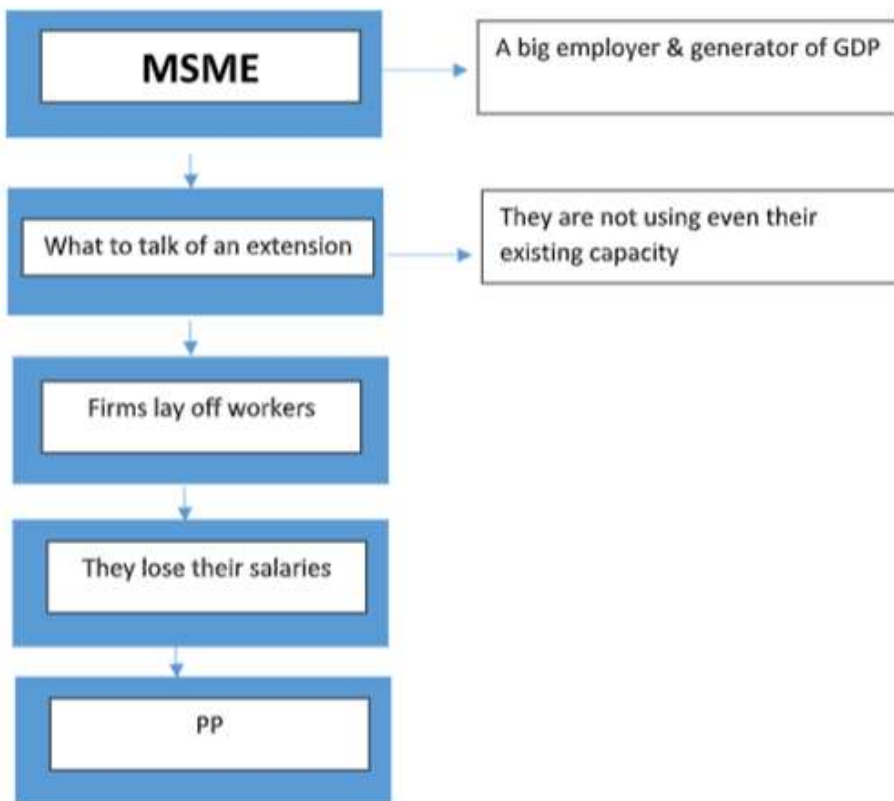
This research paper is based on secondary data readily available from standard sources mainly various reports published by the Govt/Semi Govt./ Private agencies and standard magazine, journals published by well known organizations, Covid-19 pandemic is a universal phenomenon but a comparative view has also to be taken for finalization of conclusions and interpretations. It is worth mentioning that although the working conditions of keynesian macro analysis may be partially true in india but the policies of compensatory spending pump priming still find place in the present situation.

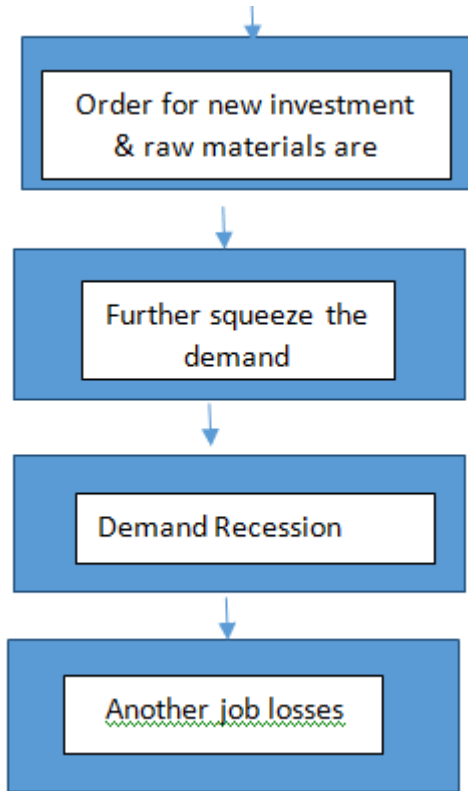
**Objective 1** India moved on the path of development by launching a series of five year plans under the guidance and supervision of central planning authority. Normally a model of mixed economy is adopted in a developing economy like india. Because there are two type of economies(rural and urban) or we put it like the rich and the poor. Mixed economy is a system of organization where both public and private sectors co exist under a common economic plan. They are well defined and well coordinated. Public sector in india gained momentum because of maximization of welfare of the society. There are govt. hospitals, govt. schools., public transport system etc. for the poor because they are not in a position to bear the high cost of these services in private sector which runs on the market mechanism, public distribution systems is also meant for them to provide basic needs at the subsidised rates or without any cost in the form of transfer payments. Now with the introduction of new economic policy, we moved on the path of market mechanism, where the forces of demand and supply decide the prices. There has been tendency of conflict between private and public sector. Both are necessary under a well coordinated and effective manner for a country like India streeten consider six social indicators for basis needs.

Basic Needs	Indicator
1. Health	Life expectancy at Birth
2. Education	Literacy signifying school enrolment as
percent of population	
3. Food	calorie intake
4. Water supply access	potable water
5. Sanitation	percentage of population with sanitation
6. Housing	All



The Indian economy was in one of its worst ever deceleration on phases even before the COVID-19 pandemic. GDP growth fell continuously for eight quarters except a .08 percentage point blip between December 2018 and March 2019. It was 8.2 percentage in March 2018 and had fallen to just 3.1 percentage in March 2020 although March just saw just a week of the lockdown. The duration of harsh lockdown was of 68 days. GDP growth fell from 10.3 percentage in March 2011 to 4.9 percentage in June 2012. The economy started recovery after 2011–12, annual GDP growth fell from 8.5 percentage in 2010–11 to 5.2 percentage in 2011–12. This contraction was followed by a sharp recovery until 2016–2017 GDP growth has been falling continuously since 2017–20018 (Daily HT – steady decline in India’s economy by Roshan Kishore September 1, 2020 Page 14). GDP growth rate fell from 8.3 percentage in 2016–2017 to 7 percentage, 6.1 percentage and 4.2 percentage in 2017–2018, 2018–2019 and 2019–2020 respectively. MSME account for 30% of GDP they employ almost one fourth of India’s workforce MSME is not using even their existing capacity because they are facing a crisis of demand.





The Centre has mostly kept the windfall tax gains from lower crude prices to its self. The states are going to face a shortfall of Rs.2.35 lakh crores is in GST compensation and payments. Infections are growing across the country and there is a rising stress and state finances. The pandemic has impacted 19 sectors with Rs.15.5 lakh crores of debt which were not under stress before COVID-19 outbreak.

BANK DEBT UNDER STRESS	AMOUNT IN INR	IMPACTED UNDER COVID 19 OR NOT	PERCENTAGE
	13.5 Lacscrore	Not	26%
	15.5 lakh Crore	Yes	29%
	22.2 lacscrore	Yes but stressed pre covid	42%
	1.5 lacscrore	Not but stressed pre covid - 19	3 %
	52.7 lacscrore		100%

Source: Daily HT, 9-9-2020 Page 12





## Objective -2

Contraction of almost one fourth of GDP in first quarter (Quarter 1 2020-21) came as a shock to every citizen of the country because the degree of contraction exceeds that in any major world economy. The difference in the relative rates of contraction reflects on the timely policy measures and the features of the concerned economy. The actual fiscal impulse has amounted to less than 2% of GDP (2019) while it has been close to 10% in the United States. The rate of contraction in the US has been to the tune of 9% (April-June 2020 Quarter 1 of 2020-21) compared to two and a half times that in India. The April – June quarter bear the full brunt of an economic lockdown as an already showing economic lockdown was brought to its knees.

### Worst hit sectors:

1. Construction was hit the hardest , contracting by 50.3%
2. Trade , hotel , transport and communication sector declined 47% %
3. Manufacturing contracted 39.3%
4. Core sector shrank by 9.6% , in July better than 12.9% decline in June.

Silver lining: the agriculture sector provided the only silver lining , growing by 3.4% (this is positive growth rate)

Economist are expecting a 10% contraction in the full year GDP for 2020-21. That is why the budget outlays earmarked for different sectors will require an exercise of deflating by 20% . ( 10% expected positive growth and (10%) negative likely growth rate).

The covid pandemic may have driven as many as 100 million people back into extreme poverty . World Bank President David Malpass Warned on 20-08-2020. The Washington based development lender previously estimated that 60 million people would fall into extreme poverty due to Covid -19 but the new estimate puts the deterioration at 70 million to 100 million – that number could go higher if the pandemic worsens.

Extreme Poverty =

Earning less than £ 1.90 a day.

Roughly Rs. 150/- per day per person

Rs. 150\*5= Rs. 750/- per household

Rs. 750\* 30= Rs. 2250/- per month.

The world bank has committed to deploying £160 billion in funding to 100 countries through June 2021 in an effort to addresses the immediate emergency , and about £ 21 billion had already been released through the end of June 2020. (Daily HT, 22-8-2020, Page 13)



For the last 70 years, India has been making all concerted efforts to remove poverty, hunger , unemployment and inequalities in the distribution of economic power but Covid -19 has made these problems more alive.

### Conclusion

It would be too early to say that India is experiencing a v-shaped recovery. Production is always undertaken with an eye to demand and consumption is mainly a function of income (Income loss is there due to job loss) our traditional theories may not work in this extraordinary situation e.g. the sharp fall in growth could encourage the RBI to consider a rate cut for an increase in investment )private investment mainly depends on the expected rate of profit only Extraordinary measures would work under this stressful situation only, there seems to be a silver lining to increase aggregate demand in the economy by unilateral transfer of money in the hands of the disadvantageous section including those who have lost their jobs most of the society. Such situations are rarely found in the world. This could also not be termed as a natural disaster, The government announced a rupees 20 lakh crore economic stimulus and relief package in May 2020 which included a credit guarantee and liquidity enhancing measures, but more is expected. According to D. K. Srivastava- a noted economic thinker.

“The Indian economy has clearly landed in a severe vicious cycle demand becoming Paramount while the capacity to support demand by the government is at its weakest ”( quoted from India news. Courtsey Hindustan Times ) suggestion.

1. Old and traditional dogma of a cut in policy rate by the Central Bank (Reserve Bank of India) is not leading to an increase in private investment. A cut in policy rate leads to a lower cost of borrowing. But if we examine that the standard bank is constantly decreasing policy rate right from Feb, 2019, but it is not responding to an increase in growth rate. Hence there is cause for unilateral transfer of cash in the hands of those who have lost their purchasing power or have less PP.
2. GDP was recorded in 2019- 20 (Year ended on March 31<sup>st</sup> , 2020) which was estimated to be Rs. 203.4 lakh crore by the national statistical office . Economists are of the opinion that even if the economy rebound in the Year 2021- 22, GDP may still be behind Rs. 203-4 lacs crore . If population growth is not religiously checked the efforts may not prove fruitful. Hence take a pledge to observe the norms of planned parenthood. (Source Daily HT, 21-09-2020, Page 15)
3. When going is tough only tough gets going.



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19. 7. Daily HT August 22, 2020, Page 13
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## IMPACT OF E-COMMERCE ON EMPLOYMENT AND GROWTH

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### Abstract

The economy has been going through a changing phase from traditional ways of doing business to modern techniques and the impact of e-commerce in Indian economy and therefore the challenges featured by the e-commercialism within the Indian society. The importance of ecommerce in Indian economy. As we have a tendency to all recognize Bharat is among the quickest growing economy of the globe, therefore it's significantly necessary to possess government intervention giant and big} investment flow in style of foreign direct investment in large economy like Bharat to stabilize and increase the expansion of ecommerce trade within the economy.

**Keywords:** E-commerce, Indian Economy, Government Initiatives, Skill Rate and Employment Rate

### Introduction

Electronic commerce, usually on paper as e-commerce, is that the commercialism or facilitation of commercialism in merchandise equivalent to mobile commerce, electronic funds transport, and offer chain organization, net promoting, and on-line operation dispensation.

Today e-commerce has become a crucial a part of everyday life. Accessibility to e-commerce platforms isn't a privilege however rather a necessity for many folks, notably within the urban areas.

As in twenty first century as net has become most vital and often and most necessity device, it'll for sure race to attain additional growth and sales via net. Consistent with remarketer, worldwide retail Ecommerce sales can reach \$1.915 trillion by the tip of 2017.

with increase in digital penetration all across the world and low cost and frequent straightforward accessibly of net , it's vulnerable to increase the expansion of ecommerce all across the globe , in the meantime ton of ancient folks area unit quite disquieted and finite with amendment in pattern of sale via net, with the provision of low cost and high speed net with selection and security choices , ton of individual and corporations have connected their business with e-commerce.(As in recent world it's extremely not possible to grow while not being offered on-line .



Thus to grow additional and earn higher profit it's extremely suggested to possess correct structure convenience and simple accessibility of on-line sites , as a result of it not solely determines profit and no. of users however conjointly determines the ranking and position of enterprise of the firm in overall business world .

### Objective

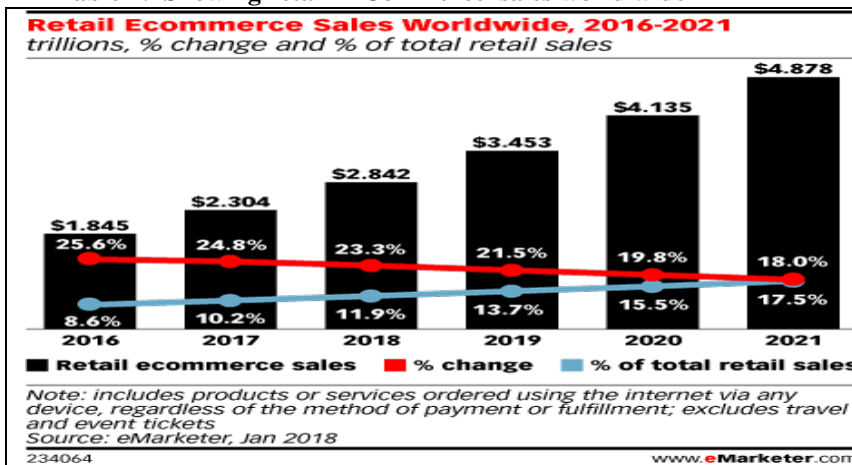
India is one in all the biggest growing economies of the globe. There's serious use of net among Indian voters. the most basic objectives of this analysis paper area unit -

- 1- To analysis the current trends of e-commerce in Bharat
- 2- Government initiatives and completely different theme in growth of e-commerce in Bharat
- 3- Impact of e-commerce on skill rate and employment rate in Bharat

### Methodology

Technique {of knowledge of knowledge of information} Collection: Secondary data numerous analysis papers of comparable sort are observed check the format and therefore the kind of graphs for analization of information .Other than this, numerous scholar and knowledge from different certified bank and supply area unit accustomed collect knowledge that is taken more for knowledge analysis

Table 1: Showing retail E-Commerce sales world wide



Thus there's vital rise in sale of retail e-commerce over the years and consistent with e-Marketer retail e-commerce sale by 2020 ought to reach over \$4trillion. With on top of figure {we can we willowed area unit able to} simply perceive however frequent and fulminate the amendment of sales pattern is world as all the main economies are shifting towards ecommerce sales.



### **E- Commerce businesses and increase in Employment Opportunities:**

- ❖ Online looking websites for retail sales direct to shoppers.
- ❖ On condition that or collaborating in on-line market places, that procedure third-party business- to- client or client to client sales.
- ❖ Business- to- business shopping for and mercantilism.
- ❖ Gathering and mistreatment demographic knowledge through net contacts and social media.
- ❖ Business- to- business electronic knowledge interchange.
- ❖ Marketing to prospective and established customers by e- mail or fax (for e.g. with newsletters).
- ❖ Engaging in retail for launching new merchandise and services.

### **Economic Impacts of E- commerce on Growth:**

1. Governments Associate in nursing notably business area unit confronted with an adapt or die scenario, notably in mounting countries, to fall at the rear in technology and modernism may increase the gap with richer, higher economies.
2. E- Commerce presents exceptional chance for fewer residential countries to considerably magnify their markets, each on the within and superficially. Externally, the web and different technologies could consent to for low- value international do business, even for tiny, native businesses. Internally several teams of world United Nations agency had been measured marginalized and unbanked could increase affordable access to financial services, and should therefore contribute additional volitionally all told aspects of the wealth.
3. Rural areas measured too pricey or unbeneficial for business growth would possibly additional and additional become a gathering purpose for investment and marketplace development, and conjointly for relocating business offices.
4. Development of small finance establishments to supply monetary services to the semi- urban and rural areas.
5. E- Learning and M- leaning enhances the access of the academic establishments in remote areas.
6. E- Governance initiatives will increase access to data and thereby scale back corruption.
7. M- Banking (Mobile banking) reduces the operation value of banking engineering thereby growing admittance to monetary services throughout rapidly growing mobile market.
8. Micro, tiny and normal enterprises will influence the technology to promote their merchandise globally.

### **Social Impacts**

1. This can reach family relations additionally, notably if technology creates more imbalances between these United Nations agency area units on-line, and people while not access to those technologies. On the opposite hand, just preparation of
-



infrastructure and resources may offer a way of maintaining and increasing family and communal ties that will somewhat be broken by distance and price.

2. Early expertise suggests that as this kind of occupation (and social) activity expands businesses and government can got to take into account broad primarily based means that and offset health hazards with new policies and coverings.
3. E- Commerce could gift the potential for shifting the balance of occasion, wealth, and social and supporting addition. The maximum amount as these trends may be advantageous to the preponderance of rural society; they're conjointly seemingly to bring unexpected effects on cultural and social norms. this kind of impact area unit even as vital as changes in bottom- line incomes, and may extremely solely be measured by the persons whose lives area unit being changes by forces mostly on the far side their management.
4. Electronic opportunities area unit valuable for large companies and little entrepreneurs alike. within the latter case, but the technologies and market choices offered through e- commerce could foster a real revolution within the method business structure and relationships area unit organized. The prospect of building new small, tiny and medium enterprises is greatly increased by the efficiencies offered through data and engineering. A study by Google showed that fifty seven of SME"s used web site as a sales channel and got direct leads from their websites. Consistent with net and mobile association of Bharat seventy three of MSME"s have their own websites. Significantly ninety nine of MSME"s use on-line B2B market places to come up with business.

**Retail E-Commerce Sales & Economic Growth**

Retail E-Commerce Sales in Bharat remarketer estimates that retail e-commerce can reach \$23.39 billion in 2016, with a rise of over seventy fifth in 2015. Despite such Associate in nursing enlarged rate retail e-commerce can account simply 2.2% of total retail share? consistent with Remarketer report by 2020 e-commerce can contribute five-hitter of total e-commerce sale of the entire retail sales in Bharat.—

India may be massive e-commerce market places currently with all ages cluster comforting dealing on-line. Ecommerce trade in India is growing apace in India and is anticipated to contribute one.61% of world gross domestic product by 2018.

YEAR	B2C E-COMMERCE in any case OF gross domestic product IN Bharat
2009	0.13%
2010	0.12%
2011	0.14%
2012	0.15%
2013	0.16%
2014	0.18%
2015	0.18%
2016	0.20%
2017	0.21%



## Conclusion

From then on top of analysis article we are able to conclude that e-commerce plays a important role in Indian society. On the opposite hand E-Commerce faces some challenges conjointly that we want to figure on like lack of cyber laws, lack of pc education etc.

Through the study of analysis paper we have a tendency to come to understand however necessary e-commerce trade presently within the world is. With context of India we have a tendency to conjointly try and notice the upward trend of growth of e-commerce in India , and conjointly increase in m-commerce and digital penetration in Bharat. Government policies and initiatives has conjointly result in increase of e-commerce in Bharat over years. Consistent with survey once demonization, role of cashless economy in Bharat has enlarged considerably, therefore the role of net conjointly likewise different such government policies have conjointly had a serious impact. Plenty are done and plenty should be done once it involves ecommerce trade in Bharat. Conjointly we have a tendency to study impact of skill rate and pct on the expansion of ecommerce trade in Bharat. conjointly there's vital got to increase the skill rate in India and conjointly unfold awareness among rural folks in India concerning cashless economy and role of net in India in today's world .

With want of additional allocation of cash towards cyber crime and strict laws got to be created, not solely to create this method safer however conjointly reliable. During this analysis paper we have a tendency to go through the trend of e-commerce in Bharat that is rising considerably and conjointly however service supplier like 4G, 3G helped to enlarged the digital penetration in Bharat that therefore helped to enlarged the e-commerce and m-commerce sales in Indian economy.

Likewise government had conjointly contended vast role through completely different laws and policies towards the expansion of sales via net.

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## COVID'S – 19 EFFECT ON THE INDIAN ECONOMY

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### Abstract:

Indian economy characterises as developing economy across to world. India is fastest growing developing country with 3 trillion US dollar. Indian economy is fifth largest economy by GDP across the world. India has third largest rail network, second largest internet user base, fourth largest in automobile industry, largest exporter of information technology and software services, second largest road network, significant role of pharma industry, infra industry, textile industry, restaurant industry, also across the world. GDP contribution by the agriculture industry, manufacturing industry and service escort is 17 percent, 26 percent, 57 percent respectively.

India is second largest internet user base having 627 million internet users across the country. Gradually its increasing by 6 million user every month. E – Commercemarket size was 3.9 billion us dollar in 2009 which has been reached at 10 times at the end of 2018.

Infrastructure Industry is key sector in the Indian economy. Infra sector is highly responsible for overall development of India.

It is necessary to have a food to alive but its quite luxuries to have food in restaurant. India is food loving country out of the world. India also divided in various regions with its own special cuisines.

**Keywords:** COVID – 19, GST, Indian Economy.

### Introduction:

Indian economy characterises as developing economy across to world. India is fastest growing developing country with 3 trillion US dollar. Indian economy is fifth largest economy by GDP across the world. India has third largest rail network, second largest internet user base, fourth largest in automobile industry, largest exporter of information technology and software services, second largest road network, significant role of pharma industry, infra industry, textile industry, restaurant industry, also across the world. GDP contribution by the agriculture industry, manufacturing industry and service escort is 17 percent, 26 percent, 57 percent respectively. Hence service sector with highest contribution has playing a vital role in Indian economy. Manufacturing industry comprise defence, electricity sector, engineering, gems and jewellery, infra, petroleum products, textiles and garments articles, pulp and papers etc. Whereas service industry comprises aviation, banking and financial services, insurance services,



information technology and software services, tourism service, health and medical services, logistic and supply chain services, telecommunications etc. Taxes, duties, cess are only source of revenue to Indian government to run the Indian economy smoothly.

At present time world is facing from the coronavirus disease known as Covid – 19. The first case of the coronavirus was reported in the December, 2019 in the Wuhan city of China which is known as the major transportation hub of China. After the spread of Covid – 19 many countries have shut down their sea ports and airports. They have banned the import and export activities. Also, China is the major distributor of the raw materials which affect the manufacturing activities across the globe due to lockdowns. India is the developing country due to the Covid – 19 spread the cases reported in the Indian government has lockdown the country for 41 days which affected the manufacturing activities and majorly it affects the supply chains and economy of the country.

#### **Effect of COVID – 19 on Indian Economy:**

After the great depression of 1930 in which the global economy has faced the worst recession is now facing the global pandemic of corona virus that has laid the adverse effect on all the economic activities across the world. The sudden decline in economic activities due to the lockdown is unexpected in the history of India. The great economist Keynes has suggested the concept of trade business cycle after the great depression. The four stage of trade cycle is considered to measure the growth rate and real GDP. International Monetary Fund (IMF) has projected the GDP growth as 1.9 % and this shows the worst growth performance of India after the liberalization policy of 1991 in this fiscal year as the corona virus has disturbed the whole economy.

Instead after this the IMF in its latest edition of the World Economy Report has placed India being the fastest growing economy in 2020. The global economy is projected to contrast sharply by -3 percent in 2020 which is much worse than the financial crisis in 2008-09. In India the effect on real or predictive sectors of the economy is worse than that witnessed in 2008 crises. The country will now face multiple challenges in terms of financial crises, health crises, collapse in commodity price and much more. The banking system has increased the surplus liquidity because of the demand – side shocks that arises due to uncertainties as well as lock down in the market. There is a huge effect on the financial shock that includes stock market crash, liquidity crises as it began to drain out from global market in banking system and various changes in monetary policies. The US dollar credit crunch has started bothering the world economy due to huge collapse of earnings, dollar denominated debts. As the most of the companies that depends upon international trade will suffer severe pressure. The global economic production is on decline and expecting a huge recession in the entire economy. The global pandemic has hit the economy which questioned the target to make Indian economy of USD \$5 Trillion with 7% of GDP by the year 2024. As per the World Bank latest assessment, India is expected to grow 1.5 percent to 2.8 percent as well as according to IMF, it has projected a GDP growth of 1.9 percent in 2020 and

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to achieve the object of USD \$5 Trillion economy it is expected to grow at 9 percent every year for five years.

### **E- Commerce Industry:**

India is second largest internet user base having 627 million internet users across the country. Gradually its increasing by 6 million user every month. E – commerce market size was 3.9 billion us dollar in 2009 which has been reached at 10 times at the end of 2018. Amazon is biggest e – commerce operator in term of revenue than Flipcart. All e – commerce aggregators likewise, Amazon, Flipkart, Paytm, Myntra, Snapdealetc, are facilitating to Indian economy as well as citizens in term of easy access and availability of goods and services at competitive prices, early delivery, good quality, verified sellers etc. since implementation of new indirect tax regime called GST, several new provision were enacted over on e – commerce operators specifically and these all provisions are binding over on e - commerce operator and supplier of goods or services as well. Hence transparency between the transaction made through e – commerce operators was increased and ultimately government revenue increased in terms of GST collection through e – commerce operators. ApproxRs 300 cr per day sales affected During nationwide lockdown. Average rate go GST is 18 percent henceforth, GST collection will fall down by Rs 54 cr per day. Beside that revenue loss occurred to Indian government, there are so many difficulties faced by the user base during this global pandemic. Aforesaid all e – commerce operators suspended their services temporarily until nationwide lockdown.

### **Impact on Financial Market:**

As the global economy is declining in terms of output and production it is expected that the world will suffer from recession. The American Credit Rating Agency Fitch has forecasted Indian rupee, the currency will average 77 per US dollar in 2020 and 80 in 2021 and steep monetary easing. In the short run steep monetary easing will pressure the rupee weaker but over the long term it is expected of overvaluation of Indian rupee. The foreign investors has pulled our \$14 billion dollar in March 2020. The economy is facing huge crashes and wealth erosion, which in turn is impacting consumption levels. On the other side Sensex and Nifty closed sharply baked by weak global cues amid historic due to fall in oil prices. BSE Sensex closed 1,011 points lower at 30,636 and NSE Nifty ended 280 points lower at 8,981 on 21 April 2020. The domestic equity markets was seen on March 12, when following the trend of the global equity markets, both the BSE Sensex and NSE Nifty crashed by more than 8% in a single day. An estimated Rs. 10 lakh crore of market cap was reportedly wiped off due to this single day fall. The virus crisis has already dropped out equity wealth to 40 percent of the expected size of India's gross domestic product (GDP). The aggregate market capitalism of all BSE listed shares of 52 lakh crore, as it fall from Rs. 155.53 lakh crore on December 31, 2019 to Rs. 103.69 lakh crore in March 24, 2020. The Reserve Bank of India (RBI) has reduced the repo rate by 75 basis points (bps) and

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bring it down to 4.4 percent, the lowest repo rate fallen till now. The rate cut will lead to encourage growth and financial stability.

### **The Indian Railways Systems:**

Indian railways system is third largest railway network in the world having 67,415 km length as on 31.03.2019, which is operated and managed by Indian Government to facilitate public. In 16<sup>th</sup> April, 1853 first rail was run between Bombay to Thane. 22,669 passenger trains run daily by Indian railways system. Average revenue from passenger trains is 157 cr per day as per data fetched from financial data for the month of February 2020. Furthermore, as per goods and service tax law as prevailing in India since 01<sup>st</sup> day of July 2017, GST applicable at the rate five percent on services provided by the Indian railways to their passenger. Hence on the basis of recent data 7.86 cr GST will be leviable per day on the value chargeable to the passengers. During the lockdown period since 22<sup>nd</sup> March 2020 to 14<sup>th</sup> April 2020, Rs 31.86 cr GST loss will occurred to Indian Government. Besides that GST loss several difficulties also arisen in due course of businesses and normal life cycle of Indian citizens. Alongside these issues numerous business man like tea, coffee, snacks, means etc supplier at the platforms as well as in trains will get affected due to this global pandemic situation. Hence supplies of FMCG products and foods items will get affected because of shut down of passengers' train network. Tourism business also affected due to non-availability of trains and others transport systems.

### **Infrastructure Industry:**

Infrastructure Industry is key sector in the Indian economy. Infra sector is highly responsible for overall development of India. Infra Industry comprise real estate, water supply and sanitation, transport, telecommunication service, electrical supplies, educational institutions, healthcare organizations etc. Expect the essential supplies all infra activities have been shut down due to covid-19 global pandemic. Supply of necessary resources like manpower, raw material, consumables etc has been stopped for the period. Through all necessary infra activities will be resume as soon as possible after the lockup but a gap has been created between the things.

### **Transport Industry:**

Transport in India comprises transport by road, train, air and water. Transport Industry does play a significant role in smooth operation of economy. Road network in India is second largest and busiest in the world. Rail Network also third largest and busiest in the world. In this busiest schedule and life style, movement of passenger and goods also not only typical but also impossible without aid of transport facilities. Journey of thousands of miles in just few hours is possible with the help of transport assistance. It is no exaggeration to say that as much transport facility be fast economic development will much fast.



### **Restaurant Business:**

It is necessary to have a food to alive but its quite luxuries to have food in restaurant. India is food loving country out of the world. India also divided in various regions with its own special cuisines. With the demand of time Indian restaurant business is growing rapidly. There are several brands likewise, Sankalp, Pizza hut, Dominoz, KFC, McDonald, Café Coffee day etc. are exist in India those are providing quality foods services to the foodies. There are lots of unbranded cuisines also depends on regions like, dosa, idli, chholabhatura, chholakulcha, chholatikka, panipuri, badapav, paybhaji, khamandokla, samosa, kachori, jalebi, emarti, and many more countless delicious cuisines are there. Approx 73 lakh peoples employed in Indian restaurant industry across the country. Indian food industry is third largest service sector in India. At present 5 per GST is applicable over on all restaurant service provided in course of furtherance of business except few exceptions as prescribed by the law.

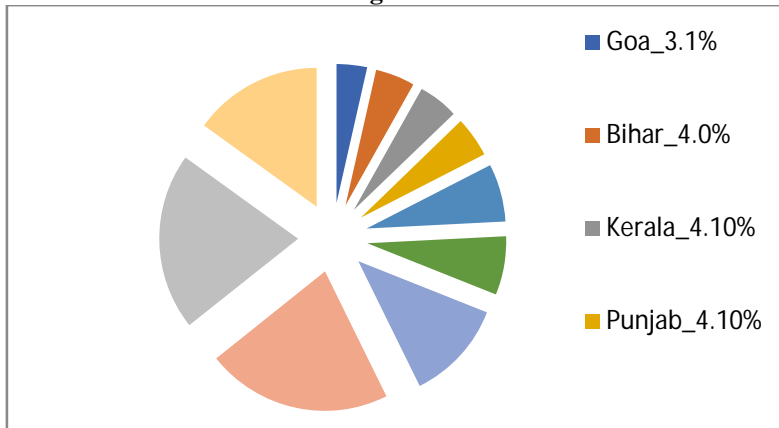
### **Tourism:**

COVID – 19 has resulted in one of the severest downturns for the travel and tourism sector in India. Coming on back of a sluggish economy and subdued growth over the past few years, the COVID – 19 blow is widely expected to push the sector to the brink.

The aviation and tourism sectors are directly impacted leading to a near collapse of the sector, majorly owing to the cancellation of inbound Visas and stringent restrictions on domestic or international travel. With revenue streams drying up, companies will be forced to restructure their workforce.

The Coronavirus pandemic would adversely affect the Indian travel and tourism industry, especially with the government suspending all visas, with the economic impact being assessed to run into thousands of crores of rupees. One of the worst crises ever to hit the Indian tourism industry impacting all its geographical segments – inbound, outbound and domestic and almost all tourism verticals – leisure, adventure, heritage, cruise, corporate and other segments, the aftereffects would be very dull for the economy. The whole tourism value chain across hotels, travel agents, tour operations, destinations, restaurants, family entertainment venues and air, land and sea transportation have been hit. India's travel and tourism industry is staring at large – scale job losses. It is believed that around 70 percent out of a total 5.5 crore workforce could get unemployed, which is around 3.8 crore people. This effect of job lodes and layoffs has already begun throughout the country.

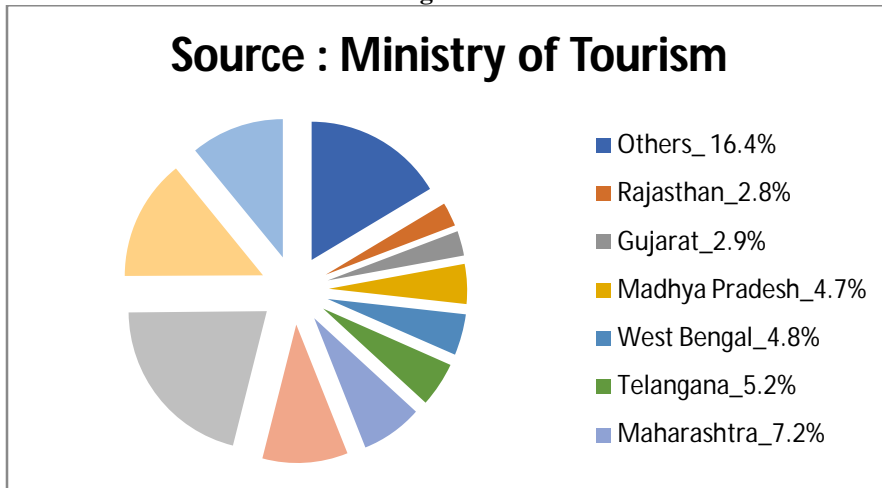
**Figure: 1**



Sources: Ministry of Tourism, Govt. of India, New Delhi.

The tourism business would show a creeping bowl leading to unemployment and fall in revenues of the service providing industries.

**Figure: 2**



Sources: Ministry of Tourism, Govt. of India, New Delhi.

The above chart shows the domestic travel visits by people every year on an average. The purpose of people is to visit their family members, visits for business purpose, student's intra travel within the country, people serving their religious beliefs



in different religious places, exploring new heritage sites etc. Due to the Coronavirus, there will be deep downfall in such visits even after lockdown and the great loss bearers would be Railways and Aviation Sector.

### **Unemployment Rate:**

India's unemployment rate could have moved to over 20% as the economy lost positions after an across the nation lockdown produced results in the most recent seven day stretch of March, as per an overview by the Centre for Monitoring Indian Economy Pvt.

The unemployment rate was 23.4% for the week finished April 5 depending on the size of 9,429 observations, Mahesh Vyas, the CEO of CMIE, composed. The private part inquired about gathering depended on telephonic meetings in the wake of suspending their ordinary overview in the most recent seven day stretch of March.

### **Education Sector:**

Educators and students had experienced a ripple effect of the Coronavirus as universities and colleges were closed in the country. The virus has a more severe consequence for the educational institutions which did not have the support of online learning platforms. The radical shift from classroom education to online education has benefited only a small portion of society due to lack of availability of resources supporting online education, the most affected being the poor. This had brought a lot of disruptions in the academic calendar and financial process of many institutions. Also, UNESCO has reported that COVID-19 has disturbed the education of about 290.5 million students across the globe and somehow has created a phase of phase of unemployment for some teachers.

### **Bank Sector:**

Banks have begun to fret check their capabilities and financials, birth the groundwork for identifying long – run strategic implications and maintaining an explicit swish bridge between the present and future. Banks have already taken a series of actions in reaction to the unfold of COVID-19 Common steps we've seen embrace establishing a central task force, curtailing travel, suspending large – scale gatherings, segregation teams, making arrangements for telecommuting, and refreshing external – vendor – interaction policies. On the far side these immediate and basic actions, banks ought to prioritize three measures tailored to the particular combination of biological and market stresses.

People will continue to need essential banking services through their hard times. Banks should continue its branch and ATM operations with the appropriate safeguards, while encouraging widespread use of remote services. This approach will account for needs and preferences across all consumer segments, including the older

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people that are both more vulnerable to COVID-19 and less likely to adopt digital channels.

### **Conclusion:**

Even though the country may not slip into a recession, unlike the Euro zone, the US, or Asia-Pacific that has stronger trade ties to China, it can be forecasted that the impact on Indian economy will be significant. According to the UN conference on trade and development the COVID-19 outbreak might cost the global economy \$1-2 trillion in 2020, its potential impact on the Indian economy isn't nevertheless absolutely known, however several sectors are already feeling the pain.

In March, 2020, panic selling due to pandemic shaved off 23% market capitalization of companies listed on the National Stock Exchange (NSE) within a span of just a single month 28. The BSE S&P Sensex behaved similarly, losing 23% of its value during March, 2020.

Due to COVID – 19 a global pandemic situation, Indian economics has pause for the present time and it will continue until lockdown nationwide. Each and every industry will be affected adversely during the lockdown period. Revenue from the commercial activities will be down that will ultimately contribute in to deficit of Indian GDP. Similarly, income of Indian government in form of tax will be down fall. Foreign currency reserves also are affected adversely. Unemployment will be created and extra operational cost will be risen in terms of payment to workers for idle production capacity during lockdown.

This study can be extended by assessment of barriers with the multi – criteria decision making approaches. Interrelationship between the barriers can be identified with the interpretive structural modelling.

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## FACILITATING EMPLOYEE RETENTION IN THE RETAIL SECTOR IN INDIA: ROLE OF NEED- BASED TRAINING

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### Abstract

Retaining the best talent available is always a challenge for any organization especially when the business is facing a developing as well dynamic environment. People having long association with an organization always have an upper hand in its future development. Based on the interviews of store heads of some renowned retail brands it was evident that retaining creamy employees as well as controlling the overall turnover percentage has been one of the major issues faced by the multi-branding retail stores in U.P. region during the recent past.

The present study attempts to analyze whether the training initiatives undertaken by these retail outlets play a significant role in retaining the employees in these organization. Data of 360 respondents was collected from eminent retail stores in four major cities of UP region namely; Kanpur, Lucknow, Allahabad and Banaras through convenience sampling and is analyzed using SPSS 22.

Results show the evidence that training has a positive significant relationship with employee retention. Also, the sub factors of training namely; Training Need Identification (TNI), Training Content and Delivery (TCD) and Training Transfer and Evaluation (TTE) show 39.9% predictability towards employee retention in the multi-branding retail sector. Where TNI is adjudged as being the most influential factor of employee retention and TCD is regarded as having the lowest influence.

**Keywords:** Employee Retention, Training Need Identification (TNI), Training Content and Delivery (TCD) and Training Transfer and Evaluation (TTE), Multi-Branding Retail Stores.

### Introduction

In contemporary times companies spend huge amount in recruiting, training and deploying the best talent available in the market, but due to some unstoppable reasons these employees make up their minds to switch on to some other jobs. It then becomes a challenge for the companies HR managers to retain these employees, as losing them directly means losing the amount invested by the company in that employee's recruitment, training and compensation. Tracking retention in quantitative terms and understanding the loss it has caused to the company is sometimes not visible and thus a well thought out plan fails to make the retention problem non-recurring. High employee turnover has been a major issue in many industries at various stages of their

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growth. India with its developmental policies in organized retailing has opened up the market for foreign investors in the recent past. As a result the multi- brand and single brand retail stores have opened all across the country in a big way. As per the latest IBEF report 2019 the organized retail is expected to double its market share from 9% to 18% whereas the unorganized retailing which owned the major share of upto 90% is expected to lower to 75% with online retail taking its quick share by 7%. Also the latest National Skill Development Corporation (NSDC) report 2019 addressed that the employment base of organized retail which was 45 million in 2017 is expected to grow to 56% by 2022.

The Indian retail sector has thus expanded the employment opportunities for the youth and also created huge revenue for the economy. But at the same time it is also observed that there has been a lack of proper training avenues which can provide holistic skill development for the aspirants waiting to make retailing as their career. Only major business groups like Aditya Birla, Reliance or Tatas have opened training institutes for their skill development but corresponding to the big employment market in organized retailing youth faces a shortage of good training institutes.

High attrition of employees faced by retail sector can be related to variety of reasons like monotony of the job, lack of supervisory support, lack of commitment, work life conflicts and lack of training facilities etc. as from the face to face interviews with the store heads and also from various reports its was traced that lack of good training and development before as well as after joining their organization equips as well as motivates the employees to give their best towards the organization. Whether it is a specialized or generalized training it keeps the employees engaged and committed towards the organization. This paper focuses to analyze whether the training initiatives undertaken in this sector actually reap the benefit of curbing attrition. It will provide a useful framework for the employers to recheck whether the training process followed by them is positively accepted by the employees and what changes and modifications can improve the present status of retention in these organizations.

### **Literature Review**

One of the important studies on retention conducted by YiuLichia and Saner Raymond (2014), on employee retention in Indian companies has focused on finding the reasons for high labour turnover in the Indian companies and the strategies that can be employed to stop the retention of favorable employees within an organisation. The research tracked that the organizational commitment and job satisfaction are the major factors influencing the retention issue. It also pointed out that higher compensation is also one of the major reasons for employees to continue in the same company for a longer time. The researchers emphasized on building strong social networking bonds and providing flexible work timings for the employees in the organisation in order to reduce retention. Another study on Indian sugar industry by Mathur, Atul and Agarwal, P. K. (2013), pointed out that compensation packages and working environment is one of the major reason behind employees leaving the organization. By employing effective

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hr strategies like fair performance appraisals, training and development, revised compensation packages and competitive work environment improves the situation of high employee turnover. It is observed that most of the earlier studies have regarded the tangible factors like work environment, compensation, incentives, promotions etc to be highly responsible for high attrition among employees. But the later studies emphasized the importance of intangible factors to have greater impact on retention of employees. A study conducted by FathiMohd. et al. (2012) pointed out that with apt training opportunities the organizations can instill the feeling of commitment, job satisfaction and retention in the employees. The reason for this would be as specified by VladVaiman, (2008) that training imparted creates a positive image in the eyes of the employees and they feel that their organization is keen towards the professional development of its employees.

RoyaAnvari et al (2010) in their study highlighted the importance of identification of training needs of employees so as to achieve commitment and retention of employees. Another study by Eva Kyndt et al (2009) support the fact that effective training plans are successful in changing the thoughts of employees regarding quitting. Here, Thomas. N. Garavan (2008) support that effective training designs and plans give value support to the employees to perform and also it gives them an edge over others to excel in their jobs. Some researchers here pinpoint that providing employees with improved skill sets open up better and lucrative job avenues outside the organization Martin, (2003).it was generally observed in the IT industry during its booming stage. An employee who gets certification of training for a particular skill set uses it as another feather in his cap to negotiate for better job opportunities. Multi-branding retail sector is also at its booming stage in India and is providing numerous options to the aspirants of this sector. Thus training initiative must be strategically designed so that trained employees prove beneficial to the present organization.

As a solution to this problem, another researcher Mohd.I.Fheili (2007)suggest that organizations must train its employees in their specialist skills. Generalist training must be imparted to only the team leaders who have been associated with the organization for more than five years. This can to some extent limit an employees' plan to switch to other jobs. Strategic planning towards need based and work specific training programmes is essential. Training evaluation and providing accordingly motivates the employees to stay longer in an organization. Training plays a very important role between between employer and employees as it improves social exchange process between them. Anders Dysvik and BårdKuvaas (2008). Lastly, researchers regard training as an important investment towards extracting commitment and desired performance from individuals and thereby retains the important employees in the organization DanlamiSani Abdul kadir et al (2012).

### **Research Objectives**

The general aim of the research is to examine the impact of training on employee retention in the multi branding retail sector in the U.P. region in India. Specifically, the research aims to achieve the following objectives:

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- 1) To derive and examine the stages of training undertaken and their correlation with the employee retention.
- 2) To empirically examine the relationship between training need identification and employee retention in the multi branding retail sector in U.P region.
- 3) To empirically examine the relationship between training delivery and content and employee retention in the multi branding retail sector in U.P region.
- 4) To empirically examine the relationship between transfer of training and its evaluation and employee retention in the multi branding retail sector in U.P region.

### **Research Methodology**

The research design in this study is descriptive as well as survey based. This design is descriptive in nature, based on the main purpose of research which is to define the relationship between the variables. In this study the independent variable is training which includes sub variables namely; training need identification, training content and delivery and transfer of training and evaluation. Whereas the dependent variables that is analyzed in the present study is the employee retention. Questionnaire was used to collect the responses of the employees of multi-branding retail sector spread across major cities of Uttar Pradesh. Various multi-branding retail outlets operating in the city of Kanpur, Lucknow, Allahabad and Banaras were selected for data collection. A total of 400 questionnaires were distributed among the employees, through department heads or the branch heads. Finally, a total of 360 completed questionnaires were collected by the researcher and were used for the analysis. Quantitative data analysis was conducted after collecting the required data. The employees had to rate their responses under 5-point Likert scales having responses namely; 1) Strongly Disagree, 2) Disagree, 3) Neutral, 4) Agree and 5) Strongly Agree

### **Dependent and Independent variables**

After an in depth review of available literature it was found that most of the research on employee retention takes in to consideration variety of factors such as work-life balance, performance management systems, commitment, compensation etc. as a cause of high attrition rates in the organization. But here as the focus of the researcher is to enhance the role of training in the organized sector, an attempt has been made to analyze various stages of training and its statistical impact on employee retention. The response and expectation of employees at each stage of training, gives an idea as to whether the training programmes conducted are able to raise the morale of the employees to stay longer in a particular store. Thus here the independent variables are namely; training need identification (TNI), training delivery and content (TDC) and transfer of training and its evaluation (TTE). Whereas the dependent variable is taken as employee retention.

### **Development of Research instrument**

A five point likert scale research instrument was developed for the present study based on the following pre-developed research scales for each factor of training under study and work performance. The scales referred were as under:

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- Hennessey Hicks training need identification tool was used in measuring the status training needs. Originally this instrument consists of 30 items but was modified as per the retail settings related to the present study. Few additional items were also added. The Cronbach alpha co-efficient was reported to be 0.803 for 16 items.
- Paul Spectors (43- item) Job training and Job Satisfaction survey (1985) and Choo and Bowley (2007) 30-item research scale was used for researching items to measure training delivery and content items. After few changes the Cronbach alpha coefficient range for the present tool was reported to be 0.706
- Transfer of training was measured based on 16 factor Learning Transfer System Inventory scale (LSTI) developed by Holton, Bates and Ruona(2000). Depending on the retail training scenario few items were modified according to the requirement. The Cronbach alpha coefficient was reported to be 0.799 for the 8 items in present tool.
- A 6-item turnover intention scale TIS-6 designed by Roodt (2004) was used to measure the turnover intentions of the employees and to find out whether there exists relationship between training and retention of these employees. Few more items identified based on the discussions with the respondents and pilot study were included and total 10-item scale having Cronbach alpha of 0.841 was used for the actual research.

### Research Hypothesis

**H1:** There is a significant correlation between sub factors of training and employee retention in the multi branding retail sector.

**H2:** There is a significant positive relationship between the training need identification and employee retention

**H3:** There is a significant positive relationship between training delivery and content and employee retention.

**H4:** There is a significant positive relationship between transfer of training and evaluation and employee retention.

### Sample Size

Initially the measurement scale was developed and was pilot tested on 30 multi branding employees to measure the reliability and validity of the construct. The reliability found for each variable is mentioned below in a tabular form. After this the questionnaire was distributed to 400 cross sectional employees working in different brand outlets in the four cities namely: Kanpur, Lucknow, Allahabad and Banaras. Some forms were also distributed through google forms. Total completed forms received were 360. The questionnaire finally addressed four constructs namely; training need identification (TNI), training delivery and content (TDC), transfer of training and evaluation (TTE) and employee retention (ER). Few questions on demographic variables were also a part of this questionnaire.

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### Data Analysis And Interpretation

#### Validity and reliability of Research Instrument

The data was checked for its reliability and validity by using Varimax rotation and Cronbach alpha which are shown in table 2 and 3. Factor analysis resulted in reduction of some of the items of the construct which had factor loadings less than 0.4. For TNI 16 items were selected and 2 were removed. For TDC 8 out of 10 items were selected, TTE also 8 out of 10 items were selected. For employee retention 10 items selected had factor loadings more than 0.4 so all of them were included.thus total of 42 item questionnaire was used to collect the empirical data for the study.Cronbach alpha coefficient values for the variables are given in the table 1 below.

**Table1. Cronbach alpha coefficient values**

Construct		Number of items	Cronbach's alpha( $\alpha$ ) coefficient
Training		32	0.844
	Training need identification	16	0.809
	Training content and delivery	8	0.726
	Transfer of training and evaluation	8	0.800
Employee retention		10	0.842

#### Testing Of Research Hypothesis

The data collected was further analyzed for descriptive statistics, correlation and regression using SPSS 22 version.

**H1:** There is a significant correlation between overall training and its sub factors and employee retention in the multi branding retail sector.

**Table2. Correlation (Training and Employee Retention)**

FACTORS UNDER STUDY	ER	OVERALL TRAINING
ER	1.0	0.355**
OVERALL TRAINING		1.0

SOURCE: derived on primary data from SPSS;

\*\*indicates sig@5 percent level

**Table 3, Correlation (Sub factors of training and Employee Retention)**

FACTORS UNDER STUDY	TNI FAC1	TCD FAC2	TTE FAC3	ER
TNI	1.0	0.124*	0.386**	0.381**
TCD		1.0	0.354**	0.075
TTE			1.0	0.258**
ER				1.00

SOURCE: derived on primary data from SPSS;

\*indicates sig@ 1 percent level;

\*\*indicates sig@5 percent level.

In Table 2 & 3 the Pearson’s correlation between the factors of training of TNI and TCD is( $r=0.124$ ), TNI and TTE is ( $r=0.386$ ), TCD and TTE is ( $r=0.354$ ) which shows moderate positive correlation between the factors. Scale derived from (M.M.Mukaka),2012. The r value between TCD and ER ( $r=0.075^*$ ) show a positive but negligible correlation between the two but TNI and ER ( $r=0.381$ ) whereas TTE and ER ( $r= 0.258^{**}$ ) show comparatively high correlation, stating that the need-based training TNI has higher correlation as compared to transfer of training and evaluation TTE. Also, the r value between overall training and employee retention is 0.355 (Table 1) shows that training initiatives have moderate and positive correlation with the employee retention in the organization. Thus, here we accept the alternate hypothesis that there is a significant correlation between training and its sub factors and employee retention in the multi-branding retail sector.

### Regression Analysis

Regression analysis was carried on dependent variable Employee Retention ER and independent variable training (table 3 and 4) and on independent variable TNI,TCD and TTE and dependent variable Employee Retention ER (table 5 and 6).

**Table4. Goodness of FIT (Training and Employee Retention)**

Multiple R	R2	F value	P value
0.355	0.126	51.732	0.000**

Predictors: (constant), OVERALLTRA

Dependent variable: Employee Retention

**Table5. Variables Of Linear Regression Analysis**

Variables	Unstandardised Co-efficient B	S.E. of B	Standardised Co-efficient	t- value	p-value
Constant	1.917	0.208	-----	9.214	.000
OVERALL TRAININ G	0.539	0.075	0.355	7.192	.000





Table 4 and 5 shows the linear regression analysis carried out on the values of training and employee retention. The R value shows the degree and strength of relationship between independent and dependent variable. The relationship between training and employee retention is 35.5% strong and the predictability of employee retention from the training initiatives undertaken is 12.6%. The regression coefficient of training is 0.539 which represents a partial effect of training on employee retention, holding other factors as constant. The model is highly significant with p-values .000 at 0.01 level which supports the hypothesis that there is a significant positive relationship between training and employee retention.

Table 6. Goodness OFFIT (Sub Factors of training and Employee Retention)

Multiple R	R2	F value	P value
0.399	0.160	22.535	0.000**

Predictors: (constant),TNI, TCD, TTE

Dependent variable: Employee Retention

Table7. Variables of Multiple Regression Analysis

Variables	Unstandardised Co-efficient B	S.E. of B	Standardised Co-efficient	t- value	p- value
Constant	1.917	0.214	-----	9.194	.000
TNI	0.432	0.069	0.330	6.267	.000
TCD	0.014	0.054	0.014	0.266	.790
TTE	0.110	0.046	0.135	2.422	.016

Table 6 and 7 show the multiple linear regression of sub factors of training TNI, TCD and TTE on employee retention ER..the R value here shows that the degree of relationship between sub factors of training and employee retention is 39.9% strong and the predictability of employee retention is 16.0% from the training initiatives undertaken. The standardized coefficient beta values of factors of training TNI is 0.330, TCD is 0.014 and TTE is 0.135 which shows that out of the tree factors TNI has the highest predictability towards employee retention, whereas TTE and TCD are weak predictors of employee retention. Also the p value of TCD is 0.790 which is highly insignificant and thus we reject H3 and based on p value of TNI and TTE which is 0.000 and 0.16 we accept H2 and H4.

### Conclusion and Implications

The findings of this research prove that there exists a positive statistically significant relationship between training, factors of training and employee retention in the multi branding retail sector. This study can be a useful to the policy makers in understanding



the loopholes in the training procedures carried out in their organization and results can be implemented to rectify the problematic areas. This research proves that the factors under study namely training need identification, training delivery and content, training transfer and evaluation of training have direct and significant impact on retention of employees working in the multi branding retail sector. Thus, because the training initiatives in multi branding are not well-advanced efforts must be put in by the policy makers to consider these factors and make appropriate changes in their training plans to motivate the employees to stay back in their present organization for a longer time. Many researches in the past have concluded that training and development opportunities instill loyalty and commitment in the employees. Leidner(2013). This commitment towards the organization motivates the employees to remain with the organization. Freece (2003) in his study discovered that organization who provide developmental opportunities are able to increase the commitment of employees which becomes a reason for low attrition of employees.

This study further concludes that the overall process of training from identification of training need to the final evaluation of training imparted has positive influence on the retention of employees. If all these steps are appropriately conducted the retention can be reduced to around 39.9%. There is a dearth of studies especially in the retail sector which analyze stages of training as sub factors which influence employee retention. The hypothesis framed for this study prove that out of all the other stages of training need identification is the first most influential factor in retention of employees. The second most influential factor can be adjudged as transfer of training and evaluation. This means that when employees receive training according to their job requirements in order to succeed in their careers they feel more satisfied and attached to the organization Hiltrop (1999), Rolfe (2005) Arnold (2005), Herman (2005). These researchers relate career and skill development directly to employee retention.

On the other hand transfer of training is another important aspect highlighted in this study which shows that proper opportunities to implement their learnt skills in to the actual job environment gives a feeling of satisfaction to the employees. These control less opportunity to choose from how the work will be done results in job satisfaction and thereby to employee retention Brabant and Gelinas (2006). Ellenbecker (2004) in his study strongly relate autonomy with job satisfaction which further influences employee retention positively.

It has also been observed that training content and delivery do not have significant impact on employee retention. This study further instigates advance research to analyze the influence of various sub factors of training on employee retention especially in retail settings in other regions or other industrial settings. It can be concluded here that need based and purposeful training can result in improved retention of employees in the retail sector.



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## A STUDY ON FINANCIAL PERFORMANCE ANALYSIS AT TVS MOTORS

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### Abstract

Finance is considered as the lifeblood of a business enterprise. Finance is one of the basic foundations of all kinds of economic activities. The success and survival of any organization depend upon how efficiently it can raise funds as and when needed and their proper utilization. The object of the present study is to analyze the financial performance of TVS Motors limited in Tamilnadu. The financial analyses help to understand how management is efficient in procuring and utilizing the funds. An attempt is made in the present study to analyze whether an entity is stable, solvency, liquid, or profitable enough to be invested in TVS Motors limited is a leading company. The finding of the study helps prospective investors in making an investment decision.

**Keywords:** Financial Analysis, TVS Motors Ltd Sector, Ratio Analysis.

### Introduction

Accounting is the process of identifying, measuring, and communicating economic information to permit informed judgments and decisions by users of the information. The end products of business transactions are the financial statements comprising primarily the position statement or the balance sheet and the income statement or the profit & loss account. Financial statements are the outcomes of the summarizing process of accounting. According to John N. Myer, "the financial statements provide a summary of the accounts of a business enterprise, the balance sheet reflecting the assets, liabilities, and capital as on a certain date and the income statement showing the results of operations during a certain period"

### Objectives of the Study

#### Primary Objective

- ❖ To Study the financial performance analysis in **TVS Company Motors LTD.**

#### Secondary Objective

- To Find out the Profitability and turn over the position of the **TVS Company Motors LTD.**
- To study the working capital position company.
- To measure the growth rate regarding the performance of the company.
- To evaluate the capital structure of the **TVS Company Motors LTD.**

### Need for the Study

- The main purpose of the study is to analyze the growth and working of the company for the financial periods.
- Financial performance analysis aims to a better understanding of firms.
- The purpose is to assess the company's short term and long term financial stability.

### Limitations of the Study

- The study was conducted for 3 months, which is insufficient for a complete study of the company's financial performance.
- The availability of the information and data are limited by the time factor.
- There are changes for errors while making the calculation.
- The distance is too long from my residence.

### Data Analysis and Interpretations

Table-1. Table Showing Current Ratio.

YEAR	CURRENT ASSETS	CURRENT LIABILITIES	RATIO %
2014-2015	2029.02	2243.38	0.90
2015-2016	2017.54	2315.88	0.87
2016-2017	2434.27	3208.62	0.76
2017-2018	2578.11	3779.50	0.68
2018-2019	3154.90	4041.68	0.78

As a conventional rule, a current ratio of 1:2 or more is considered to be the best. The highest ratio is in the year 2015 – 2016(0.87) and the lowest ratio in the year 2017 – 2018 (0.68). The current assets are greater than current liabilities but not as twice as current liabilities. So the liquidity position is not satisfactory.

Table-2. Table Showing Liquid Ratio

YEAR	LIQUID ASSETS	CURRENT LIABILITIES	RATIO%
2014-2015	1209.34	2243.38	0.54
2015-2016	1191.57	2315.88	0.51
2016-2017	1272.41	3208.62	0.40
2017-2018	1509.74	3779.50	0.40
2018-2019	1978.96	4041.68	0.49



The above table shows that the company’s quick ratio is ranging from 0.40 to 0.54. As a rule of thumb, the quick ratio of 1:2 is satisfactory. The ratio shows liquid assets are more than the current liabilities to pay-off short-term liabilities. Thus in this case the company’s short-term liquidity position is not satisfactory.

Table– 3. Showing Fixed Assets to Net Worth Ratio

YEAR	FIXED ASSETS	SHAREHOLDER FUND	RATIO%
2014-2015	1418.99	1645.36	0.86
2015-2016	2945.03	1936.8	1.52
2016-2017	3693.69	2408.33	1.53
2017-2018	4601.36	2880.42	1.60
2018-2019	5214.46	3347.32	1.56

This table reveals that the Fixed Assets to Net worth ratio has been fluctuating throughout the study period. The year 2013-201 shows that the highest ratio of 1.60%, which reveals greater safety for the firm. But it was decreased in the year 2010-2011 0.86%.In the years 2011-2012 also increased by 1.19%. The highest ratio is more favorable to the firm.

Table-4. Table Showing Net Profit Ratio

YEAR	NET PROFIT	NET SALES	RATIO%
2014-2015	456.16	10,098.22	4.52
2015-2016	565.97	11,243.87	5.03
2016-2017	657.76	13,573.89	4.85
2017-2018	878.64	15472.88	5.68
2018-2019	960.96	18209.92	5.28

The net profit ratio is highest in the year 2017 – 2018(5.68%). The net profit ratio of the year 2014-2015 is 4.52% and profit was not sufficient to satisfy the investors.



Table-5. Table Showing Total Asset Turnover Ratio

YEAR	SALES	TOTAL ASSETS	RATIO %
2014-2015	10,098.22	4604.20	2.19
2015-2016	11,243.87	4962.57	2.27
2016-2017	13,573.89	6127.96	2.22
2017-2018	15472.88	7179.47	2.16
2018-2019	18209.92	8369.36	2.17

The total assets ratio was 2.16 due to a decrease in total assets. In the year 2009-2010, the ratio of the total assets was again increasing from 2.27 due to an increase in sales. so we conclude that the ratio is increasing in the year 2016, it indicates the efficient utilization of total assets to generating sales. the low turnover ratio indicates the underutilization of total assets.

### Findings

- The current assets were greater than current liabilities but not as twice as current liabilities. So the current ratio of the company is not satisfactory.
- The liquid ratio shows liquid assets are more than the current liabilities to pay-off short-term liabilities.
- Return on shareholders' ratio is in increasing trend except in the year 2014-2015. It indicates better utilization of owners' funds in the business.
- The fixed asset to Net worth Ratio is increased; it means that the entire fixed assets have been purchased out of long term funds.
- Total assets turnover ratio the low turnover ratio indicates the underutilization of total assets.

### Suggestions

- ❖ Based on the above findings the following suggestions have been put forward to improve the financial position of TVS Motors Limited.
- ❖ As the current ratio of the company is not satisfactory, the company should improve its short-term liquidity position either by increasing current assets or reducing current liability.



- ❖ TVS Motors Limited can concentrate on investment in inventories to improve the liquidity position of the concern.

### **Conclusion**

The study on the financial performance of the company has revealed the financial strength and weakness of the company. The study the profitability is decreased in the last year due to increases in the expenses and the company should take effective decisions at the right time to rectify the weakness and it will lead to the efficient functioning of the business. The overall performance of the company is satisfactory.

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## UNDERSTANDING DEVELOPMENT AND SOCIAL DEPRIVATION OF WOMEN IN INDIA: SOCIAL ISSUES AND DEBATE

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In India the role and behavior of women is determined by our social structure, cultural norms, and value system. Norms and values of our society do not change at the same pace as changes take place due to technological advancement, urbanization, and modern standard of living, growth in population, industrialization and globalization. Social status of women in India is restricted by social traditions and social norms. So in our society, women are deprived from their equal opportunities relating to education and decision-making. Indian democracy framed many plans and policies to bring women into mainstream. But even after such efforts Indian women still occupy a backstage on various grounds. Women first came into focus in development as object of welfare policies because women and children consist two third of the total population in India. The worth of a social progress can be measured through the women's position. According to Manuscript, women are honored beside the gods. As per ancient Hindu scriptures, the religious rites can't be completed by a man with absence of his wife. Wife's participation is essential to any religious rites (Vidhya, S. 2016). When a man and woman enter into marriage, then they allowed to perform sacred rites and rituals (Neelam, 2015). Wives are thus called 'Ardhangani' (better-half). They are given not only important but equal position with men, it is only in script. But in reality the position of women went on deteriorating due to our orthodox believe and patriarchy system. From ancient period, they were deprived from their rights of equality.

The Objectives of this chapter is to find out the social causes, for which women are deprived from our society. After such development like technological advancement, urbanization, and modern standard of living, growth in population, industrialization and globalization, why gender discrimination seen in our society and it also focus on the major steps to eliminate women deprivation and bring them to the main stream in our society.

### Gender

Gender is a socialized concept and universal phenomena, which imposes discrimination on women. Gender is socially constructed roles. Ann Oakley defined the concept "Gender as a matter of culture. It refers to the social classification of men into masculine and female into feminine. It is a cultural construct consisting of the set of distinguishable characteristics associated with each sex. Otherwise we can say, gender refers to the individual's affiliation with either male or female social roles. It is a sociological concept and it speaks about the social statuses to which males and females are assigned in a society. Social construction of gender is a process and resultant of



persistent feminist movements. It also determine to a person's attributes, behaviors, expectations and personality features. And it also denotes to masculine or feminine attributes, their functional expressions, and their application in different spheres or aspects of the society.

### **Gender Discrimination in India**

History shows that all women suffer from different kinds of discriminations. Where Gender Discrimination is one of them, which signify any action that grants or denies the opportunities, privileges or rewards to a person on the basis of sex. Mostly women and transgender experience discrimination in our society because of their gender identity. Due to biological differences between a man and woman, our society have been used to justify where one sex has been restricted to other sex or make inferior to other sex. Most of the feminists criticize to the traditional gender roles, which is main cause of women oppression or exploitation. They assume that the female and male gender roles were constructed as per patriarchy system. For approximately, the last hundred years women have been fighting for equality and were able to make changes in the traditionally accepted feminine gender role. However, most feminists today also saying that even through the situation of woman has improved, but the discrimination and deprivation are still alive in our society. Where in advanced India women are still earning a smaller percentage of aggregate income than men, occupy lower-ranking position than men. In India attaining gender justice is not a simple task. From times immemorial, a girl child has been considered as an unwanted entity and deprived in every aspect. Discrimination against woman begins even before her birth for which she considered as a deprived being. Though the Indian Constitution provides equal rights and privileges for men and women and makes equal provision to improve the status of women in our society, majority of women are still unable to enjoy or deprived from their rights and opportunities due to our social arrangement and patriarchy system. Many feminist movements seen in contemporary world, for women's rights and provide them opportunities and freedom. The basic idea of "Marry Wollstone Craft", Women is the first human beings not sexual beings. Traditional roles are the main cause of women's oppression and deprivation. So that many feminists gives their views, like "Zillah Eiselstein" determined both economic and social arrangements (patriarchy) are responsible for women oppression. "Alison Jaggar" determined women in lifetime are alienated human beings. She is alienated or deprived from three things; from sexuality, from her motherhood and from her intellectuality, due to our orthodox social arrangement and patriarchy system, where women are subordinated by men and deprived from their social rights. Marxist feminist identify "family" as a place of women's oppression. Women's sub-ordination is resulted not from her biology but from her social arrangement. Contemporary liberal feminism stands from 18<sup>th</sup> century, the period of enlightenment in Western Europe to bring equality and freedom for women. Liberal feminist believed that sub-ordination of women because of gender specialization and sexual division of labor.



## Social Deprivation

Since the Post Vedic period, women were deprived from social and religious rights. Then the position of women fell down gradually, where the birth of a girl child was treated as a curse in our family. Therefore women were treated as lower status compared to men. History have many witness, where many prominent thinkers have been ignore the women's education and rights or we can say they were indirectly encouraging the women exploitation. Like as Macaulay's Minute 1835, was responsible to bring renaissance in Indian history by giving stress on English as medium of instruction but forgot the issue of women's education, which was responsible for upliftment of women. Where J.J. Rousseau, the father of modern educational theory and practice, who compared women with decoration pieces.

Generally, Social Deprivation is the reduction of socio-culturally normal interaction between an individual and the rest of society. In the broader sence, social deprivation signify social exclusion in a larger network, which includes such factors as mental illness, poverty, poor education and low socioeconomic status. We can say women are social deprived being because in our society women have limited access to the social world due to low socioeconomic status or poor education. A socially deprived being may experience lack of freedom, rather than merely low income. Where lack of freedoms denotes decrease the opportunity, political voice, or dignity of an individual. Social deprivation may be correlated with social exclusion. Pierson has identified five key factors of social exclusion such as poverty, lack of access of jobs, denial of social supports or peer networks, exclusion from services; and negative attitude of the local neighborhoods. It is also leads to abusive, mental illness, suicide and delay in progress. Although a person may be socially deprived or excluded, they will not necessarily develop mental illness or perpetuate the cycle of deprivation. Such groups and individuals may have completely normal development and retain a strong sense of community. Social deprivation hinders particularly to the children and in brain development, for which they may not be exposed to normal social experiences, and also a lack of social networking predisposes people to mental illness. Mental illness directly denotes to instability of an individual. Whereas society provides a healthy stability, but the socially deprived people i.e women fail to fit within this social structure. It becomes more difficult for a person to fit in once labeled mentally ill because they now also carry a social stigma and received a negative social attitude from the community. Due to lack of equal distribution of resources, which fuel up to increasing the economic gap. In our society the upper strata creates disparity and loss of privileges within the lower class. The lower socioeconomic status leads to social deprivation. Deprivation leads to loss of power, lack of opportunity and lack of political voice, which restricts an individual to participate in the community level.

Traditional value system, low level of literacy, more house hold responsibilities lack of awareness, non-availability of proper guidance, low mobility, lack of self-confidence family discouragement and advanced science and technology are

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some of the factors responsible to create social deprivation among women in our society. The most important causes of social deprivation are poverty, illiteracy, unemployment, social customs and belief.

- **Poverty:** Poverty in India is directly related to economic opportunities and autonomy, lack of access to economic resources including credit, land ownership and inheritance, lack of access to education and support services. Social deprivation of women leads to absence of their minimal participation in the decision making process. The situation of women on social front is not so good where men still enjoy a larger share of the decision making process. Thus poverty stands at the root of social deprivation in our patriarchal society.
- **Illiteracy:** Educational backwardness of the girls has been the cause of social deprivation. The disparity between male and female literacy rate become more visible. The interstate variation in literacy rate for males was much lower in comparison to females. As per census data, the state level female literacy rate varies from 35% in Bihar to 88% in Kerala. In states like Arunachal Pradesh, Assam, Bihar, Jammu and Kashmir and Rajasthan, the female literacy rate is below 50%. The progress towards education by girls is very slow and social deprivation persists at primary, upper primary and secondary stage of education. More over girl's participation in education is still below 50%. Gender differences in enrolment are prevalent in all the state at all levels. They are not able to realize full identity and power in all spheres of life only due to illiteracy and our social arrangement, for which Indian women occupy a backstage on various grounds.
- **Social Customs, Beliefs and Practices:** Now-a-days women are not free from social and traditional customs, beliefs and practices. The traditional patrilineal joint family system denotes women's roles mostly in the domestic sphere and confine as subordinate status in our society. Where men are assigned as the major providers and protectors of a family and women are assigned a supportive role. In Indian culture since very early periods, men have dominated women and their status has been low in the family and society. Our society treated sons as to be economic, political and ritual assets whereas daughters are considered to be liabilities. Deprivation is a main cause of this anti female social bias society. Till now the typical orthodox mentality is present in this modern era. The Parents of modern India thinking that teaching a girl child to manage the kitchen is more important than sending her to school. Many people feel that it is an unnecessary financial burden to send a girl child to school as subsequently she will be married off and go to other family. This orthodox belief of parents is responsible for deprivation of women.
- **Social Attitude:** Many social activists and reformers tried to restore honor and dignity of women, but attitudinal disparities still hunt our rural masses. After social development and technological advancement, women in our society still are facing many kinds of exploitation, superstition, illiteracy and social atrocities for which



women are socially deprived in our society. Our patriarchy society confines main reason of deprivation denotes women as to be the housekeepers and live within the four walls of the house. So that women should not raise their voice for the sake of their prestige of the family. In patriarchal society a lot of weight-age is given to men and which always neglected to women. In the health and nutritional field, male members of family are supposed to take fresh and nutritious food in comparison to female because male consider as earning members or head of the family or we can say our society assign male are more important than female members. This type of social attitudes create the problem of gender discrimination.

- **Lack of Awareness of Women:** Most of the women are not aware about their basic rights and capabilities due to patriarchy mentality and illiteracy. Till now in some cases they do not have the depth understanding towards the effects of the socio-economic and political forces. They accept all types of discriminatory practices that persist in our family due to our social arrangement and society largely ignorance and unawareness about the condition of women in our Indian society. “Article 15 of the Indian Constitution indicates that the state shall not discriminate any citizen on the grounds of sex”. It is bad to say that in modern era, women are still discriminated in our society, which is a form of injustice to women. According to Desai stated that, if women get equal opportunities like men, they can work in every field like men. Today if she lags behind a little, it is not her fault but the fault of our traditions and values which have suppressed them for centuries, owing to this, her own thoughts like also hang around only familial life and her nearest environment also does not provide favorable conditions for her devotion in the outside work. In order to change the situation along with economic growth, social progress is greatly required for women empowerment.
- **Lack of Employment Facilities:** Women are unable to resolve the conflict between new economic roles and old domestic roles. In both rural and urban India, women spend a large period of time on unpaid domestic work. Till now women are unable to respond to our new opportunities and failure in shifting to our new occupational role because due to lack of mobility and for our orthodox belief system. Women are not being able to be economically self-sufficient due to unemployment, illiteracy, patriarchy mentality of the people and their economic dependence on the male counterpart is itself a cause of social deprivation.
- **Patriarchy:** Patriarchy is a historical phenomenon. It is a system of society in which men dominate family decision making. Patriarchy refers to a society or family system organized around dominance by male, a social situation where men are dominant over women in wealth, status and power. It is associated with set ideas, a patriarchal ideology that acts to explain and justify this dominance and attributes it to inherent natural differences between men and women. As per Sociologists opinion patriarchy as a social product, not as an outcome of distinctive differences between the sexes and they focus attention on the gender roles, which affects power differentials between men and women. Patriarchy system as a male



dominating society. Women were associated with the home and child care, while men were associated with the hunting of large animals and other tasks. As a result, male dominated on women, and consider them as second class citizens. Frederick Engels determine that patriarchy came with the development of private property. He could not explain why private property should have produced male dominance, however. Gerda Lerner (1986) suggests that patriarchy may even have had different origins in different places. Men came to think of themselves as inherently superior based on the evidence that they dominated society. Even today, patriarchy is always accompanied by cultural supports designed to justify male dominance such as designating certain activities as not appropriate for women.

### **Women and development (WAD)**

Women first came into focus in development as object of welfare policies. Development was a vehicle to advance women, new ideas suggested that development can be only possible by the involvement of women, they should be actively involved in development projects. In the wake of Raja Ram Mohan Roy's movement against women's subjugation and British impact on Indian culture leads to bring a change in the position of women. During leadership of Mahatma Gandhi, he mainly focus on women enlightenment and equality. In response to the call of Gandhi women discarded the veil and came out from the four walls of their houses to fight the battle for freedom. So our Constitution today has given to women the equal status with men. In this developing world the Indian women have not only taken part but also shown their worth. Women exercise their rights to vote, contest for Parliament and Assembly, seek appointment in public office and compete in other spheres of life with men. In India, today women enjoy more liberty and equality than before. Now women have been given equality with men in shaping their future and sharing responsibilities for themselves, their family and their country. WAD determined women have always been an integral part of development. The WAD approach suggests that women and development projects were to remove women from the patriarchal hegemony that would exist if women participated in development. WAD emphasizes on the relationship between patriarchy and capitalism, where WAD stress on the relationship between women and the work, that perform in the society as an economic agents in both the public and domestic spheres. It also focus on distinctive nature of the women roles play in the maintenance and development of their societies, with the understanding that purely the integration of women into development efforts would serve to reinforce the existing structures of inequality present in societies overrun by patriarchal interests. The WAD approach focuses on the distinctive nature of women's knowledge, work, goals, and responsibilities, as well as advocating for the recognition of their distinctiveness. The critiques of WAD approach include concerns that the women-only development projects would struggle, or ultimately fail, due to their scale, and the marginalized status of these women. With an improvement on WID, WAD fails to fully consider the relationships between patriarchy, modes of production, and the marginalization of women. The position of women around the world will improve when international conditions become more equitable.

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## Gender and Development

Development refers to the changes or advanced capitalist nations measure using a country's GDP and its degree of industrialization, urbanization and technological sophistication and consumer orientation. The developing countries addressing to survival issues like hunger and malnutrition, homelessness, unemployment and underemployment, health services and destruction of environment and political repression. Many of these problems result from the effect of unequal and dependent relationships which were established during colonization and recreated in the present to adjustment programs and strategies such as IMF and World Bank.

The usages of Women's unpaid and underpaid labor have been crucial to many development program and policies. In 1960s and 1970s dependency theorists argued that rapid modernization allowed industrialized nations to exploit developing ones. But modernization theorists attention on women's role and assumed that they will be benefited in economic growth. Gender and development approaches to incorporate strategies to enhance women's position. Many developmental projects based on the women in development and helped women economically. In Gender and development, women was focused with the goal of improving women's rights and increasing gender equity. Women empowerment approach denotes the goals to create development projects based on the needs of grassroots women and to challenge women's subordination in households and in societies not only to provide services. The concept of gender mainstreaming denotes that a gender analysis occur within all bureaus and agencies to make gender equity in the forefront.

Gender and Development approach focus on the socially construction of differences between men and women and it also need to challenge existing gender roles and relations. GAD challenged the women as important 'target group' and 'untapped resources' for development. GAD emphasis primarily on gender division of labor and gender as a relation of power rooted in institutions. 'Gender roles' and 'social relations analysis' are used in this approach. Gender role focus on social construction of identities within the household, it also reveals the expectations from 'maleness and femaleness' to access to resources. Social dimensions of hierarchical power relations imbedded in social institutions; it also determining influence on 'the relative position of men and women in society.' This relative position tends to discriminate and deprived the women.

GAD approach is not concerned only with women, in which a society assigns roles, responsibilities and expectations to both women and men. GAD policies aims to redefine traditional gender role expectations and rearrange the social institutions. Women are fulfill household management tasks, home based production as well as bearing and raising children and caring for family members. The role of a wife is largely taken into consideration as the responsibilities of motherhood. For instance, 'a study by the Equality and Human Rights Commission found massive pay inequities in some United Kingdom's top finance companies, women received around 80 percent less



performance-related pay than their male colleagues.' GAD has been criticized for emphasizing the social differences between men and women and also for changes in roles. Development agencies still advance the gender transformation to mean economic betterment for women (empowerment of women) and to bring them into mainstream (Reeves and Baden, 2000).

### **Conclusion and Suggestion**

Women in India have made a considerable progress in the last fifty years but yet they have also oppressed and deprived from their rights and opportunities in this male dominated society. The Hindu Code Bill has given the daughter and son equal share of the property. The Marriage Act no longer regards woman as the property of man. Now Marriage considered to be a personal affair, where partner feels dissatisfied she or he has the right of divorce. But passing of law is one thing and its absorption the thinking of society is quite a different matter. In order to prove themselves and to get their dignity and equal status, they have to shake off the shackles of slavery and patriarchy system. They should help the government and the society in eradicating the orthodox social beliefs, illiteracy, and patriarchy system and help to rearrange the social institutions. Women in the name of religious practices have been denied opportunities of growth. To think about equality of sexes is an illusion. Women historically have never been given the required importance in India be it in the field of social, cultural, politics and education, History is full of stories of exploitation, humiliation and suppression. Women strongly influence the moral, social and creative development of her children. We are treating women as second class citizens. Oppression, rape, humiliation, disrespect and deprivation etc, all are rewards for women in our society.

Time has ripened to analyze the causes of deprivation, which give a low status to women. Efforts should be taken for women empowerment, which may help them to eradicate the deprivation. Women empowerment can be possible only through free and compulsory education for women so that they can claim their rights. In our society women empowerment can be educated and exercise their opinion in taking decision in the matters of marriage, family size, household developmental activities, work situations and even community activities, national and international debates and discussions. They should be made their own development and be able to set their own aims and be challenge and change their inferior position in the society. Then they will be made free from exploitation, social injustice, inequality and social deprivation. Women empowerment is not a spontaneous process, it requires efforts deliberately and consistently from all human beings in all walks of life. Intellectuals and media can go a long way in influencing and leading public opinion within collective consciousness. Social development entails the proper alternation and rearrangement of institutional structure so that human needs are made available to all sections of the society to the downtrodden and women, who are the vulnerable mass. Under this backdrop, this paper tries to evaluate development and the status of women in India. Governments alone cannot eradicate exclusion, which is the reality lived by those who experience deprivation: people themselves may have to reclaim their place in society. While the

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responsibility for fighting exclusion lies with entities at various levels of society, including grass-roots organizations and non-governmental actors, it may be argued that the imposition of collective resolutions, such as universal access to education, would eradicate the need to target those who are excluded. There is in any case an urgent need to look at processes and relations and cultural transformation of norms and expectations, which reveal that, ultimately, there are many ways to describe deprivation. Development of women implies their access in overcoming the underlying structural inequalities. Gender in development is the approach that seeks to redress women's status through affirmative action in improving the qualities of women's lives.

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## A STUDY ON ROLE OF HUMAN RESOURCE FOR DEVELOPMENT OF AGRICULTURE OF RURAL PEOPLE

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### **Abstract**

Rural development implies an overall development of rural areas to improve the quality of life of rural people. It is an integrated process, which includes social, economic, political and spiritual development of the poorer section of the society. Human Resource is considered as the most crucial productive resource having highly skilled, knowledge and experience which can contribute for the greater benefit of the society. So by this paper an attempt has been made to study to know about the role of human resource for development of the agriculture rural people.

**Key words:** Human Resource, Agriculture, Rural Development.

### **Introduction**

The term rural is a geographical concept, which means a location with identifiable boundaries on a map. In general rural area is a geographical area that is located outside cities and towns. Where population density up to 400 and above per square kilometer, it has a clear surveyed boundaries but not municipal board, most of the people involved in agriculture an allied sector.

Development implies an overall positive change in the physical quality of life. It means an improvement in the quality of life through better health, education, housing and overall material and social welfare.

So rural development implies an overall development of rural areas to improve the quality of life of rural people. It is an integrated process, which includes social, economic, political and spiritual development of the poorer section of the society.

In Assam 86% of total population lives in rural areas. Its economy is primarily based on rural life with 70% of its population directly depend on agriculture as a source of livelihood and 15% is dependent on allied services. So agriculture plays a vital role of development of Assam economy.

### **Significance of the Paper**

It has been necessary to develop rural areas. Because 86% of total population lives in rural areas. Where 70% population depend upon agriculture. Without considering this rural people we can't expect a developed nation. To become developed a nation we need

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to develop rural people because half of the countries national income is derived from agriculture which is a major occupation of rural people. To develop rural area as a whole in terms of culture, society, economy and health we must need development of rural people. Rural development is necessary to empower human resource of rural area in terms of their psychology, skills, knowledge, attitude and other abilities. Rural people are still backward because there are some problems due to which they unable to become develop. So by this paper an attempt has been made to know how human resource can contribute for development of the rural people and their agriculture.

### **Research Question**

How human resource can contribute for development of the agricultural sector of their society?

### **Methodologies**

To conduct the study Descriptive method is used. The study based on primary data. To collect primary data from sampling unit a sample survey has been done. For collect information an interview had been conducted on selected sample. The field survey was conducted in one village under chauldhowa G.P. From the village randomly data had been collected. The investigator had selected 20 household from the village.

### **Analysis and Interpretation of the Data:**

In Assam 86% of total population lives in rural areas. Its economy is primarily based on rural life with 70% of its population directly depend on agriculture as a source of livelihood and 15% is dependent on allied services. So agriculture plays a vital role of development of Assam economy.

Human resource is the key factor of rural people on which development of a village is dependent. If people are illiterate they unable to know about technological concept on agriculture, if they ignore about different plans and policies how development is possible. So provide knowledge about technology based agriculture we need human resource.

**Agriculture:** Agriculture is considered as the mainstay of the economy of Assam and plays a vital role in the states economy. So it is needed to see its strength which can lead to development.



**Table No. 1**

Table.1 shows the collected data from the cultivators.

USES OF ITEAMS	NO.OF HOUSEHOLD	PERCENTAGE
FERTILIZERS	5	16.67%
PUMPSETS/TUBEWELL	6	20%
TRACTOR/POWERTRILER	12	40%
USE GOVT.SUPPLY SEEDS	6	20%
AWARE ABOUT GOVT SCHEMES	3	10%
ASSISTANCE RECEIVED FROM GOVT.	2	6.67%
USES ALL THESE TECHNOLOGY	4	13.33%

From the above table regarding agriculture it has been found out that only 13% people have uses technology in their agriculture. Almost 87% have done as like as traditional manner. In addition to the paddy only 20% have related with other seeds. Only 20% people have uses pump sets, tubewel etc. But 80% people have depended upon weather. So, due to lack of knowledge, due to law level of calamities, low level of mechanization, inadequate availability of quality input, poor soil health the production capacity of agriculture is very low. Only 10% people aware about different governmental scheme on agriculture. They have not get any assistance from government. So regarding this context human resource are most essential having proper knowledge for development on agriculture.Because Assam’s economy is depend upon agriculture. So without development of agriculture no development of rural peoples is takes place.

### **Findings of the Study**

From the above study it has been found out that-

- Regarding agriculture, they have no adequate knowledge. Due to which the rate of production is very low. Even 80% people don’t know about Govt. scheme regarding improvement of agriculture like- RKVY, NFSM, IWMP, etc.
- Only 10% rural people uses technology in their paddy. 90% have done as like as traditional manner. They depend upon natural weather. So due to low level of calamities, low level of mechanization, inadequate availability of quality input, poor soil health the production capacity of agriculture is very poor.



## Suggestions

For improvement of rural people some measures has been given below-

- Human resource can provide knowledge about different techniques and governmental schemes for rural development.
- Create awareness among people through social network like- TV, RADIO, INTERNET etc about NREGA,DRDA,NABARD,SIRD, NATIONAL RURAL LIVELIHOOD MISSION,IAY, PMGSY, BRGF, NRDWP,NRLM,NRHM,IWMP,RKVY,RJBY, MAHATMA GANDHI NATIONAL OLD AGE PENSION, INDIRA GANDHI NATIONAL WIDOW SCHEME,NFWS, INDIRA GANDHI NATIONAL PHYSICALLY HANDICAPPED SCHEME, EGM,TSC ET.
- Human Resource should give the general information to the rural people about different scheme under SIRD.
- Women participation is also necessary to improve rural economy. They can empower rural economy through handloom textile, poultry farm, piggery etc.
- Mass participation also necessary. They should look after the all activities of their village so that corruption should not be there.
- Identify the illiterate people and make them aware about national literacy mission.
- Identify the homeless family and should provide shelter through IAY.
- Village worker should secure rural people and work for their welfare.
- Implement the governmental scheme properly and adequately.
- People have to engage different field like-mushroom cultivation, management of poultry, pig, cattle, fish farming, food processing, horticulture, floriculture, rural housing, Seri culture, pisciculture marketing management etc.
- Awareness generation project camp, family counseling centre etc should be established.

## Conclusion

From the whole study it has been found out that though it is say that rural development is takes place. But in real context it is not true. Still now there are numbers of problems exist in rural areas due to which rural people are still remaining back in each and every aspects of their life, including, communication, health, education etc. Regarding agriculture who is the real cultivators they have not get any opportunity from government or any other agency. Instead of the cultivators the tractor, tube well, pump sets, spray machine and any other material under governmental scheme is considered as commercial business of some middle people. The member of PRI, BLOCK, and ZILAPARISAD are using this instrument as their income source. Poor people have not get this equipment because they unable to give a huge amount of money. Only SHG, JLG, has to some extent benefited from these schemes. Due to negligible by bank and panchyat most people have not get their opportunity due to which poverty is still considered as a prime issue. And till when poverty will continue, rate of literacy is low,



hunger is survived till than how we can say rural development is there. In this context human resource is the prime factor which can change the attitude of the rural people, and can able to change the rural economy by using new technology in agriculture and it allied sector.

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**STUDIES ON HABITAT AND POPULATION STATUS OF MARSH CROCODILE (*Crocodylus palustris*) AND ITS CONSERVATION PROBLEM IN THE JADHAV SAGAR LAKE, SHIVPURI, MADHYA PRADESH, INDIA**

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**Abstract**

Mugger *Crocodylus palustris* is a hardy species adapted for different habitats including rivers, lakes, reservoirs and other small water bodies. The present study was carried out on JadhavSagar Lake in Shivpuri town, which inhabits mugger or marsh crocodiles *Crocodylus palustris*. A good population of muggers was found in this micro wetland. During 2016 a total of 19 muggers and during 2017 a total of 22 individuals were counted. Successful nesting and hatching were also observed in this lake. For the assessment of water quality the limnological factors of JadhavSagar Lake were monitored for the period of one year from January, 2016 to December, 2016. A total of 15 water parameters were analyzed and the result showed that the concentrations of most of the water parameters were exceeded the normal range. In JadhavSagar Lake the population of mugger is facing several major threats due to anthropogenic activities. Increasing of temperature, seasonal fluctuation of water level, habitat destruction, food shortage, sedimentation, development of residential colony and other human influences are the principal environmental factors which have a negative impact on the habitat and population of mugger. The present study endeavours to focus attention on ecological status of habitat and adaptability of mugger in polluted water and unsafe habitat.

**Keywords:** Jadhav Sagar Lake, *Crocodylus Palustris*, Habitat, Pollution, Adaptation

**Introduction**

It is known that the habitat is a natural home of animals and supports animal populations primarily for space, food and shelter. Marsh crocodiles *Crocodylus palustris* (Lesson, 1831) are amphibious vertebrates spending part of their lives in water and part on dry land. The rivers, lakes and other fresh water bodies are important habitat of conservation for large and varied pattern of aquatic lives including muggers. The Marsh Crocodile or Mugger is one of the common and wide spread crocodylian species in India. Mugger is successful ecologically, as it can be adapted to a wide habitat range from rivers to ponds, marshes and lakes (Vyas, 2012). Habitats and population of marsh crocodile has also been declining due to habitat fragmentation, drought, poaching, water pollution, mortality due to increased fishing activities and other anthropogenic pressure etc. (Javed and Rehman, 2004; Da Silva & Lenin, 2010). The records show numbers of crocodiles were on a sharp decline and they were placed in the Appendix I of CITES and

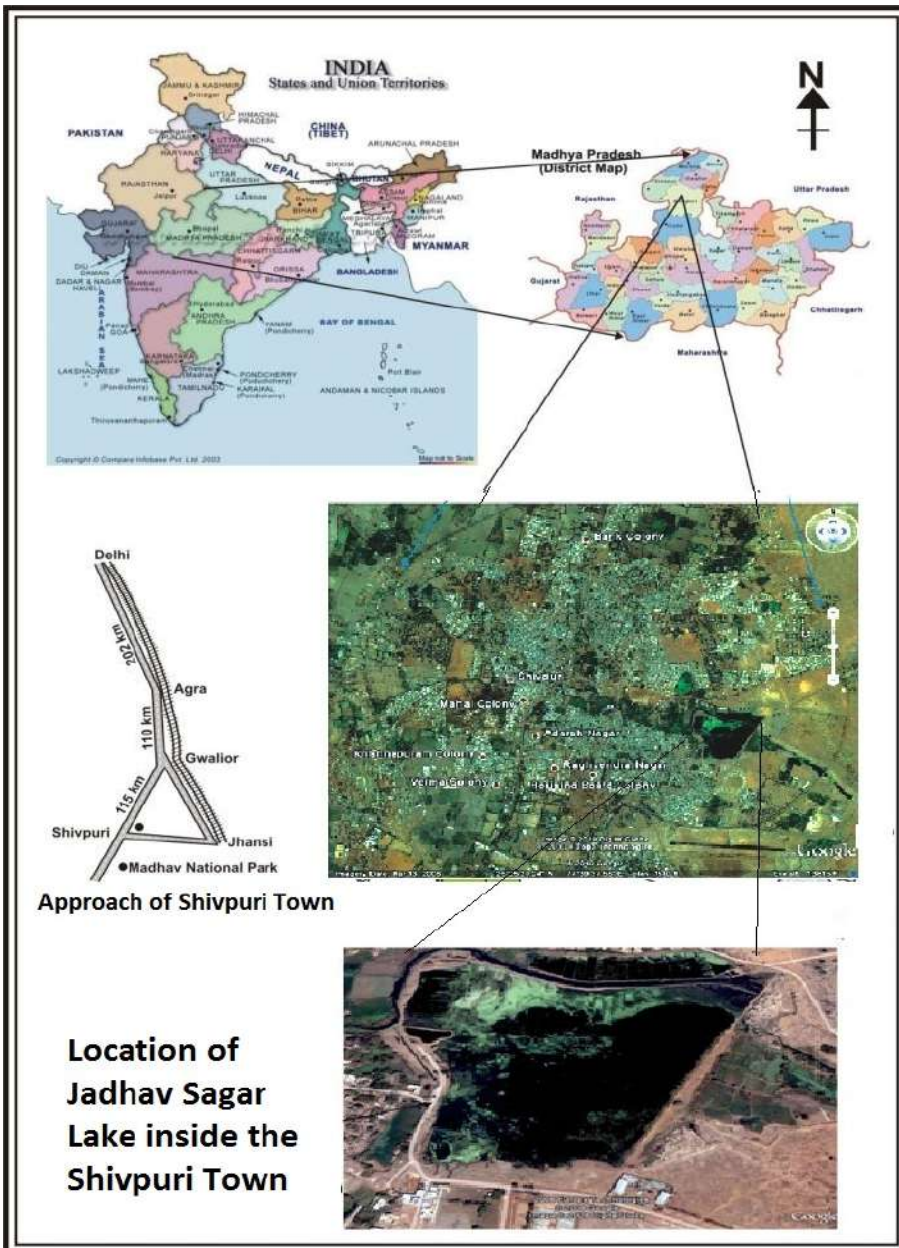




listed Vulnerable in IUCN's Red Data Book. In Indian perspective *C. palustris* is protected under Schedule I in Wildlife Protection Act 1972. The population level of crocodile species is very low throughout the range in Madhya Pradesh (Rao, 1999). The mugger seems to be a hardy species adopting for different habitats. In small water body like JadhavSagar Lake (50 ha.) the mugger is adopted for successful living. In Shivpuri town population of marsh crocodiles has been coexisting with human population which resides in surrounding areas of JadhavSagar Lake. The aim of the present study was to focus attention on the water quality, population status and habitat conditions of the muggers as well as effects of anthropogenic pressure on the habitat of mugger.

### Study Area

The Jadhav Sagar Lake is one of the oldest water bodies built in the year 1921. It is a man-made water body located in the municipal area of Shivpuri town, M.P. and is situated outside the protected area (Madhav National Park, Shivpuri). Shivpuri is 120 km. far from Gwalior (M.P.) and 95 Km. from Jhansi (U.P.). The average temperature is 32°C-45°C in summer and 4°C-15°C in winter. The average rain fall are approximately 100cm- 125cm/anum falling from July to October. The JadhavSagar Lake lies between latitude 25° 25' 06.84"N and longitude 77° 40' 16.59"E. Jadhav Sagar Lake is a micro wetland spared about 50 hectares with a maximum depth of 15 feet. The height of dam is over 15 feet and length is 1500 feet of which, 600 feet is pucca made of stone and rest. 900 feet is kuchha made of stone and murrum. The top width of the dam is 4 feet. It is a perennial water body but in some months of summer it dries up slightly. The water body serves as catchment area for rain water. In the past it represented the source of drinking water and used for recreational purposes. Singhara (*Trapa*) cultivation and fisheries were done in the lake since 1932. However fisheries have now been stopped due to pollution problem but some illegal fishing activities are still continuing. Idol immersion is being done in this lake near Ganesh mandap. In recent times the lake and it ecology has changed considerably due to human interference and the land around the JadhavSagar Lake is used largely for agriculture, Singhara cultivation, woodcutting, dhobi-ghat, garbage dumping, sewage disposals, encroachments and development of residential colonies (Fig. 1).



Source- Google earth.com

Figure 1: Map showing the location of JadhavSagar Lake in Shivpuri town



## Material and Methods

The surveys were conducted from January 2016 to December 2017 in the JadhavSagar Lake for the assessment of the ecological status of mugger's habitat and to identify various human activities in the vicinity of lake. The survey was conducted by boat and walking along lake banks during the morning hours from 7:00 to 10:00 am and late afternoon from 3:00 to 6:00 pm. Only direct sighting of mugger and their nests were recorded. Field binocular (Olympus, 7×50 magnification) was used for recording numbers and approximate size of the muggers and it also useful for focus from their location. Digital camera was used to take the pictures of marsh crocodiles. In indirect method we have collected the data through the different signs of mugger such as faecal pellets, den or tunnel, tracks, trails and egg shells (Chang *et al.*, 2012). During the survey all the sighted muggers were marked on a field map. The length of muggers sighted was estimated and recorded as: adult over 120 cm, sub-adults 90-120 cm, juvenile/yearlings 30-90 cm and hatchlings less than 30 cm (Sharma, 2006). Informal discussions were held with the persons directly or indirectly involved in the affairs of JadhavSagar Lake. Habitats preferred by the muggers in the lake were also recorded. For the assessment of water quality and pollution level of JadhavSagar Lake different limnological methods were used as outlined by APHA (1985) and Trivedi&Goel (1986).

## Results and Discussion

The JadhavSagar Lake is an unprotected water body in Shivpuri town and this is one of the water bodies where human settlement is very close. The lake receives the entire wastewater of Shivpuri town through a nala. This nala has catchments of 7786 sq. km. which includes 5024 sq. km. main nala and 2762 sq. km. subsidiary nala. This nala originates from Maniyar tank in the upstream and flows thorough the Shivpuri town and carries with it the entire drainage, sewage, solid waste (domestic, market and hospital waste) of the town and drains in to the lake. The lake has silted to large extent and the present depth of lake has been reduced from 15 to 8 ft. and storage capacity has reduced as such the water overflows from the lake all through year except in summer. Dhobi ghat, idols immersion and disposal of religious wastes are another cause of increased water pollution and silting. To evaluate the habitat conditions of the mugger and water quality of the JadhavSagar Lake, total 15 physico-chemical parameters of water were analyzed. The results of water quality showed that the lake is polluted and the water cannot be used for domestic purposes, fish culture and *Trapacultivation*. The lake is highly polluted with eutrophic status and filled with weeds (Mishra *et al.*, 2010). Aquatic weeds like *Eichhornia*, *Pistia*, *Lemna*, *Azolla* (Floating); *Nymphoides*(Emergent); *Hydrilla*, *Vallisneria*, *Potamogeton* (Submerged); *Typha* and *Ipomeia* (Marginal) have infested the lake and grown in large area there by reducing the water-spread area. The pollution level of JadhavSagar Lake has become noticeable in the form of visible changes of the lake environment as well as the water quality tests (Table- 1).

**Table-1: Analytical results of physico-chemical parameters of Jadhav Sagar Lake during January, 2016 to December, 2016.**

Parameters	Units	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Water Temperature	°C	19.2	21.1	25.5	27.8	29.9	28.5	28.5	27.5	26.2	23.6	24.8	23.6
Color	-	Light green	Light green	Light green	Light green	green	green	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid
Transparency	Cm	65	58	52	46	41	32	41.5	48	55	61	68.5	67.5
Turbidity	NTU	45	50	58.5	65.5	68.5	72	58.5	50.5	35.5	40.5	38.5	36.5
Conductivity	µS/cm	1350	1370	1340	1460	1410	1480	1485	1520	1460	1440	1380	1420
pH	-	8.1	8	8.3	8.2	8.1	8.2	8	7.9	7.2	7.8	7.9	8.1
DO	mg/l	8	7.5	7.3	6.1	6.4	5.1	5.6	6.1	6.6	6.6	6.5	7.4
TDS	mg/l	870	865	865	945	910	950	950	975	915	920	865	920
Alkalinity	mg/l	280	330	310	285	265	250	228	110	112	190	205	238
Hardness	mg/l	375	420	415	425	465	455	510	480	510	460	460	380
Iron	ppm	0.3	0.3	0.2	0.3	0.4	0.2	0.4	0.3	0.5	0.2	0.3	0.5
Sulfates	mg/l	55	70	70	85	110	120	165	135	120	80	120	110
Chloride	mg/l	850	830	840	820	870	855	910	830	810	855	880	815
Nitrates	mg/l	10	10	16	12	14	12	10	12	12	10	20	16
Fluoride	mg/l	0.21	0.35	0.35	0.3	0.2	0.35	0.3	0.35	0.3	0.4	0.3	0.35

Habitats are usually described in terms of salient physical and chemical features of the environment. Since, the physical and chemical characteristics of water affect habitat preference, seasonal variations do have bearing on the habitat preference of a particular crocodile species. Land basking is influenced by water temperature. The habitat in a particular season may receive a preferential treatment from a crocodile species over some other habitat (Arya *et al.*, 2015). Conclusively, the better the habitat, the greater are the chances of survival. The water depth is having a positive influence on the muggers. The deep water usually makes the habitat more suitable due to availability of temperature gradients, food present in different depths and the movement of the water in different water levels. The deep pools are suitable for adults who breed in these pools; the young muggers prefer to live in the shallow waters to enable themselves to get food easily and to come outside the water quickly for basking (Venugopal and Prasad, 2003; Joshi *et al.*, 2011).

During 2016 a total of 19 muggers were observed in which 7 adults, 3 sub-adults, 3 were juveniles and 6 were hatchlings. A total of 22 individuals, comprising 8 adults, 3 sub-adults, 4 juveniles and 7 hatchlings were counted during 2017 (Table-2).



**Table- 2:** Population status of muggers (*Crocodyluspalustris*) in the JadhavSagar Lake.

Survey Year	Adult	Sub-adult	Juvenile /Yearlings	Hatchling	Total
2016	07	03	03	06	19
2017	08	04	05	05	22

The lake has muddy black soil banks with fringing reed-weed. There is less vegetation on the banks. The muggers bask mostly on the northern bank of the lake. Rocky and sandy areas are not present in this lake. In addition to the water spread area, the land area away from the water-line is most suitable for muggers for basking, nesting and burrowing purposes. The marshes edges of lakes are favorite haunts of mugger, since they rely on both water and land for their activities. To ensure the continued survival of an endangered species it is important to have thorough knowledge of the factors affecting the reproductive success of the population. Nesting is a vulnerable period in the life of crocodiles, and is probably one of the most easily studied population traits. As a result nesting biology is one of the best known crocodilian population characteristics (Mazzotti, 1989). The Mugger is a hole-nesting species, with egg-laying taking place during the annual dry season. The present study showed that the number of muggers increased during last two years. The evidence of mugger nesting was also observed in JadhavSagar Lake. Only one nest was seen in the year 2016 and 6 hatchlings were observed. Unfortunately some eggs were destroyed by dogs and cattles. In the year 2017 one mugger nest was located on the north-eastern bank of the lake and another nest was located on the mound area inside the water. Successful hatching has been observed once and broken eggs shells were found on the banks on two occasions. There are no sand banks in JadhavSagar Lake and the female mugger laid their eggs in hard black soil. This phenomenon also shows the adaptability of muggers in this region. During the study period it is also noted that muggers migrate from JadhavSagar Lake to other nearest water bodies. The migration of muggers is usually seen high in rainy seasons as the water level is increased. Field observation indicated that the distributional range of the mugger is increasing in adjoining areas of the JadhavSagar Lake (Plate 1: Images 1 - 8).



1. A view of Jadhav Sagar Lake



2. Water overflow at the dam wall



3. Nala join the Jadhav Sagar Lake



4. Dumping of garbage and wastes



5. Cattle moving in Jadhav Sagar Lake



6. Illegal fishing activities



7. Nesting ground of *Crocodylus palustris*



8. Muggers basks at bank of Jadhav Sagar Lake

Plate 1: Image 1 to 8 showing ecological conditions of JadhavSagar Lake, Shivpuri along with muggers habitat and human activities.



## Conservation and Management

The constant population over two years suggests that the mugger breeds successfully in this lake. This study has provided baseline data on mugger population in this Lake. These data can be used with the results of future counts to determine population trends. The census has also provided information on the distribution of muggers outside the protected area in Madhya Pradesh. It is interesting to note that a good number of muggers successfully live in a lake of 50 hectares area which has a thin population of fishes but goats and dogs had been lifted by muggers when they approach the water body. The water quality of the lake also shows that mugger may survive in polluted water which receives sewage of the town. This study shows that the mugger may adapt considerably as per the need. Therefore more suitable breeding sites may be identified comparing with the physico-chemical and biological conditions of the JadhavSagar Lake of Shivpuri town. This study suggests that there is an ecological relationship between the habitat and the muggers that occurs there. Though muggers were generally reported in JadhavSagar Lake as a friendly and peaceful animal for both cattle and man, the human livestock crocodile conflicts were escalating due to increased pressure on mugger habitats (Kumar *et al.*, 1999; Upadhyay and Sahu, 2013). Most of the people who become victims of the muggers attack belong to the localities like *Trapacultivator* and fisherman. Due to anthropogenic pressure, pollution, silting, illegal fishing, *Trapacultivation*, dumping of wastes and sewage etc. these are continuous deterioration in the environment of the lake and the biodiversity depend on them.

Although muggers are surviving in this lake, the latter is not a suitable place to conserve them because of the three problems. Firstly the water pollution, the nala carrying all waste of Shivpuri town drains into the lake, leading to slow eutrophication. The second problem is increasing *Trapacultivator* and illegal fishing activities, which coincide with breeding season of mugger. Thirdly the lake is too close to the residential colonies, there by resident are at risk and the lake is also connected with the local nalas which may provide passage routes to the muggers to migrate during different situations. The result of present study showed that number of muggers increased during last two years in JadhavSagar Lake and the human settlement also increased in the nearby areas of lake. This causes alarming situation for mugger's existence in this area. In other hand it was also noted that muggers attacking domestic animals such as goats, dogs and poultry were reported on some occasions, which indicate dependency of this species on domestic livestock for food in this area. Mugger also scavenged on various materials dumped in nala and the vicinity of lake. No specific attempts have to been made to study the muggers in micro wetland habitats, which were located outside the protected areas in Madhya Pradesh and many other regions of India. Information on selection of different habitats by muggers is necessary to take proper measures for their conservation. Usually in this region poaching and hunting activities are not done but it requires protection of the habitat of the mugger to ensure its survival in nature.



JadhavSagarLake is micro wetland habitat but if these problems are properly addressed, the lake can become a major place to study the muggers.

### Recommendations

For proper conservation management of the lake, it is necessary to take measures suitable for the local situations. Following are some of the suggested measures:

1. The concerned authorities like municipal and forest department should take measures to stop illegal fishing, woodcutting, garbage dumping, sewage disposal, idol immersion, encroachment and development of residential colonies in the vicinity of lake.
2. To discourage any human activities that affects the lake environment and strictly monitors the factors that disturb the muggers nesting and breeding ground.
3. Survey for the population census of mugger to be conducted every year and excess growth of aquatic vegetations to be controlled in lake.
4. To create a regional conservation forum represented by a network of educational institutions, researchers, NGO's, and local people, to help restore the already degraded lake and conserve those at the brink of extinction.

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## Modeling and crack analysis on GFRP

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**Abstract** – Laminated plastics are used extensively in aerospace and other applications because of high specific modulus, high strength and capability of being tailored for a specific applications. Usage of these materials in critical places, it is very difficult to monitor the condition of the material continuously. In this paper, the dynamic characteristics of the laminated Glass fibre reinforced polymer are studied in order to facilitate structural health monitoring. The appropriate structure is modelled in Ansys APDL software and the characteristics are analysed through Modal analysis. In the Modal analysis, the output is extracted in the form of natural frequencies along with mode shapes. Then crack is established in the structure. The dynamic characteristics different structures are compared with the intact structure. The presence of crack is identified by the differences in the natural frequencies. The location of the crack is identified by calculating the nodal displacements values. The data collected are used in Structural Health Monitoring (SHM) of the laminate.

**Keywords** – GFRP, Ansys APDL software, Modal analysis, Structural Health Monitoring, nodal displacement.

### 1. Introduction

Most composite structures are built with fibers in different orientation to withstand the combinations of the axial forces, bending and torsion acting on the

structures. Often the fibers are placed in one direction in thin layers. Fiber reinforced composites are finding increasing applications in civil engineering, transportation vehicles, aerospace, marine, aviation, and chemical industries in recent decades. This is due to their excellent features, such as high strength-to-weight and stiffness-to-weight ratios.

There are several methods to evaluate the mechanical properties such as experimental, analytical and computational methods. Computational modeling and analysis method is developed drastically in these few years. Finite element method (FEM) is one of the numerical method which is more powerful in its applications in its real world problems. Now, there is much commercial software available that uses finite element analysis technique. The commercial software ansys is user friendly and easy to design the required model. In this paper, the elastic properties of Glass fibre reinforced polymer (GFRP) is calculated, Ansys 3D model is developed and analysed through finite element method.

### 2. Modal analysis

Modal analysis is the study of the dynamic characteristics of structures under vibrational excitations. This technique is used to determine the structure's vibration characteristics such as natural frequencies and mode shapes. Natural frequency is the frequency at which a system tends to oscillate in the

absence of any driving or damping force. Mode shape is the shape of the beam at different natural frequency. A normal mode of an oscillating system is a pattern of motion in which all parts of the system moves sinusoidally with the same frequency. The frequency of the normal modes of a system is known as its natural frequencies. There may be several software packages are available for modal analysis. In Ansys software, the following steps to be followed:

- Preprocessing
- Solution
- Post processing

### 3. Rule of mixture

The elastic properties of the polymer can be calculated with the help of rule of mixture formulations. Since, the polymer is unidirectional one, rule of mixture will be better suited for this. In this, the young's modulus of matrix and fibre are taken as  $E_m$  and  $E_f$ . Similarly, the poisons ratio are taken as  $\nu_m$  and  $\nu_f$ .  $V_f$  is the volume fraction of fibre used in composite.

Properties	Values
<b>Glass fibre</b>	
Elastic modulus	72 Gpa
Poison's ratio	0.25
Density	2.54 kg/m <sup>3</sup>
Shear modulus	30 Gpa
<b>Epoxy</b>	
Elastic modulus	2.1 Gpa
Poison's ratio	0.53
Density	1.2 kg/m <sup>3</sup>
Shear modulus	0.807Gpa

Elastic modulus:

$$E_1 = E_f V_f + E_m (1 - V_f)$$

$$E_2 = E_m \left[ \frac{E_f + E_m + (E_f - E_m)V_f}{E_f + E_m - (E_f - E_m)V_f} \right]$$

$$E_2 = E_3$$

Evaluation of Poison's ratio:

$$\nu_{12} = \nu_f V_f + \nu_m (1 - V_f)$$

$$\nu_{12} = \nu_{13}$$

$$\nu_{23} = \nu_f V_f + \nu_m (1 - V_f) \left[ \frac{1 + \nu_m - \nu_{12} E_m / E_1}{1 - \nu_m^2 + \nu_m \nu_{12} E_m / E_1} \right]$$

Evaluation of Rigidity modulus:

$$G_{12} = G_m \left[ \frac{G_f + G_m + (G_f - G_m)V_f}{G_f + G_m - (G_f - G_m)V_f} \right]$$

$$G_{12} = G_{13}$$

$$G_{23} = \frac{E_2}{2(1 + \nu_{23})}$$

Evaluation of Density:

$$\rho_c = \rho_f V_f + \rho_m (1 - V_f)$$

Laminated plate values:

Properties	Values
Elastic modulus in plane 1-2 $E_1$	24.5309 Gpa
Elastic modulus in plane 2-3 $E_2$	3.9233 Gpa
Elastic modulus in plane 1-3 $E_3$	3.9233 Gpa
Shear modulus in plane 1-2 $G_{12}$	1.5123 Gpa
Shear modulus in plane 2-3 $G_{23}$	1.4062 Gpa
Shear modulus in plane 1-3 $G_{13}$	1.5123 Gpa
Poison's ratio in	0.2840



plane 1-2 $v_{12}$	
Poison's ratio in plane 2-3 $v_{23}$	0.3950
Poison's ratio in plane 1-3 $v_{13}$	0.2840
Density	1.630 kg/m <sup>3</sup>

#### 4. Analysis

##### 4.1. Pre-processing:

This is the initial stage in the Ansys Mechanical APDL software. The structure is modelled in this stage. Initially the element type is assigned as solid185 (8 node brick element). Layer construction is specified as layered solid and all layers are selected. Then shell type of section is selected.

The material properties such as elastic moduli, shear moduli, poison's ratio and density values are provided.

A beam of 0.5x0.045x0.005m is developed by generating nodes. Generally ansys commands are used to define the nodes as it is easy to define. Then, a group of nodes are selected for specifying the crack. All the nodes are then merged except the crack part.

Ansys commands for pre-processing:

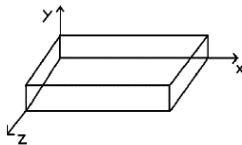
```

/PREP7
/title,GFRP          !Define the title as GFRP
ET,1,solid185       !Select element type
KEYOPT,1,3,1        !Layered solid
KEYOPT,1,8,1        !Select all layers
SECTYPE,1,SHELL     !Data of composite layer
SECDATA,,.000833,1,0,9
MP,EX,1,25.3E9      !Material properties
,EY,1,4E9           !Elastic modulus
,EZ,1,4E9
    
```

```

,PRXY,1,0.28        !Poison's ratio
,PRYZ,1,0.35
,PRXZ,1,0.28
,GXY,1,1.6E9       !Shear modulus
,GYZ,1,1.5E9
,GXZ,1,1.6E9
,DENS,1,1645       !Density
N,1                !Fixing the position for 1st node
,11,0.05           !Fixing the position for 11th node
FILL               !Fill nodes between 1st and 11th node
NGEN,21,11,1,11,1 !Node generation along width
,,,0.00225
ngen,7,231,1,231,1 !Node generation for 6 layers
,,0.000833
e,12,13,2,1,243,24 !Element formation using nodes
4,233,232
EGEN,10,1,-1      !Element generation on straight line along x-axis
EGEN,20,11,1,10,1 !Element generation along width
egen,6,231,1,200,1 !Element generation for 6 layers
N,1618,0.05       !Node generation for remaining part
,1708,0.5
FILL
NGEN,21,91,1618,1708,1,,,0.00225
ngen,7,1911,1618,3528,1,,0.000833
e,1709,1710,1619,1618,3620,3621,3530,3529
EGEN,90,1,-1
EGEN,20,91,1201,1290,1
    
```

```
egen,6,1911,1201,
3000,1
NSEL,S,LOC,X,0.05 !Select all nodes
                    at x=0.05
NSEL,R,LOC,Z,0,0.0 !Reselect the
405                nodes from z=0 to
                    z=0.0405
NSEL,A,LOC,Y,0,0.0 !Select the nodes
04165              from y=0 to
                    y=0.004165
NUMMRG,NODES      !Merge selected
ALLSEL            nodes
```



Lamina reference axes

### 4.2 solution

In this, the type of analysis are specified. Cantilever boundary condition is applied. Ansys provides different solver options, each of which more or less appropriate for the given problem.

Before going to solve the problem, the type of analysis i.e., static, harmonic, modal analysis etc, to the problem. We have selected modal analysis for our problem, since we want natural frequencies and mode shapes as output.

Ansys commands for solution:

```
nse1,s,loc,x,0      !Selecting nodes
                    on x=0
d,all,all           !Selecting
allsel              displacement as 0
FINISH
/SOLU               !Solution module
ANTYPE,MODAL        !Selecting analysis
```

```
type
MODOPT,LANB,5      !Selecting number
                    of modes
SOLVE              !Solve the current
                    load state
FINISH
```

### 4.3 post processing

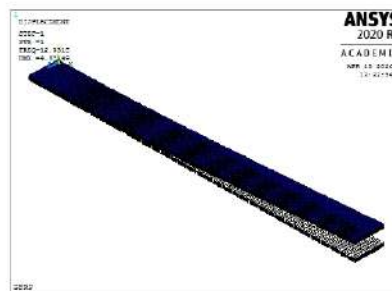
The Ansys post processor provides powerful tool to view the results. With this module, we can summarize the results, plot the results and list the results.

Ansys commands for post processing:

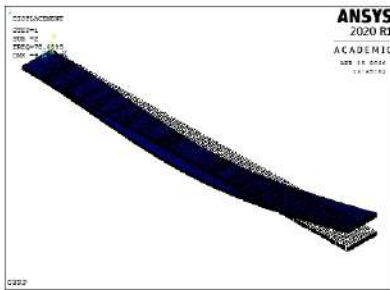
```
/POST1             !Post processor
                    module
SET,LIST           !List the critical
                    loads
SET,FIRST          !Set the first mode
                    of vibration
PLDISP,1          !Display selected
                    mode of vibration
```

### 5. Presence of crack

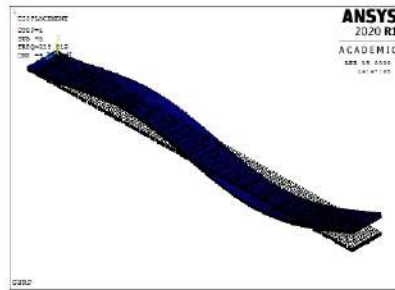
The presence of crack may be identified by the variation in the natural frequency and the mode shapes.



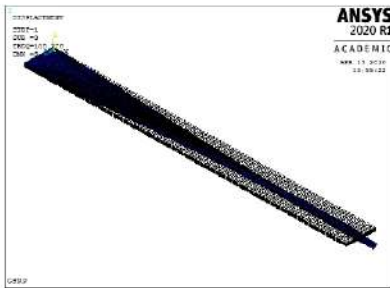
First mode



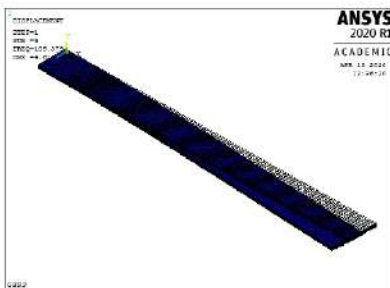
Second mode



Fifth mode



Third mode



Fourth mode

## 6. Location of Crack

With the help of frequencies, it is possible to sense the presence of crack. For finding the location of crack, much more developed algorithm is needed. Nodal displacement values helps in finding the specific location of crack.

### 6.1 Nodal displacement

The nodal displacement value are extracted from the Ansys software. These values helps in finding the displacement of the each nodes. The Ansys commands are provided to extract the nodal displacement values along the width of the structure.

Ansys commands to find nodal displacements:

```
nsel,s,loc,z,0      !Node Selection
nselect,r,loc,y,0.002499 !Node selection
PRNSOL,U,Y         !Print nodal
                   displacement
                   values
```

```
SET,NEXT           !For next mode
PRNSOL,U,Y
PLDISP,1
PRNSOL,U,Y
SET,LAST
PLDISP,1
PRNSOL,U,Y
```

Similar way, the nodal displacement values along the width are found out.

### 6.2 Curvature mode shape calculation

The curvature mode shape is calculated by finding the second derivative of displacement values that is extracted from the Ansys APDL.

Curvature mode shape difference:

$$U_j = \frac{V_{i+1} - 2V_i + V_{i-1}}{h^2}$$

Where,

$l$ , is the node number

$V_{i+1}$ , is the displacement of ( $i + n$ )<sup>th</sup> node

$V_i$ , is the displacement of  $i^{th}$  node

$V_{i-1}$ , is the displacement of ( $i - 1$ )<sup>th</sup> nodes

$h$ , is the distance between the nodes

Normalized curvature mode shape:

$$NCMS = \frac{U_j}{\sqrt{\sum_{j=0}^{100} U_j^2}}$$

Based on the NCMS values, Graphs are plotted. In the graph, there will be a peak point. The peak point represents the location of the crack.

After finding the location of the crack, maximum damage location can be identified by comparing the peak points. Similar procedure are carried out to find the crack along the thickness of the structure.

## 7. Results

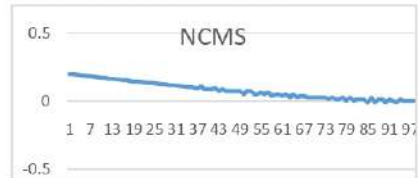
Identification of crack:

The deflections in Natural frequencies finalises there is a presence of crack. The Natural frequency values are listed below.

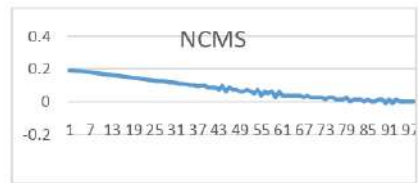
modes	Intact	Cracked	%Difference
1	12.537	12.532	0.039882

2	78.400	78.388	0.015306
3	108.78	108.78	0.000000
4	109.42	109.38	0.036556
5	218.83	218.82	0.004570

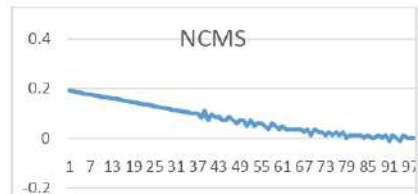
Identification of crack location:



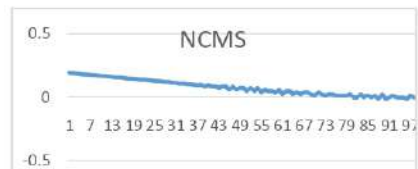
AT Z=0



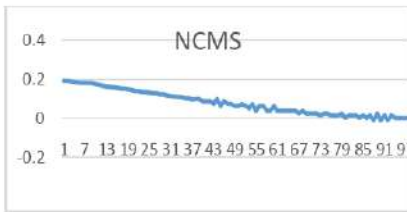
At z=0.009



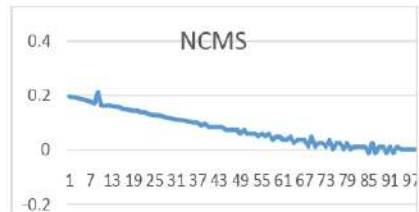
At z=0.018



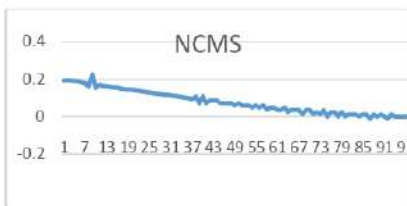
At z=0.027



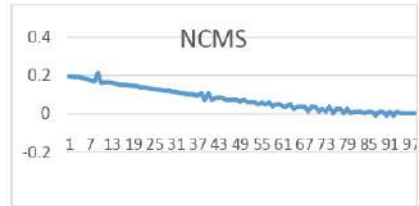
At z=0.036



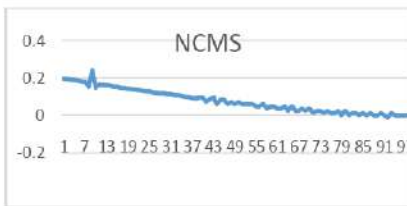
At bottom



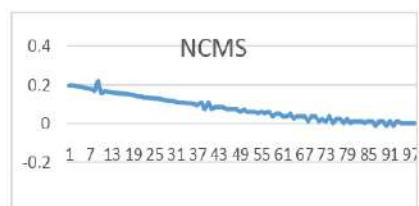
At z=0.04275



At 1<sup>st</sup> interface

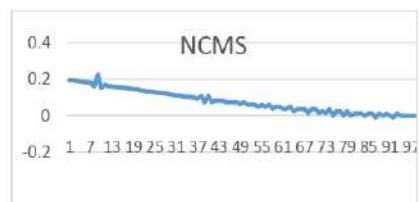


At z=0.045



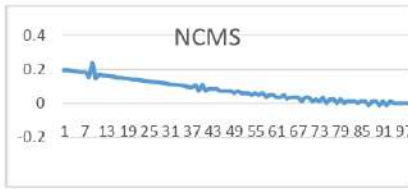
At 2<sup>nd</sup> interface

The Normalized curvature mode shape values are calculated along the width of the composite (along z-axis) and plotted in graph. From the above graphs, it is found that, damage takes place from z=0.04275 to z=0.0405. The depth of the damage at the particular location can be identified by conducting the NCMS along the interfaces of the composite at that location.

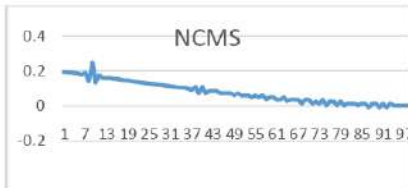


At 3<sup>rd</sup> interface

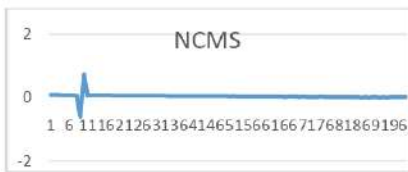




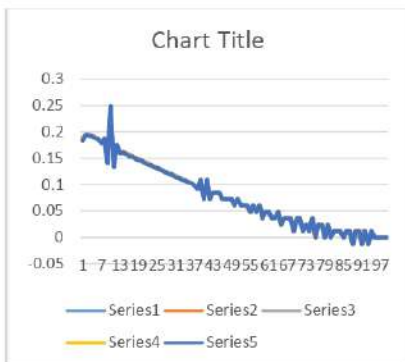
At 4<sup>th</sup> interface



At 5<sup>th</sup> interface



At the top



Comparing NCMS of interfaces

By comparing the interfaces graph, it comes to a conclusion that, the damage is along the depth of the composite at  $z=0.04275$  and maximum at  $y=0.004165$  and at the top surface.

## 8. References

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## A STUDY ON PATTERN OF GOVERNMENT EXPENDITURE AND ITS IMPACT ON GDP IN INDIAN ECONOMY

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### **Abstract**

Government expenditure is considered as an important tool of fiscal policy. It creates and increases the scope of employment opportunities during depression. During depression it is recommended that there should be more and more governmental expenditures on the ground that it creates jobs and incomes. The quality of expenditure determines the adequacy and effectiveness of such expenditure. Excessive expenditure may cause inflation. The study covers the period of 2011-2012 to 2019-2020 and the data is based on secondary data which is collected from Indian Public Finance Statistics, Ministry of Finance, Government of India, Handbook of statistics on the Indian economy, RBI. To analyze the data statistical tools such as Compound Growth rate, Annual Growth Rate, Mean, Standard Deviation and ANOVA test is used in the study. In order to analyze the pattern and growth of government expenditure has been divided into two main categories. They are Capital and Revenue expenditure. As the calculated value is greater than the table value, it is concluded that the null hypothesis is accepted i.e., government expenditure has significant impact on GDP in India.

**Keywords:** GDP, RBI, Capital Expenditure, Revenue Expenditure, ANOVA

### **Introduction**

Government Expenditure is one of the major processes which helps in improving the welfare of the people and is an important aspect of the government budget. In India government expenditure is divided into revenue expenditure and capital expenditure as per the provision in the constitution. However the adoption of economic planning modified the division of expenditure into plan and Non plan expenditure. In the initial years of planning the importance was to direct capital investment in sectors according to priorities of each five year plan. The bulk of plan expenditure was capital expenditure and the aim was to raise the productive capacity of the economy. However the composition of the plan expenditure in both centre and state has changed over time as the plan expenditure to revenue expenditure. It is an important tool which can be used by the government for maximizing public satisfaction. The government has to perform certain functions within its territory for the welfare of the people, which entail government expenditure. Government expenditure becomes the end and aim of the collection of revenue. The size, pattern and efficiency of government expenditure results in reduction of economic disparity, is leading to growth and development of the country. Governments incur expenditure to satisfy the collective social needs of the people, to correct market distortions as well as to regulate private activities hazardous to the society. Government expenditure is considered as an important tool of fiscal policy. It creates and increases the scope of employment opportunities during depression. During

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depression it is recommended that there should be more and more governmental expenditures on the ground that it creates jobs and incomes. The quality of expenditure determines the adequacy and effectiveness of such expenditure. Excessive expenditure may cause inflation. The Government expenditure generally forms around 10% to 11% of the Indian economy. The growth of the government expenditure was 19.1 percent and 13.2 percent in 2017-18 and 2018-19 the highest since the financial crisis. For 2019-2020 the government expenditure focused on increasing and the tax growth is the engine of government expenditure. The purpose of this paper is to analyze the pattern of Government Expenditure and its impact on GDP in India from 2011-12 to 2019-20.

### **Classification of Government Expenditure**

**Capital Expenditure and Revenue Expenditure:** Capital expenditure is incurred on building durable assets. It is a non-recurring type of expenditure. Expenditure incurred on building multipurpose river projects, highways, steel plants, building machinery and equipment is regarded as capital expenditure. On the other hand revenue expenditure is of recurrent type which is incurred year after year. Revenue expenditure is a current or consumption expenditure incurred on civil administration, defense, public health and education.

**Transfer Payments and Non Transfer Payments:** Transfer payments refer to those kind of expenditure against which there is no corresponding transfer of real resources to the Government. Expenditure incurred on old age pensions, unemployment allowances, sickness benefits, interest on public debt during a year are transfer payments because the government does not get any service or goods against them in the particular year. Non Transfer payments are expenditure incurred on buying or using goods and services such as the government receives goods or services. Investment Expenditure is non transfer expenditure as through it government obtains capital goods.

**Developmental and Non Developmental Expenditure:** The expenditures of government which promote economic growth are called developmental expenditure. Expenditure on irrigation projects, flood control measures, transport and communication, capital formation in agricultural and industrial sectors are described as developmental expenditure. On the other hand On the other hand, expenditure on defense, civil administration (i.e., police, jails and judiciary), interest on public debt etc., are put into the category of non-development expenditure. It may be noted that, till recently, expenditure on education and health were regarded as non-developmental type. It has now been realized that the expenditure on education and public health promotes the growth of what is called human capital which promotes economic growth as much as physical capital, if not more. Therefore, these days, expenditure on education, research and health are generally regarded as developmental expenditure.

**Theoretical Evidence:** According to Wagner, an increase in state activity is accompanied by an increase in Government expenditure as a proportion of National Income. This is due to the fact that the government has to perform a number of functions more efficiently which is an intensive growth in public activity thereby

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increasing government expenditure. Peacock and Wiseman states that government expenditure increases over time not at a constant rate, but on an ascending spiral. Social emergencies like war and depression require a remarkable increase in their relative share of public expenditure. He also relates the growth of government expenditure to external forces like war and displacement effect. Anuradha De et al., in their study has revealed that the public expenditure on education in current prices has been growing which is resulted through compound Growth Rate of about 13.4 percent per annum. From 1990-91 to 2003-04. It was also evident that rate of growth has slowed down in the present decade. Though the expenditure has almost stagnated after 2000-01 and even decline 2003-04. As a proportion of GDP the share of public expenditure on education has been less than 4 percent. There have been major changes in the composition and modalities of expenditure and education. The analysis reveals that the centre has been playing an increasingly important role in state education finance.

### Objectives of the Study

- To examine the growth of Government expenditure in India during 2011-12 to 2019-20.
- To analyze the impact of government expenditure on macroeconomic indicators.

**Research Methodology:** The study covers the period of 2011-2012 to 2019-2020 and the data is based on secondary data which is collected from Indian Public Finance Statistics, Ministry of Finance, Government of India, Handbook of statistics on the Indian economy, RBI. To analyze the data statistical tools such as Compound Growth rate, Annual Growth Rate, Mean, Standard Deviation and ANOVA test is used in the study. In order to analyze the pattern and growth of government expenditure has been divided into two main categories. They are Capital and Revenue expenditure. It is further classified into Development and Non – Development expenditure. Development capital expenditure comprises of expenditure on Agriculture, Industries and Public Health. Similarly Development revenue expenditure comprises expenditure on social and community services such as Education, Art and Culture, Scientific research, Medical, Family welfare, Housing, Urban development, Broadcasting, Labour and employment, Social security and welfare, Relief account and others.

**Impact on Macroeconomic Indicators:** The Government expenditure has an immediate impact on Gross Domestic Product (GDP). An increase of government expenditure increases Gross Domestic Product (GDP) by the same amount. Government acquisition of goods and services which is termed as GDP intended to create future benefits such as infrastructure investment which is termed as Gross fixed capital formation which is usually the largest part of the government gross capital formation. Government expenditure that are not acquisition of goods and services instead it represents the transfer of money such as social security payments are called transfer payments. Government expenditure can be financed by taxes or Government borrowing. On this background the study is based to trace out the growth and pattern of government expenditure and its impact on GDP in India



Hypothesis: H<sub>0</sub> – Government Expenditure have significant impact on GDP in India
H<sub>1</sub> – Government Expenditure do not have significant impact on GDP in India

Table 1: Major Expenditure of Central Government of India(in crore of Rs.)

Table with 5 columns: Year, Revenue Expenditure, AGR\*, Capital Expenditure, AGR\*. Rows include years 2011-2019, CAGR\*, Mean, and SD\*.

Source: Budget Documents of central and State Government, (\*Annual Growth Rate, Compound Growth Rate, Standard Deviation)

The table 1 provides data on the growth rate of the revenue expenditure and capital expenditure of India for the period 2011-12 to 2019-20. It shows that the annual growth rate of revenue expenditure has fluctuations during the study period. it is noted that revenue expenditure of the central government has increased from 2011-12 (9.17 percent) to 2013-14 (9.35 percent) and again in 2016-17 (9.04 percent) the revenue expenditure increased in 2019-20(14.57percent). Out of the total expenditure at the end of the study period 2019-20 the revenue expenditure is estimated 14.57 percent growth and capital expenditure is estimated to be 13.39 percent growth which shows that revenue expenditure is higher than the capital expenditure which expenses bring a change to the government’s assets or liabilities such as construction of roads or recovery of loans are capital expenses, and all expenses such as payment of salaries or interest payments are revenue expenses. The share of capital expenditure in total expenditure has been declining in 2014-15 to about 4.80 percent as expenditure on petroleum subsidy has been declining over the past few years. The capital expenditure increased in 2015-16 by 28.65 percent as expenditure on food subsidy, fertilizer and petroleum has



increased. The compound growth rate of capital expenditure is comparatively higher than the revenue expenditure which is about 9.16 percent in capital expenditure and 8.31 percent in revenue expenditure.

Table 2: Major Development Expenditure and Non-Development Expenditure of Central Government of India(in crore of Rs.)

Year	Central Government			
	Development Expenditure	AGR*	Non-Development Expenditure	AGR*
2011	705321	5.57	627075	12.06
2012	742417	5.00	692856	9.49
2013	784504	5.36	803070	13.72
2014	813813	3.60	881159	8.86
2015	835019	2.54	990172	11.01
2016	899369	7.16	1075825	7.96
2017	998201	9.90	1143772	5.94
2018	1025979	2.71	1289134	11.28
2019	1225349	16.27	1473203	12.49
CAGR*	6.33		9.96	
Mean	892219.1		997362.9	
SD*	165281.6		278453	

Source: Budget Documents of central and State Government, (\*Annual Growth Rate, Compound Growth Rate, Standard Deviation)

The above table shows the analysis of development and non-development expenditure. All expenditures relating to revenue account, capital outlay and loans and advances are categorized into social services, economic services and general services are treated as non development expenditure. While social and economic services constitute development expenditure, expenditure on general services is treated as non-development expenditure. Thus, development expenditure includes the development components of revenue expenditure, capital outlay and loans and advances by state governments. Social sector expenditure includes expenditure on social services, rural development, and food storage and warehousing. The annual growth rate of development expenditure is declining from the year 2011-12 (5.57 percent) to 2015-16 (2.54 percent). The above table reveals that Compound growth rate of non development expenditure is higher than the development expenditure which is about 9.96 percent and 6.33 percent growth respectively.



**Table 3:**ANOVA of Impact of Government Expenditure on Gross Domestic Product (GDP) in India

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4.706	2	2.353	<b>46.54</b>	<b>0.000*</b>
Residual	3.033	6	5.055		
Total	5.009	8			

The above table shows the ANOVA test which indicates that the impact of government expenditure on GDP in India during the study period 2011-2012 to 2019-2020. The value of F ratio is 46.54 as against the table value for the degree of freedom (2, 6) at 5% level of significance is 19.33. As the calculated value is greater than the table value, it is concluded that the null hypothesis is accepted i.e., government expenditure has significant impact on GDP in India.

**Conclusion:** Government expenditure and its basic concepts are highlighted in this paper. It measures the size of the government. When expenditure compared to GDP the size of the government in India is more modest. The analysis shows the structure and growth of Government expenditure, Classification of government expenditure and the impact of government expenditure on gross domestic product (GDP) which helps to identify the pattern of expenditure and the growth of the Indian economy.

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## LIVING AND WORKING CONDITIONS OF WOMEN WORKERS IN AGRICULTURE SECTOR IN ANDHRA PRADESH

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### Introduction

Women form an integral part of the Indian workforce. The total number of female workers in India according to census report, 2011 is 149.8 million and female workers in rural and urban areas are 121.8 and 28.0 million respectively. Out of total 149.8 million female workers, 35.9 million females are working as cultivators and another 61.5 million are agricultural labourers, So a high proportion of working women in India is employed in the unorganised sector mainly in agriculture, livestock and forestry. Working women are manifested in agricultural activities like land preparation, seed grading, sowing, dibbling, planting, irrigation, threshing, winnowing, storing crops, feeding cattle, looking after milk animal and poultry etc. Women's presence in the labour market is purposeful by her family situation, education, growth in job opportunities and the normal level of fiscal action. Female work presence in agriculture depends on a severity and related growth of agriculture. The present study deals with the agriculture women workers in Andhra Pradesh.

### Objective of the Study

To study the living and working conditions of women in unorganized sector in Andhra Pradesh with special reference to agriculture sector.

### Sample Design

The total sample of present study comes to 200 women respondents from agriculture sector. The information of agriculture women workers collected from the districts of Krishna and West Godavari in the state of Andhra Pradesh covering the sample of 100 each.

A structured interview schedule was developed and used to collect the data from the selected sample respondents in the study area.

### Analysis of the Study

The present study concentrate on a detailed exploration into the living conditions and conditions of work of women workers in agriculture sector covering various aspects such as the type of work, experience in the work, no. of working days in a month, daily working hours, wage rate, discrimination in the wages, monthly income, nature of spending the earnings, facilities available at work places, problems of respondents health, care about children, membership in SHGs, decision making in the





family, harassment at work place, social security schemes and Acts related to welfare of unorganized sector workers

**Type of the Work**

Generally most of the women workers working in unorganized sector like agriculture are unskilled. As per table no.1 the respondents are engaged in different kinds of works. 91% of the workers are engaged in weeding, 88% in sowing, 84% in harvesting, 90% in stacking the produce, 62% is engaged in loading the produce.

During the discussions with the respondents, they reported that the employer is assigning different kinds of unskilled work.

**Table No:1** Type of the work of the respondents

Sl.No.	Type of work	Agriculture workers	
		No.	%
1	Sowing	176	88.00
2	Weeding	182	91.00
3	Harvesting	168	84.00
4	Stacking the produce	181	90.50
5	Loading	124	62.00

Note: Multiple answers provided by the respondents.

Source: Field Study

**Reasons for engaging in the work:**

Table No.2 presents the reasons for joining the work as stated by the sample respondents in the study area. It is observed from the table that a number of different reasons were provided by the respondents for opting work in agriculture sector. 84% of the respondents said that due to financial needs they were engaged in the wage work. 58% of the respondents reported that low wages at their native places for the same kind of job. Out of the total, 54.5% of the respondents said that they joined in work because their husbands and other family members already working in the same work site followed by 47.5% of the respondents are for better wages than their native place, 51% said they joined the work to clear the old debts and 6% engaged in the present work because their families having large number of members.

The data shows that the socioeconomic causes which compelled poor people to engage themselves in agriculture activities. Lack of work in the village, early marriage, small size of landholdings are the major economic causes which lead about a large percentage of workers to involve themselves in the agriculture works, whereas a small proportion of workers are engaged in this profession due to social factors like large family size, early marriage, family disintegration etc.

**Table No: 2** Reasons for engaging in the work by the respondents

Sl.No.	Reasons	Agriculture workers	
		No.	%
1	Lack of work in the village	92	46.00
2	Early marriage	48	24.00
3	Small size of land holdings	151	75.50
4	Family disintegration	24	12.00
5	Large size family	12	6.00
6	Financial needs	168	84.00
7	Low wages at native places	116	58.00
8	Indebtedness	102	51.00
9	Better wages	95	47.50
10	Working with other family members	109	54.50

Note: Multiple answers provided by the respondents.

Source: Field Study

### Work Experience:

Table No.3 presents the experience of the respondents in present activity in which they engaged for earnings. As stated earlier, most of the women workers are engaged in unskilled work. Out of the total respondents, 50.5% of them said that they had experience in the same work between 1-2 years followed by 40.5% have below 1 year experience and 9% have experience between 3-4 years.

**Table No: 3** Distribution of the respondents according to their work experience

Sl.No.	Experience (Years)	Agriculture workers	
		No.	%
1	< one	81	40.50
2	1-2	101	50.50
3	2-3	-	-
4	3-4	18	9.00
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study



**Time of work:**

Each work is having a time schedule. Normally, maximum hours of time are regarded as 8 hours but in the unorganized sector it has not prevailed. It is possible to categorise the hours of work into three- between 6-7 hours, between 8-9 hours and 10 and above hours. The classification of workers as per their daily hours of work is exhibited in table no.4. The statutory laws in the organized setup except the workers to work 8 hours per day.

From the table no.4, it is clear that 45.5% of the sample respondents work between 6-7 hours followed by 43% of the workers work between 8-9 hours and 11.5% works 10 hours and above per day.

**Table No: 4**Distribution of the respondents according to working hours per day

Sl.No.	Time of work	Agriculture workers	
		No.	%
1	6-7 hours	91	45.50
2	8-9 hours	86	43.00
3	10 and above	23	11.50
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**No. of Days of work in a Month:**

Table No.5 shows the information pertaining to no. of days of working in a month by the respondents. It is clearly showing that out of the total respondents, 41.5% of them are engaged in 25 days and above in a month. 25 % of the respondents said that they engaged in work between 15-20 days in a month, 21.5% engaged between 10-15 days and 12% between 20-25 days.

**Table No:5** No. of days of work in a month

Sl.No.	No. of days	Agriculture workers	
		No.	%
1	10-15	43	21.50
2	15-20	50	25.00
3	20-25	24	12.00
4	25 and above	83	41.50
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study



**Distance from houses of the respondents to work place:**

Table No.6 denotes that out of the total respondents, 84% of them reported that the distance between work place to residence is less than 2 kms and 16% said it is between 3-5 kms.

During the interaction with the respondents, the agriculture workers said that their employers are providing transportation to the site and back to their residence.

**Table No:6** Distance between houses of the respondents and work place

Sl.No.	Distance (in kms)	Agriculture workers	
		No.	%
1	<2	168	84.00
2	3-5	32	16.00
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Wage rate per day:**

The wages given to the workers per day varies from place to place and work site to work site. Table No.7 shows that out of the total respondents, 66% of them said that they have received Rs.200 as wage per day, 15% earning Rs.250 per day, 7% getting Rs.300 per day and 12% workers earning Rs.150 per day.

**Table No: 7**Wage rate per day

Sl.No.	Wage(Rs.)	Agriculture workers	
		No.	%
1	150	24	12.00
2	200	132	66.00
3	250	30	15.00
4	300	14	7.00
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Discrimination in wages:**

There is no much difference in the working hours of both men and women but they are not getting equal wages. On the other hand, wage discrimination is considered, 52.5%of the respondents expressed that there is discrimination in the wages and the remaining 47.5% of the respondents said that there is no discrimination in the payment of wages. Further, the researcher approached the women workers those who said no



discrimination, they told that they are not skilled workers so that the wages are reasonable for their effort. Those respondents who expressed existing of discrimination in wages reported that the wages are not commensurate to their work (Table no.8).

Table No: 8Discrimination in wages

Sl.No.	Opinion	Agriculture workers	
		No.	%
1	Exist	105	52.50
2	Not exist	95	47.50
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

Monthly income of the respondents:

Monthly income of the respondents is presented in table no.9. Keeping in view of the daily wages and no. of days of engagement in work by the respondents, the monthly income divided into 3 groups between Rs.4000-5000, Rs.5000-6000 and Rs.6000-7000. Table No.9 shows that out of the total respondents, 46.5% of them are found in the monthly income range of Rs.5000-6000 followed by 34.5% in the range of Rs.6000-7000 and 19% between Rs.4000-5000.

Table No: 9Monthly income of the respondents

Sl.No.	Income (Rs.)	Agriculture workers	
		No.	%
1	4000-5000	38	19.00
2	5000-6000	93	46.50
3	6000-7000	69	34.50
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

Level of satisfaction on wages:

The level of satisfaction of the respondents on the wages is presented in table no.10. The table clearly demonstrates that 63% of the respondents reported that they are satisfied with their wages whereas 37% of the workers are not satisfied.

Table No: 10Level of satisfaction on wages

Sl.No.	Opinion	Agriculture workers	
		No.	%
1	Satisfaction	126	63.00



2	Not satisfaction	74	37.00
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Reasons for not satisfaction on the wages:**

Table No.11 presents the reasons stated by the respondents on the non-satisfaction on wages in the agriculture sector. As seen from table no.10, out of the total 200 respondents 37% were not satisfied with wages (No.74). Table No.11 presents a combination of reasons provided by the respondents. Out of the total respondents (No.74) 31% stated that long hours of working, 18% said low wages from the activity and 12% reported exploitation.

**Table No: 11**Reasons for not satisfaction on the wages

Sl.No.	Reasons	Agriculture workers	
		No.	%
1	Low wages	36	18.00
2	Long working hours	62	31.00
3	Exploitation	24	12.00

Note: Multiple answers provided by the respondents.

Source: Field Study

**Frequency of payment of wages:**

89% of the respondents said that they are receiving wages daily and the rest of them i.e., 11% of the respondents receiving their payments weekly. (Table No.12). Further the investigator asked a question of regular payment with regard to wages made to the respondents. It is interesting to note that all of the respondents reported that they are receiving wages regularly and a small percentage of them opinioned that a small portion of loan money was deducted from the payments.

**Table No:12** Frequency of payment of wages

Sl.No.	Frequency	Agriculture workers	
		No.	%
1	Daily	178	89.00
2	Weekly	22	11.00
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Utilization of earnings by the respondents:**

The pattern of utilization of the earnings by the respondents is shown in the table no.13. Multiple answers were provided by the respondents on this question. Out of



the total respondents 90.5% of them said that they are using their earnings for household consumption which includes childrens education, house rent, socio-religious ceremonies etc. 24% of the respondents said that they are utilizing a part of the income for clearing the old debts raised by them and also other family members. Out of the total, 21% of the respondents told that a small portion of their earnings are using for savings either in depositing in local banks or post offices or in their self help groups.

Table No: 13 Utilization of earnings by the respondents

Sl.No.	Details	Agriculture workers	
		No.	%
1	Household consumption	181	90.50
2	Payment of old debts	48	24.00
3	Savings	42	21.00

Note: Multiple answers provided by the respondents.

Source: Field Study

**Improvement in Social and Economic Condition:**

One of the main reason in joining the wage work or any job by the women is to earn income to supplement the income of the family. These earnings are giving recognition to the women in the society as well as in the family. Table No.14 presents the opinion of the respondents on the improvement of social and economic condition after joining the present work. 78% percent of respondents reported that their position in both aspects such as socially and economically was increased/improved due to this wage employment. The remaining 22% of the sample workers said that there is no improvement in both the aspects it means that status-quo existing in both aspects.

Table No:14 Improvement in socio-economic condition

Sl.No.	Opinion	Agriculture workers	
		No.	%
1	Improved	156	78.00
2	Not improved	44	22.00
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Seasonal Employment:**

There are many jobs which are seasonal in nature like Kharif and Rabi season for agriculture activities. Table No.15 exhibits the seasonality of agriculture work. According to analysis of the data in the table, it is observed that out of total respondents, 55.5% of them opined that the employment is not seasonal. 44.5% of the workers opined that work is seasonal in nature. During the discussions with the respondents, it is



noticed that majority of the respondents ready to go for other work such as Tailoring, MGNREGS during the off season.

**Table No:15** Seasonal Employment

Sl.No.	Seasonal employment	Agriculture workers	
		No.	%
1	Yes	89	44.50
2	No	111	55.50
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Reasons for non-availability of work in agriculture:**

An effort has been made to know the reasons for the non-availability of work by the respondents. It may be mentioned here that the study covered the districts of Krishna and West Godavari because these two districts are in delta areas and also nearby river Godavari and Krishna. The table no.16 shows the reasons as stated by the agriculture sector respondents on non-availability of agriculture work in study area. A combination of answers were provided by the respondents. Of the total respondents of 200, 17% said that due to lack of rain in timely the agriculture work was not available, 14% of the total opined drought is also primary reason for non-availability of work and 38% stated that due to unseason of agriculture work.

**Table No:16** Reasons for non-availability of work in agriculture

S.No.	Reasons	Agriculture workers	
		No.	%
1	Due to lack of rain	34	17.00
2	Due to drought	28	14.00
3	Due to non-availability of work	76	38.00

Source: Field Study

**Facilities at work place:**

Provision of providing basic facilities like drinking water, toilets, rest room at work place is one of the primary responsibilities of the employer/contractor. With regard to availability of basic facilities at work place in the study area is examine, the data shows that all the respondents reported that they have only drinking water facilities at their work sites. It is observed that toilet facilities are not available in agriculture sector. 23.5% of the respondents reported that the employers/ owners constructed a temporary thatched sheds for having lunch and rest. Further the researcher approached the respondents to elicit their opinion on the level of satisfaction on the availability of facilities at work places. Majority of the respondents expressed satisfaction on this aspect (table no.17).





**Table No:17** Facilities at work place

Sl.No.	Facilities available	Agriculture workers	
		No.	%
1	Drinking water	200	100.00
2	Toilets	-	-
3	Work shed for rest	47	23.50

Note: Multiple answers provided by the respondents.

Source: Field Study

**Problems of Respondents:**

Table No.18 shows the result of various problems faced by women workers in agriculture sector. A large percentage of the total respondents faced multiple problems at agriculture fields with lack of basic facilities at work place (67.5%), insecurity of job (65.5%), health problems (61%), continuous work without taking rest (34%), over loaded of work (17.5%), no provision of refreshment at work place (22.5%), low wages (37.5%), rude behavior of employer (15.5%), absence of social security (37.5%), wage discrimination (47%) etc.

**Table No:18** Problems of Respondents

Sl.No.	Problems	Agriculture workers	
		No.	%
1	Unfavourable climatic conditions	57	28.50
2	Continuous work without rest	68	34.00
3	Work overload	35	17.50
4	No provision of refreshment at work place	45	22.50
5	Low wages	75	37.50
6	Rude behavior of employer	31	15.50
7	Absence of social security	75	37.50
8	Lack of basic facilities	135	67.50
9	Insecurity of job	131	65.50
10	Wage discrimination	94	47.00
11	Health problems	122	61.00
12	Long distance	10	5.00

Note: Multiple answers provided by the respondents.

Source: Field Study



**Health problems:**

Further the researcher made an attempt to understand the health problems of the respondents. For women, the work in the agriculture sector is too risky and there are so many problems faced by them at work place. Health problem constitute the major problem for the women workers because they are physically poor. The main health problems faced by them presented in table no.19. According to table the respondents are facing different kinds of health-related problems like Muscle pain, Allergy, Asthama and Breathing, Cough and also all the above. Out of the total respondents, 60.5% of the workers having muscle pain, 19% of the workers are suffering from allergy, workers who face the problem of Cough are 18% and Asthama and Breathing problem are found among 6% of the workers. During the discussions with the respondents it is noticed that 19% of the workers are suffering from all the above problems.

**Table No:19** Health problems

Sl.No.	Details	Agriculture workers	
		No.	%
1	Muscle pain	121	60.50
2	Allergy	38	19.00
3	Asthama and breathing	12	6.00
4	Cough	36	18.00
5	All the above	38	19.00

Note: Multiple answers provided by the respondents.

Source: Field Study

**Nature of hospital for treatment:**

There are many hospitals in the study area such as Govt., Private, Primary Health Centres etc. The preference of the hospital by the worker is shown in table no.20. 52.5% of the respondents have preferred govt. hospital due to the availability of free medicine and free checkups. 37.5% of the workers prefer primary health centre and a large percentage i.e., 56% prefer both Govt. and Private hospitals. 20.5% of respondents visiting private hospital for getting treatment and checkups. During the discussions with the respondents it is noticed that majority of the work force belongs to below poverty line and due to financial constraints they are unable to afford costly treatment from private hospitals.



**Table No:20** Nature of hospital for treatment

Sl.No.	Nature	Agriculture workers	
		No.	%
1	Govt. Hospital	105	52.50
2	Private Hospital	41	20.50
3	Primary Health Centre	75	37.50
4	Both Govt. &Pvt.	112	56.00

Note: Multiple answers provided by the respondents.

Source: Field Study

### Harassment at work place:

Types of harassment at work place faced by the respondents is presented in table no.21. It is interesting to note that 46% of the respondents said that there is no harassment at work place and the remaining respondents reported that they are facing one or the other types of harassment at work place. The table shows that 54% of the workers reported that there is verbal abuse of women at work, 24% admits that eve-teasing at work place, 34% reported that they are criticized either personal or professional matter and 7.5% said that they were sexually harassed at work place.

**Table No:21** Harassment at work place

Sl.No.	Type of harassment	Agriculture workers	
		No.	%
1	Verbal abuse	108	54.00
2	Eve-teasing	48	24.00
3	Criticism at work	68	34.00
4	Sexual	15	7.50
5	No harassment	92	46.00

Note: Multiple answers provided by the respondents.

Source: Field Study

### Care of the children of the respondents at home:

As seen from the table no.22, out of the sample respondents 32.5% of them have small children. The remaining respondents (67.5%) said that they have no small children. Further the researcher enquired about the care of the children of the respondents, when they are at work, they told that their mother-in-law/father-in-law/elder children taking care of the small children. Of the total families those who have children said that their children are going to schools and having mid day meals in their respective schools.



**Table No:22** Care about small children

Sl.No.	Details	Agriculture workers	
		No.	%
1	No small children	135	67.50
2	In-laws/elder children	65	32.50
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Decision making by the respondents:**

One of the important aspect of women empowerment is involvement of women in decision making in their families in all the matters such as household expenditure, purchase of assets, childrens education, childrens marriages, savings, debt etc., In the present study the respondent women is also earner in the family i.e., supplementing her income to the family.

Participation in decision making is an important indicator that reflects the position/status of women in the family. In the tradition-oriented social structure, the typical pattern of husband-wife relationship is; ‘Man domains and women dependences’. The husband enjoys superior position over the wife and the major decision making is mostly domain of the husband. But this situation may vary in families where women work and contribute towards family. The data on decision making revealed that majority of the decisions (52%) were taken by their husbands. The data confirm the view that even if the wife is working, decision making power is mainly exercised by the husband. In 10% cases other family members including both wife and husband jointly took the decisions. 38% of the respondents said that they themselves took decisions in their families and these were either widows, divorced or whose husbands were addicted to bad habits (Table No.23).

**Table No:23** Decision making in the families by the respondents

Sl.No.	Decision making	Agriculture workers	
		No.	%
1	Husband	104	52.00
2	Other family members	20	10.00
3	Own	76	38.00

Note: Multiple answers provided by the respondents.

Source: Field Study

**Membership in Self Help Groups:**

Now a days, self help groups got more importance and also many women are joining and actively participate in various activities of self help groups. Table No.24 shows the number of workers having membership in SHG in the study area. It is found



from the table that majority of the respondents (92%) have membership in SHGs while 8% of the total have no membership in SHGs. Further the investigator made an effort to know the opinion of the respondents of those who were not members in any SHGs, reported that they do not have interest in joining the SHGs.

**Table No: 24**Membership in Self Help Groups by the respondents

Sl.No.	Membership	Agriculture workers	
		No.	%
1	Yes	184	92.00
2	No	16	8.00
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Awareness on the social security Acts and welfare measures for unorganised labour:**

Social security Acts refers to the protection provided by the employers to their workers in unorganized sector in the case of an accident, old age, marriage, maternity, death and illness etc., The protection is usually provides benefits both in cash and kind, in case of occurrence of such eventualities. Table No.25 presents the awareness of workers on social security labour laws implemented by the Govt. The table shows that out of the total respondents 70% are not aware about Acts, its means that they were ignorant about their rights enshrined in various labour laws made by the government from time to time. This is the primary reason that they are at times exploited by the owners. The remaining 30% of the workers are aware about these provisions. Further the investigator asked a question to the workers about the sources of awareness on these provisions. Majority of them reported that trade union leaders, officers from department of labour created awareness on different laws and other welfare schemes.

**Table No:25** Awareness on the social security Acts and welfare measures

Sl.No.	Awareness	Agriculture workers	
		No.	%
1	Yes	60	30.00
2	No	140	70.00
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Awareness on the workmen compensation Act, 1923:**

Of the total workforce respondents 28.5% are aware about workmen compensation Act, 1923 and the remaining respondents (71.5%) are not aware about this Act (table no.26).



**Table No: 26**Awareness on the workmen compensation Act

Sl.No.	Awareness	Agriculture workers	
		No.	%
1	Yes	57	28.50
2	No	143	71.50
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Awareness on the Maternity benefit Act:**

Table No.27 presents the level of awareness of the respondents on the Maternity benefit Act. A large percentage of the total respondents (71.5%) are not aware about the Act and the remaining (28.5%) reported that they are aware about the Act. Further the researcher posed a question to the respondents those aware about the details of benefits of Act. It is very sad to note that all of them are not having partial or full knowledge on this benefits.

**Table No: 27**Awareness among the respondents on the Maternity benefit Act

Sl.No.	Awareness	Agriculture workers	
		No.	%
1	Yes	57	28.50
2	No	143	71.50
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

**Awareness on the Equal Remuneration Act:**

Out of the total respondents 70% of them are not aware about the equal wages Act for both men and women for same work. The remaining 30% of them said that they aware the Act including some of the provisions of the Act. (Table No.28).

**Table No: 28**Awareness on the Equal Remuneration Act

Sl.No.	Awareness	Agriculture workers	
		No.	%
1	Yes	60	30.00
2	No	140	70.00
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study



### Awareness on the Minimum Wages Act:

The Department of Labour and Employment, Govt. of India and also various State Govts. fixed minimum wages for different kinds of activity based on nature and working hours including the safety nets. As seen from the table no.29, 67.5 % of the sample not aware about the Minimum Wages Act. The rest of the sample 32.5% aware about the Act.

**Table No: 29**Awareness on the Minimum Wages Act

Sl.No.	Awareness	Agriculture workers	
		No.	%
1	Yes	65	32.50
2	No	135	67.50
	<b>Total</b>	<b>200</b>	<b>100.00</b>

Source: Field Study

### Suggestions offered by the respondents:

Based on their problems and experiences of the respondents in the present work, a different combination of suggestions were provided by the respondents for their wellbeing (Table No.30). 71.5% of the respondents are in favour of increase in wages followed by 46% seeking sanitation facilities at work places, 57.5% for free medical facilities from the employers, 16% said payment for weekly holiday and 24% for safety and security of employment.

**Table No:30** Suggestions offered by the respondents

Sl.No.	Suggestions	Agriculture workers	
		No.	%
1	Wages to be increased	143	71.50
2	Paid holiday	32	16.00
3	Safety and security	48	24.00
4	Sanitation facilities	92	46.00
5	Medical facilities	115	57.50

Note: Multiple answers provided by the respondents.

Source: Field Study



### **Suggestions and Recommendations:**

- Majority of the respondents are members in Self Help Groups. So, facilitate institutional credit through the scheme of Self-Help Group Bank Linkages to start income generating activities.
- Conduct awareness programmes with regard to legal rights, labour laws and schemes among the women workers.
- Government should take lead for the appointment of wage fixation committee for the workers working in agriculture sector to uplift the economic condition of the workers.
- Strengthen the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in creating alternative sources of employment in off season of agriculture activities in rural areas.
- An external redressal committee should be set up to enquire into the cases of wage exploitation, non-medical benefits, sexual exploitation and other forms of physical violence against the women workers by the authorities.
- Informal sector is so large and it comprises variety of workers and all the workers are not same in terms of economically, socially and intellectually. So social security schemes should be made only for a specific group not for all in a single.
- The existing labour laws relating to minimum wages or social security are not helping them in any way. Therefore, proper implementation of the existing laws and measures are of utmost importance for the development of the unorganized women workers.
- Labour legislations are out of reach for most women workers because they are not beneficiaries of these legislations. Therefore, there is a need for an integrated approach of all the agencies.
- Monitoring and evaluation research need to be undertaken to assess the effectiveness of different schemes/programs being run for the welfare of the unorganized women workers.





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## HOUSEHOLD HEALTH EXPENDITURE IN INDIA: AN ECONOMIC ANALYSIS

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### Abstract

People have a right to good health. In order to fulfill this right there is a demand for health care. The demand for health care is a derived demand for good health. Health care expenditure is inevitable both for the individual and the state. In India major share of the private health expenditure is bear by the households. The impoverishment effect of household health expenditure is high in India due to high out-of-pocket expenses. The present study analyses the trend of household health expenditure in India and its disparity among various states in India. The study found that the percent change in the household health expenditure and per capita household health expenditure in India exhibit an increasing trend. The evidences show that there may be much more differences in the health expenditure spend by the households among the various states in India.

**Key words:** Disparity, Household Health Expenditure, Impoverishment.

### Introduction

The expenditure on health may be of public expenditure as well as private expenditure which measure a country's final consumption of health care goods and services plus capital investments in health care infrastructure. The public and private expenditure of different countries follow different path at different level of economic development. The public expenditure on health can be easily analyzed with the support of GDP. During 2016 India spent 1 percent of GDP to the health sector while U.S spent 14 percent. According to National Health Profile 2017 the per capita public expenditure on health increased from ₹621 in 2009-10 to ₹1411 in 2016-17. In 2017-18 about ₹15937 in rural areas and ₹22031 in urban areas of India were spent as out-of-pocket medical expenditure for hospitalization excluding child birth. In India there exists a large disparity between public and private expenditure on health. The lion's share of expenditure on health is spent by the private individuals. Households primarily depended on their income or savings and on borrowing for financing the expenditure on health care.

### Significance of the study

The health care market is highly asymmetrical one. The patient, who is the consumer, has very little choice and is far from being a free agent. The need for health

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care of the consumers is decided by the producers, i.e., the doctors. Health care is a service whose demand is created mostly by physicians, and not the consumers themselves. The demand for health care is uncertain. The demand for health care is derived from the demand for health. Different people have different concept of health. Therefore the demand for health is difficult to measure. The demand for health care depends on many factors such as income, morbidity pattern, life expectation, technological change and preferences for different types of care, different types of providers and health institutions. The demand for health care services keeps growing. The demand for health care increase the burden of the households which throw back them to poverty. The impoverishment effect of high household health expenditure is a serious concern. The present study throws light on the growth of household health expenditure in India and the interstate disparity of household health expenditure in India.

### **Methodology and data source**

The private final consumption expenditure on medical care and health services estimated by National Accounts Statistics (NAS) is considered as the household expenditure on health in India. The data on household health expenditure in India can be adjusted to 2011-12 prices. The estimates of expenditure of households for medical care and health services were outfitted on the basis of NSSO Consumer Expenditure Survey of various rounds. The study is descriptive and is based on secondary data. Simple statistical tools are employed for statistical analysis.

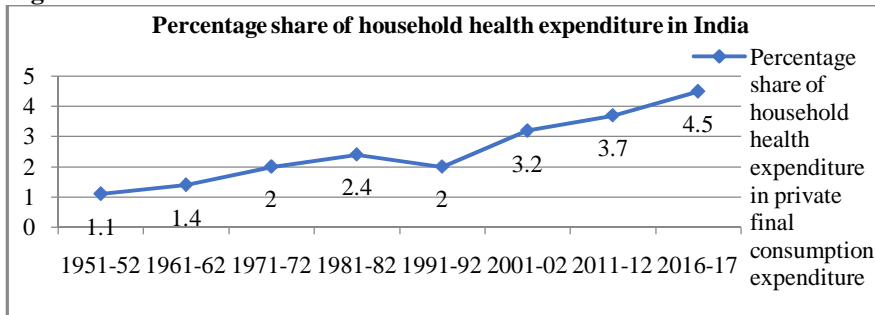
### **Objectives of the study**

1. To examine the trend of household health expenditure in India
2. To find out the variations in household health expenditure among different states in India.

### **Household Health Expenditure in India**

Generally the expenditure incurred by the households to meet health care demand is considered as household health expenditure. It is a part of private final consumption expenditure. So it is essential to know the share of household health expenditure in private final consumption expenditure.

**Figure - 1**



Source: National Accounts Statistics, Various years, CSO, Government of India.

The percentage share of Household Health Expenditure (2011-12 prices) in Private Final Consumption Expenditure of various years shows an increasing trend. In 1951-52 it was 1.1 percent and rose to 4.5 percent in 2016-17. Hence it can be undoubtedly argue that the household health expenditure in India witness an increasing trend. This will aggravate the financial hardships of the poor and the marginalized sections of the society.

**Table – 1** Trend of Private Expenditure on Health in India

Year	Private expenditure on health as a % of total expenditure on health	Year	Private expenditure on health as a % of total expenditure on health
1995	73.83	2005	73.51
1996	74.17	2006	73.85
1997	74.75	2007	73.98
1998	74.30	2008	73.21
1999	71.92	2009	72.10
2000	73.91	2010	72.87
2001	76.03	2011	72.86
2002	76.69	2012	73.03
2003	77.08	2013	71.59
2004	75.77	2014	69.96

Source: World Health Statistics 2017, WHO

It can be evident from the table that more than 70 percent of expenditure on health out of total expenditure is carried out by the private individuals. As per World Health Organization statistics the private expenditure on health in India decreased from 73.8 % during 1995 to 69.9% during 2014. Private health expenditure in India includes out-of-pocket expenditure, health insurance expenditure towards health by the firms and other agencies. Some amount of medical expenditure was reimbursed by employers or by insurance companies or by other agencies in case of both hospitalized treatment and non- hospitalized treatment.



**Table – 2 Household Health Expenditure in India (2011-12 prices)**

Year	Household Health Expenditure in India (₹Crores)	Percentage Change	Year	Household Health Expenditure in India (₹Crores)	Percentage Change
1984-85	31007	0.0	2001-02	90070	14.2
1985-86	31668	2.1	2002-03	94829	5.3
1986-87	32310	2	2003-04	98003	3.3
1987-88	32992	2.1	2004-05	110277	12.5
1988-89	33731	2.2	2005-06	119930	8.8
1989-90	34497	2.3	2006-07	130412	8.7
1990-91	35207	2.1	2007-08	136262	4.5
1991-92	35983	2.2	2008-09	145641	6.9
1992-93	36616	1.8	2009-10	158569	8.9
1993-94	37249	1.7	2010-11	170650	7.6
1994-95	41494	11.4	2011-12	181334	6.3
1995-96	46187	11.3	2012-13	198663	9.6
1996-97	51230	10.9	2013-14	216675	9.1
1997-98	56824	10.9	2014-15	248443	14.7
1998-99	63049	11	2015-16	274549	10.5
1999-00	70678	12.1	2016-17	306481	11.6
2000-01	78895	11.6	2017-18	357270	16.6
CAGR = 7.68					

Source: National Accounts Statistics, Various years, CSO, Government of India.

Note: CAGR- Compound Annual Growth Rate.

Household health expenditure in India was ₹31007 crores in 1984-85 and it increased to ₹357270 crores in 2017-18. There was a drastic increase in the household health expenditure in India from 1993-94 to 1994-95 and from 2003-04 to 2004-05. Percent change in household health expenditure is 2.1 percent in 1985-86 and 16.6 percent in 2017-18 The CAGR of household health expenditure in India is 7.68 percent for the period 1984-85 to 2017-18.

**Table – 3** Per Capita Household Health Expenditure in India (2011-12 prices)

Year	Per Capita Household Health Expenditure(₹)	Percentage Change	Year	Per Capita Household Health Expenditure(₹)	Percentage Change
1984-85	420	0.0	2001-02	866	11.9
1985-86	419	-0.2	2002-03	898	3.7
1986-87	419	0	2003-04	914	1.8
1987-88	419	0	2004-05	1013	10.8
1988-89	419	0	2005-06	1084	7
1989-90	420	0.2	2006-07	1162	7.2
1990-91	420	0	2007-08	1197	3
1991-92	420	0	2008-09	1262	5.4
1992-93	420	0	2009-10	1355	7.4
1993-94	418	-0.5	2010-11	1439	6.2
1994-95	456	9.1	2011-12	1486	3.3
1995-96	498	9.2	2012-13	1609	8.3
1996-97	542	8.8	2013-14	1732	7.6
1997-98	589	8.7	2014-15	1961	13.2
1998-99	641	8.8	2015-16	2140	9.1
1999-00	706	10.1	2016-17	2359	10.2
2000-01	774	9.6	2017-18	2682	13.7
CAGR = 5.77					

Source: National Accounts Statistics, Various years, CSO, Government of India.

Note: CAGR- Compound Annual Growth Rate.

The per capita household health expenditure in India increased from ₹420 to ₹2682 over the period 1984-85 to 2017-18. The percentage change in per capita household health expenditure was 13.7 in 2017-18. The percentage change is positive during the period except for the year 1985-86 and 1993-94. The CAGR of per capita household health expenditure is 5.77 percent for the period 1984-85 to 2017-18.

### **Interstate Disparity of Household Health Expenditure in India**

There exists disparity among the states in India with respect to morbidity, prevalence of diseases, treatment seeking behaviour, provision of health care services, health expenditure coverage status and health indicators. This also results in the disparity of health spending by the households and the public authorities. The percent share of total expenditure among households, public and other during 2004-05 and 2014-15 can be compared among different states in India in order to find a picture on disparity of household health expenditure.



**Table –4**Health Expenditure among Various States in India (2004-05 & 2014-15)

States	2004-05			2014-15		
	Per cent spent by			Per cent spent by		
	Households	Public	Other	Households	Public	Other
Assam	80.8	17.8	1.4	63.1	29.4	7.5
Andhra Pradesh	73.4	19.4	7.2	78.0	15.4	6.6
Bihar	90.2	8.3	1.5	82.3	16.5	1.2
Gujarat	77.5	15.8	6.7	53.1	34.0	12.9
Haryana	85.0	10.6	4.4	62.5	24.4	13.1
Himachal Pradesh	86.0	12.4	1.6	50.0	44.3	5.7
Jammu & Kashmir	77.3	20.7	2.0	60.7	34.6	4.7
Karnataka	70.4	23.2	6.4	52.2	21.5	26.3
Kerala	86.3	10.8	2.9	73.9	17.8	8.3
Madhya Pradesh	83.4	13.6	3.0	72.0	25.5	2.5
Maharashtra	73.3	22.1	4.6	59.6	17.0	23.4
Odisha	79.1	18.0	2.9	73.6	21.5	4.9
Punjab	76.1	18.0	5.9	79.3	17.0	3.7
Rajasthan	70.0	24.5	5.5	59.1	30.7	10.2
Tamil Nadu	60.7	26.6	12.7	66.4	25.0	8.6
Uttar Pradesh	84.3	13.0	2.7	78.3	19.0	2.7

Source: Report of National Commission on Macroeconomics and health, Government of India, 2005; National Health Account Estimates for India 2014-15, MoHFW, 2017.

There was a high burden on households for health care during 2004-05 and 2014-15. The public health care spending is low. Households spend major portion of expenditure for healthcare. Health expenditure spent by public varies from 8.3% in Bihar to 26.6% in Tamil Nadu during 2004 - 05 and 15.4 % in Andhra Pradesh to 44.3% in Jammu Kashmir during 2014 – 15. Health expenditure spent by households varies from 90.2% in Bihar to 70 % in Rajasthan during 2004 - 05 and 82.3 % in Bihar to 52.2% in Karnataka during 2014 – 15.

### Conclusion

It is clear from the fact that in India the major share of health expenditure is spent by the individual himself rather than the public authorities. Both the household health expenditure and per capita household expenditure shows an increasing trend. The share of household expenditure in total private final consumption expenditure is also exhibits an increasing trend. This will max out the burden of households for seeking



health care. There are several studies to argue the impoverishment effect of health care due to high out-of-pocket spending. Apart from the expenditure in the form of money for health care the consumer face non-monetary expenditure like travelling time and waiting time.

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## A NEW CLASS OF RATIO TYPE ESTIMATORS FOR FINITE POPULATION MEAN USING MID-RANGE IN SURVEY SAMPLING

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**Abstract:** The present study was taken under consideration in order to propose new modified ratio estimators for population mean using the auxiliary information of Mid-Range with coefficient of correlation, coefficient of variation and coefficient of skewness in order to achieve more precision in estimates than the already existing estimators. The properties associated with the proposed estimators are assessed by mean square error and bias and compared with the existing estimators. In the support of the theoretical proposed work we have given numerical illustration.

**Keywords:** Auxiliary information; Ratio-type estimators; Mean square error; Bias; Efficiency.

### 1. INTRODUCTION

An important purpose of sampling theory is to make sampling more efficient. It attempts to develop methods of sample selection and of estimation that provides, at the lowest possible cost, estimates that are precise enough for our purpose. This principle of specified precision at minimum cost recurs repeatedly in the presentation of theory. Estimation theory is an important part of statistical studies, whereby, population parameters are obtained using sample statistics. In any survey work, the experimenter's interest is to make use of methods that will improve precisions of estimates of the population parameters both at the design stage and estimation stage. These parameters can be totals, means or proportions of some desired characters. In sample surveys, auxiliary information is used at selection as well as estimation stages to improve the design as well as obtaining more efficient estimators. Increased precision can be obtained when study variable  $Y$  is highly correlated with auxiliary variable  $X$ . Usually, in a class of efficient estimators, the estimator with minimum variance or mean square error is regarded as the most efficient estimator. Ratio, product and regression type estimators are good examples in this context. Cochran (1940) initiated the use of auxiliary information at estimation stage and proposed ratio estimator for population mean. It is well established fact that ratio type estimators provide better efficiency in comparison to simple mean estimator if the study variable and auxiliary variable are positively correlated. If the correlation between the study variable and auxiliary variables negative, product estimator given by Robson (1957) is more efficient than simple mean estimator.

Further improvements are also achieved on the classical ratio estimator by introducing a large number of modified ratio estimators with the use of known parameters like, coefficient of variation, coefficient of kurtosis, coefficient of skewness and population correlation coefficient. For more detailed discussion one may refer to Cochran (1977), Kadilar and Cingi (2004, 2006), Koyuncu and Kadilar (2009), Murthy (1967), Prasad (1989), Rao (1991), Singh (2003), Singh and Tailor (2003, 2005), Singh et al (2004), Sisodia and Dwivedi (1981), Upadhyaya and Singh (1999) and Yan and Tian (2010).

Further, Subramani and Kumarapandiyan (2013) had taken initiative by proposed modified ratio estimator for estimating the population mean of the study variable by using the population median of the auxiliary variable.



The objective of the paper is to propose modified estimators for estimating the population mean by using the non-conventional location parameter (Mid-Range) and their linear combinations with the correlation coefficient and the coefficient of skewness of the auxiliary variable.

**2. Notations Used**

The following are the notations used in the paper:

$N$	Population	$n$	Sample size
$f = n/N$	Sampling fraction	$Y$	Study variable
$X$	Auxiliary variable	$\bar{X}, \bar{Y}$	Population mean
$\bar{x}, \bar{y}$	Sample means	$x, y$	Sample totals
$s_x, s_y$	Population standard deviations	$s_{xy}$	Population covariance between $c_x, c_y$
Coefficient of variation	$\rho$	Correlation coefficient	
$B(.)$	Bias of the Estimator	$MSE(.)$	Mean square error of the estimator
$MR = \frac{X_{(0)} + X_{(N)}}{2}$	Mid-range	$\beta_2$	Kurtosis $\beta_1$ Skewness

**3. Procedure and Definitions**

Let  $U = \{U_1, U_2, U_3, \dots, U_N\}$  be a finite population of  $N$  distinct and identifiable units. Let  $y$  and  $x$  denotes the study variable and the auxiliary variable taking values  $y_i$  and  $x_i$  respectively on the  $i^{th}$  unit ( $i = 1, 2, \dots, N$ ). For estimating the population mean  $\bar{Y}$  of  $y$  a simple random sample of size  $n$  is drawn without replacement from the population  $U$ . Then the classical ratio estimator is defined

$$t_R = \frac{\bar{y}}{\bar{x}} \bar{X}; \text{ if } \bar{x} \neq 0$$

Where  $\bar{X}$ , the population mean of the auxiliary variable  $x$  is known.

The mean square error expressions of the ratio and product estimators are

$$MSE(t_R) = \left\{ \frac{1-f}{n} \right\} Y^2 \left\{ C_y^2 + C_x^2 \left( 1 - 2\rho_{yx} \frac{C_y}{C_x} \right) \right\}$$

Further, a list of modified ratio estimators is given in table 1 is used for assessing the performance of the proposed estimator along with their bias and mean squared error expressions.

**Table 1:** Existing modified ratio type estimators with their biases and mean squared errors

Estimators	Bias, B (.)	Mean square error, MSE (.)	Constants $\theta$ , or $R_i$
$t_1 = \bar{y} \left( \frac{\bar{X} + C_x}{\bar{x} + C_x} \right)$ Sisodia and Dwivedi (1981)	$\left( \frac{1-f}{n} \right) Y^2 (\theta_1^2 C_x^2 - 2\theta_1 C_x C_y \rho_{yx})$	$\left( \frac{1-f}{n} \right) Y^2 (C_y^2 + \theta_1^2 C_x^2 - 2\theta_1 C_x C_y \rho_{yx})$	$\theta_1 = \frac{\bar{X}}{\bar{X} + C_x}$
$t_2 = \bar{y} \left( \frac{\bar{X} + \beta_2}{\bar{x} + \beta_2} \right)$ Singh et al (2004)	$\left( \frac{1-f}{n} \right) \bar{Y}^2 (\theta_2^2 C_x^2 - 2\theta_2 C_x C_y \rho_{yx})$	$\left( \frac{1-f}{n} \right) \bar{Y}^2 (C_y^2 + \theta_2^2 C_x^2 - 2\theta_2 C_x C_y \rho_{yx})$	$\theta_2 = \frac{\bar{X}}{\bar{X} + \beta_2}$

$t_3 = \bar{y} \left( \frac{\bar{X} + \beta_1}{\bar{x} + \beta_1} \right)$ <p>Yan and Tian (2010)</p>	$\left( \frac{1-f}{n} \right) Y (\theta^2 C_x^2 - 2\theta_3 C_x C_y \rho_{yx})$	$\left( \frac{1-f}{n} \right) Y^2 (C_y^2 + \theta^2 C_x^2 - 2\theta_3 C_x C_y \rho_{yx})$	$\theta_3 = \frac{\bar{Y}}{\bar{X} + \beta_1}$
$t_4 = \bar{y} \left( \frac{\bar{X} + \rho_{yx}}{\bar{x} + \rho_{yx}} \right)$ <p>Singh and Tailor (2003)</p>	$\left( \frac{1-f}{n} \right) Y (\theta^2 C_x^2 - 2\theta_4 C_x C_y \rho_{yx})$	$\left( \frac{1-f}{n} \right) Y^2 (C_y^2 + \theta^2 C_x^2 - 2\theta_4 C_x C_y \rho_{yx})$	$\theta_4 = \frac{\bar{Y}}{\bar{X} + \rho_{yx}}$
$t_5 = \bar{y} \left( \frac{\bar{X} C_x + \beta_2}{\bar{x} C_x + \beta_2} \right)$ <p>Upadhyaya and Singh (1999)</p>	$\left( \frac{1-f}{n} \right) Y (\theta^2 C_x^2 - 2\theta_5 C_x C_y \rho_{yx})$	$\left( \frac{1-f}{n} \right) Y^2 (C_x^2 + \theta^2 C_y^2 - 2\theta_5 C_x C_y \rho_{yx})$	$\theta_5 = \frac{\bar{X} C_x}{\bar{X} C_x + \beta_2}$
$t_6 = \bar{y} \frac{b(\bar{X} - \bar{x})}{\bar{x}} X$ <p>Kadilar and Cingi (2004)</p>	$\left( \frac{1-f}{n} \right) \frac{S_x^2}{Y} R_6^2$	$\left( \frac{1-f}{n} \right) (R_6^2 S_x^2 + S_y^2 (1 - \rho_{yx}^2))$	$R_6 = \frac{\bar{Y}}{\bar{X}}$
$t_7 = \bar{y} \frac{b(\bar{X} - \bar{x})}{(\bar{x} + C_x)} (X + C_x)$ <p>Kadilar and Cingi (2004)</p>	$\left( \frac{1-f}{n} \right) \frac{S_x^2}{Y} R_7^2$	$\left( \frac{1-f}{n} \right) (R_7^2 S_x^2 + S_y^2 (1 - \rho_{yx}^2))$	$R_7 = \frac{\bar{Y}}{\bar{X} + C_x}$
$t_8 = \frac{\bar{y} + b(\bar{X} - \bar{x})}{(\bar{x} + \beta_2)} (X + \beta_2)$ <p>Kadilar and Cingi (2004)</p>	$\left( \frac{1-f}{n} \right) \frac{S_x^2}{Y} R_8^2$	$\left( \frac{1-f}{n} \right) (R_8^2 S_x^2 + S_y^2 (1 - \rho_{yx}^2))$	$R_8 = \frac{\bar{Y}}{\bar{X} + \beta_2}$
$t_9 = \frac{\bar{y} + b(\bar{X} - \bar{x})}{(\bar{x} C_x + \beta_2)} (X C_x + \beta_2)$ <p>Kadilar and Cingi (2004)</p>	$\left( \frac{1-f}{n} \right) \frac{S_x^2}{Y} R_9^2$	$\left( \frac{1-f}{n} \right) (R_9^2 S_x^2 + S_y^2 (1 - \rho_{yx}^2))$	$R_9 = \frac{\bar{Y} C_x}{\bar{X} C_x + \beta_2}$
$t_{10} = \frac{\bar{y} + b(\bar{X} - \bar{x})}{(\bar{x} + \beta_1)} (X + \beta_1)$ <p>Yan and Tian (2010)</p>	$\left( \frac{1-f}{n} \right) \frac{S_x^2}{Y} R_{10}^2$	$\left( \frac{1-f}{n} \right) (R_{10}^2 S_x^2 + S_y^2 (1 - \rho_{yx}^2))$	$R_{10} = \frac{\bar{Y}}{\bar{X} + \beta_1}$
$t_{11} = \frac{\bar{y} + b(\bar{X} - \bar{x})}{(\bar{x} \beta_1 + \beta_2)} (X \beta_1 + \beta_2)$ <p>Yan and Tian (2010)</p>	$\left( \frac{1-f}{n} \right) \frac{S_x^2}{Y} R_{11}^2$	$\left( \frac{1-f}{n} \right) (R_{11}^2 S_x^2 + S_y^2 (1 - \rho_{yx}^2))$	$R_{11} = \frac{\bar{Y}}{\bar{X} + \beta_1}$
$t_{12} = \frac{\bar{y} + b(\bar{X} - \bar{x})}{(\bar{x} + \rho_{yx})} (X + \rho_{yx})$ <p>Kadilar and Cingi (2006)</p>	$\left( \frac{1-f}{n} \right) \frac{S_x^2}{Y} R_{12}^2$	$\left( \frac{1-f}{n} \right) (R_{12}^2 S_x^2 + S_y^2 (1 - \rho_{yx}^2))$	$R_{12} = \frac{\bar{Y}}{\bar{X} + \rho_{yx}}$
$t_{13} = \frac{\bar{y} + b(\bar{X} - \bar{x})}{(\bar{x} C_x + \rho_{yx})} (X C_x + \rho_{yx})$ <p>Kadilar and Cingi (2006)</p>	$\left( \frac{1-f}{n} \right) \frac{S_x^2}{Y} R_{13}^2$	$\left( \frac{1-f}{n} \right) (R_{13}^2 S_x^2 + S_y^2 (1 - \rho_{yx}^2))$	$R_{13} = \frac{\bar{Y} C_x}{\bar{X} C_x + \rho_{yx}}$
$t_{14} = \frac{\bar{y} + b(\bar{X} - \bar{x})}{(\bar{x} \rho_{yx} + C_x)} (X \rho_{yx} + C_x)$ <p>Kadilar and Cingi (2006)</p>	$\left( \frac{1-f}{n} \right) \frac{S_x^2}{Y} R_{14}^2$	$\left( \frac{1-f}{n} \right) (R_{14}^2 S_x^2 + S_y^2 (1 - \rho_{yx}^2))$	$R_{14} = \frac{\bar{Y} \rho_{yx}}{\bar{X} \rho_{yx} + C_x}$
$t_{15} = \frac{\bar{y} + b(\bar{X} - \bar{x})}{(\bar{x} \rho_{yx} + \beta_2)} (X \rho_{yx} + \beta_2)$ <p>Kadilar and Cingi (2006)</p>	$\left( \frac{1-f}{n} \right) \frac{S_x^2}{Y} R_{15}^2$	$\left( \frac{1-f}{n} \right) (R_{15}^2 S_x^2 + S_y^2 (1 - \rho_{yx}^2))$	$R_{15} = \frac{\bar{Y} \rho_{yx}}{\bar{X} \rho_{yx} + \beta_2}$

$t_{16} = y \left[ \frac{\bar{X} + M_d}{\bar{x} + M_d} \right]$ <p>Subramani and Kumarapandiyan (2013)</p>	$\left( \frac{1-f}{n} \right) Y \left( \theta^2 C^2 - 2\theta_{16} C_x C_y \rho_{yx} \right)$	$\left( \frac{1-f}{n} \right) Y^2 \left( C^2 + \theta^2 C^2 - 2\theta_{16} C_x C_y \rho_{yx} \right)$	$\theta_{16} = \frac{\bar{X}}{\bar{X} + M_d}$
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#### 4. Proposed Estimator

Following Subramani and Kumarapandiyan (2013), we have proposed an estimator for estimating the population mean when the mid-range, correlation coefficient and coefficient of skewness of the auxiliary variable is known

$$t_{sts1} = y \left\{ \alpha \left[ \frac{\bar{X} + MR}{\bar{x} + MR} \right] + (1 - \alpha) \left[ \frac{\bar{x} + MR}{\bar{X} + MR} \right] \right\}$$

$$t_{sts2} = y \left\{ \alpha \left[ \frac{\bar{X}\rho + MR}{\bar{x}\rho + MR} \right] + (1 - \alpha) \left[ \frac{\bar{x}\rho + MR}{\bar{X}\rho + MR} \right] \right\}$$

$$t_{sts3} = y \left\{ \alpha \left[ \frac{\bar{X}\beta_1 + MR}{\bar{x}\beta_1 + MR} \right] + (1 - \alpha) \left[ \frac{\bar{x}\beta_1 + MR}{\bar{X}\beta_1 + MR} \right] \right\}$$

Where MR is the Mid-range of the auxiliary variable X.

To the first degree of approximation, we have obtained the expression of bias and mean squared error (MSE) of the proposed estimator as

$$B(t_{sts1}) = \left( \frac{1-f}{n} \right) Y \left\{ (1-2\alpha) \phi \rho C C + \alpha \phi^2 C^2 \right\}$$

$$B(t_{sts2}) = \left( \frac{1-f}{n} \right) Y \left\{ (1-2\alpha) \phi \rho C C + \alpha \phi^2 C^2 \right\}$$

$$B(t_{sts3}) = \left( \frac{1-f}{n} \right) Y \left\{ (1-2\alpha) \phi \rho C C + \alpha \phi^2 C^2 \right\} \quad \text{And}$$

$$MSE(t_{sts1}) = \left( \frac{1-f}{n} \right) Y \left\{ C^2 + (1-2\alpha)^2 \phi^2 C^2 + 2(1-2\alpha) \phi \rho C C \right\}$$

$$MSE(t_{sts2}) = \left( \frac{1-f}{n} \right) Y \left\{ C^2 + (1-2\alpha)^2 \phi^2 C^2 + 2(1-2\alpha) \phi \rho C C \right\}$$

$$MSE(t_{sts3}) = \left( \frac{1-f}{n} \right) Y \left\{ C^2 + (1-2\alpha)^2 \phi^2 C^2 + 2(1-2\alpha) \phi \rho C C \right\}$$

Where  $\phi_1 = \frac{\bar{X}}{\bar{X} + MR}$ ,  $\phi_2 = \frac{\bar{X}\rho}{\bar{X}\rho + MR}$  and  $\phi_3 = \frac{\bar{X}\beta_1}{\bar{X}\beta_1 + MR}$ ,

The  $MSE(t_{sts1})$ ,  $MSE(t_{sts2})$  and  $MSE(t_{sts3})$  will be minimum when

$$\alpha = \frac{1}{2} \left( 1 - \frac{\rho_{yx} C_y}{\phi_1 C} \right) = \alpha_{01} \text{ (say)}, \quad \alpha = \frac{1}{2} \left( 1 - \frac{\rho_{yx} C_y}{\phi_2 C} \right) = \alpha_{02} \text{ (say)}$$

$$\text{and } \alpha = \frac{1}{2} \left( 1 - \frac{\rho_{yx} C_y}{\phi_3 C} \right) = \alpha_{03} \text{ (say),}$$

by substituting the minimum value of  $\alpha$  in the proposed estimators, one can get the asymptotically optimum estimators (AOE) as

$$t_{sts1}(opt) = y \left\{ \alpha_{01} \left( \frac{\bar{X} + MR}{\bar{x} + MR} \right) + (1 - \alpha_{01}) \left( \frac{\bar{x} + MR}{\bar{X} + MR} \right) \right\}$$

$$t_{sts2}(opt) = y \left\{ \alpha_{02} \left( \frac{\bar{X}\rho + MR}{\bar{x}\rho + MR} \right) + (1 - \alpha_{02}) \left( \frac{\bar{x}\rho + MR}{\bar{X}\rho + MR} \right) \right\}$$

$$t_{sts3}(opt) = y \left\{ \alpha_{03} \left( \frac{\bar{X}\beta_1 + MR}{\bar{x}\beta_1 + MR} \right) + (1 - \alpha_{03}) \left( \frac{\bar{x}\beta_1 + MR}{\bar{X}\beta_1 + MR} \right) \right\}$$

Thus the optimum MSE of,  $t_{sts1}$ ,  $t_{sts2}$  and  $t_{sts3}$  is

$$Min.MSE(t_{sts1}, t_{sts2}, t_{sts3}) = \left( \frac{1-f}{n} \right) Y^2 (1-\rho^2) C_y^2$$

### 5. Efficiency Comparison

For comparison of proposed estimator with the existing estimators, we have derived the conditions for which the proposed estimators are more efficient than the existing modified ratio estimators as

$$Min.MSE(t_{sts1}, t_{sts2}, t_{sts3}) \leq MSE(t_i; i = 1, 2, 3, 4, 5) \text{ if } \rho_{yx} \leq \frac{\theta_i C_x}{C_y}$$

$$Min.MSE(t_{sts1}, t_{sts2}, t_{sts3}) \leq MSE(t_i; i = 6, \dots, 15) \text{ if } R_i^2 S_x^2 \geq 0$$

$$Min.MSE(t_{sts1}, t_{sts2}, t_{sts3}) \leq MSE(t_{16}) \text{ if } \rho_{yx} \leq \frac{C_x}{C_y}$$

From the above conditions, it is noted that the proposed estimators are more efficient among other discussed estimators if the above conditions holds true.

### 6. Empirical Study

To demonstrate the performance of the suggested estimator empirically in comparison to other estimators. We have used the Murthy (1967) where Y is output for 80 factories in a region and X is Data on number of workers. The descriptions of the population are given below.

**Table 2:** Characteristics of the Population

Population (Murthy 1967)	
$N = 80$	$C_y = 0.3542$
$n = 20$	$S_x = 2.7942$
$\bar{Y} = 51.8264$	$C_x = 0.9498$
$\bar{X} = 2.8513$	$\beta_2 = 1.3005$
$\rho = 0.9150$	$\beta_1 = 0.698$
$S_y = 18.3569$	$MR = 5.73$
$M_d = 1.48$	$QD = 1.7938$

Here, we have computed mean squared error (MSE) and the Bias of the estimators.



The results are given in the following table.

Table 3: The mean squared errors and Bias of the existing and proposed estimators

Estimators	MSE	Bias
t <sub>1</sub> ; Sisodia and Dwivedi(1981)	17.18812	0.750401
t <sub>2</sub> ; Singh et al(2004)	12.84257	0.686762
t <sub>3</sub> ;Yan and Tian (2010)	21.36603	0.803387
t <sub>4</sub> ;Singh and Tailor (2003)	17.68491	0.757056
t <sub>5</sub> ;Upadhyaya and Singh (1999)	12.1351	0.675254
t <sub>6</sub> ;Kadilar and Cingi (2004)	92.65628	18.17641
t <sub>7</sub> ; Kadilar and Cingi (2004)	53.07362	13.6396
t <sub>8</sub> ; Kadilar and Cingi (2004)	44.78744	12.48287
t <sub>9</sub> ; Kadilar and Cingi (2004)	2.317192	0.974223
t <sub>10</sub> ;Yan and Tian (2010)	60.5325	14.60269
t <sub>11</sub> ; Yan and Tian (2010)	35.18871	10.99178
t <sub>12</sub> ; Kadilar and Cingi (2006)	53.98248	13.76056
t <sub>13</sub> ; Kadilar and Cingi (2006)	52.63652	13.58105
t <sub>14</sub> ; Kadilar and Cingi (2006)	50.78761	13.33051
t <sub>15</sub> ; Kadilar and Cingi (2006)	42.40512	12.12991
t <sub>16</sub> ;Subramani and Kumarapandiyam (2013)	11.13659	0.658301
<b>Proposed 1</b>	<b>0.855269351</b>	<b>0.332265112</b>
<b>Proposed 2</b>	<b>0.855269334</b>	<b>0.312863365</b>
<b>Proposed 3</b>	<b>0.855269328</b>	<b>0.257737132</b>

### 7. Conclusion

In this paper we have proposed modified estimators based on simple random sampling without replacement by using the auxiliary variable, under the situation when mid-range, coefficient of skewness and correlation coefficient is known. We found that the performances of our proposed estimators in terms of mean square error are more efficient than all other existing estimators in the literature. Hence we strongly recommend that our proposed estimators preferred over the existing estimators for use in practical application.

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## PLACE OF MORALITY IN VIVEKANANDA'S PHILOSOPHY

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### Abstract

Morality has become a complicated issue in the multi-cultural world we live in today. Morality speaks of a system of behaviour in regards to standards of right or wrong behaviour. According to Vivekananda, morality is not the goal of man, but the means through which freedom is attained. Everything that we perceive around us is struggling towards freedom, from the atom to the man, from the lifeless particle of matter to the highest existence on earth. The whole universe is in fact the result of this struggle for freedom. Although Vivekananda does not establish any particular moral theory, but has discussed about the concept of morality and freedom in his philosophy and through his concept of morality he tries to destroy the so called separation between man and man. For Vivekananda all ethics, all human action and all human thought, hang upon one idea of unselfishness. From this thinking of Swami Vivekananda it is clear that the boundary of morality is extended to nonhuman beings also to treat them as ethical beings. The duty of all human beings is not only to help other fellow beings, but also to extend his helping hands to non-human beings. So, it is free from anthropocentrism (in strong sense), specicism and sentientism like others. This paper is an attempt to understand and analyse the concept of morality and freedom in Vivekananda's Philosophy.

**Keywords** – Anthropocentrism, Freedom, Morality, Self-Abnegation,

### INTRODUCTION

Vivekananda's thoughts caught the imagination of people in diverse societies and cultures because of the universality of his preaching and the exalted goals that he set for man. A central aspect of ethics is "the good life", the life worth living or life that is simply satisfying, which is held by many philosophers to be more important than traditional moral conduct. Ethics can be regarded as the philosophical study of moral values and rules and distinguishing between what is right and wrong. Generally the word 'ethics' refers to moral theory that involves systematizing defending and recommending concept of right and wrong conduct. It also tries to resolve the disputes of moral diversity or moral conflict in practical life. It helps a human being to choose right path in moral conflict in particular situation. We get a new concept of ethics in the philosophy of Swami Vivekananda. The thought on ethics of Vivekananda offer a new dimension to be a good human being on earth. It surely helps us to manifest our divinity that resides in our inner world to achieve the goal of humanity.





## **RATIONALE OF THE STUDY**

The proposed study intends to analyse the Philosophy of Vivekananda and his ethical view and try to examine whether their view can be labelled as Applied Ethics or Normative Ethics or Spiritualistic. The objectives of this paper are:

- To understand the Philosophy of Vivekananda
- To find out the ethical perspectives of Vivekananda.
- To find out the place of morality in Vivekananda Philosophy

## **METHODOLOGY**

To carry out this research work in a systematic way the analytic method will be used. Again in this study the descriptive method will be followed wherever it is necessary

## **UNDERSTANDING SWAMIJI MORAL PHILOSOPHY**

From the very beginning of the human society some ethical, social and political codes are there to pave the way for the manifestation of humanity for the betterment of the society. Among all these codes, it is accepted that the code of ethics is the basis of all. So, ethics has a profound role to play for the society. Swamiji had an ethical philosophy of his own. It would be wrong to construe it as an academic philosophy, and, as such, it may not be accommodated within the framework of Western ethics. Ethical discussion, however, is divided into two branches: meta-ethics and normative ethics. Meta-ethics is about the nature of ethics and moral judgements—whether we act from self-interest or not; normative ethics determine the content of moral behaviour and is about setting norms for standards of conduct. Swamiji does not discuss the question whether moral judgements are objective and, hence, his ethics does not develop into meta-ethics. The ethics of Swamiji sets itself the task of specifying norms for human conduct and may be construed as a kind of normative ethics. But the standard or norm is in no way comparable to the norm set by the Western ethicist.

From a Western perspective, the central question for normative ethics is whether the moral value of an action is to be judged in the light of its consequence or by the fact that it is done for the sake of duty. The ethical theory which evaluates the moral value of actions on the basis of consequence is known as ‘consequentialism’ or ‘teleological’ ethics. On the other hand, the theory that proposes to judge action by reference to duty is known as ‘deontological’. However, this dichotomy is not relevant to the moral philosophy of Vivekananda, for it cannot be accommodated within the straitjacket of either consequentialism or deontological ethics as conceived in the West.



Consequentialism is of various kinds, of which mention may be made of 'hedonism' and 'utilitarianism'. For both these theories, either pleasure or utility as consequence is the determinant of the moral value of action. Vivekananda has criticized utilitarianism in very clear terms besides lambasting hedonism. The term utility has been defined as the greatest good of the greatest number of people. Hedonism is simply the pursuit of pleasure. Vivekananda rejects utilitarianism on the ground that the standard set up by this theory cannot explain the ethical relation of humans and we cannot derive any ethical laws from considerations of utility.

What repels Vivekananda in utilitarianism is the singular emphasis laid on the consequence as determinant of the moral value of an action, which is measured by utility. Vivekananda was not ignorant of human distress, and so the production of utility as a means of ameliorating human unhappiness was his prime concern. Distress must be removed, happiness of the masses must be ensured; but it must be the result of an action that is unselfish or proceeds from love for all. Thus the ethical philosophy of Swamiji could be branded as 'utilitarianism with a difference'. It is not the consequence of an action, but the motive that is important. An action is moral to the extent it is motivated by selfless love towards humanity.

Can we identify the ethics of Vivekananda as an instance of deontological ethics? Deontological ethics is the ethics of duty; the term 'deon' means duty in Greek. Thus deontological ethics stands for the theory that requires one to act for the sake of duty and not for the sake of desire or self-interest. Since Vivekananda asks us to practise self-effacement in all our actions, it is an exhortation to work for the sake of duty. Put in this way Vivekananda's ethics contrasts with Immanuel Kant's concept of moral action. An action has moral worth if it is done from the motive of doing one's duty.

For Kant, duty is a compulsion, a person's ethical obligation. Duty must be performed. Thus conceived, duty is a load on our shoulder as it takes away our freedom. It drags us towards an ideal that is basically uncompromising, demanding, or even exacting. Vivekananda compares duty with the midday summer sun which scorches the innermost soul of mankind. In Vivekananda we find a definition of duty that is different in spirit from that given by Kant. For Kant duty is a compulsion, a person's ethical obligation. For Vivekananda duty 'is the impulsion of the flesh, of our attachment; and when an attachment has become established, we call it duty'<sup>1</sup>. For him such duty is slavery. He says: 'How easy it is to interpret slavery as duty—the morbid attachment of flesh for flesh as duty! Men go out into the world and struggle and fight for money or for any other thing to which they get attached. Ask them why they do it. They say, "It is a duty." It is the absurd greed for gold and gain, and they try to cover it with a

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<sup>1</sup> Vivekananda, The Complete Works, vol.I, 12<sup>th</sup>Edition,p.123



fewflowers'<sup>2</sup>. Vivekananda's moral philosophy is not a philosophy of attachment and not an ethics of duty.

We have arrived at a negative conclusion that the moral philosophy of Vivekananda is neither pure and simple consequentialism nor deontology. How should we name it? But before that, it will be well to remember that Vivekananda made Advaita Vedanta his point of departure. The essence of Advaita Vedanta is that Brahman alone is real and the individual selves are not different from Brahman or the supreme Self. The essential oneness of all human beings is the quintessence of Advaita metaphysics. This identity or non-duality constitutes the foundation of Vivekananda's conception of universal religion. It is non-duality, again, which makes for human fellowship or universal brotherhood.

### GROUNDWORK OF VIVEKANANDA'S ETHICS

The moral philosophy of Vivekananda is a corollary of his concept of religion. It should be noted that for Vivekananda religion is not a doctrine, nor a theory, but one's realization of the essential Divinity that pervades all individual selves. The ethics of Vivekananda is based on the oneness of all human beings.

Vivekananda tells us: 'Oneness is the secret of everything. All is one, which manifests itself, either in thought, or life, or soul, or body, and the difference is only in degree'<sup>3</sup>. From this non-dualistic thought follows certain moral codes that seem to parallel Western thought.

Since all are one, there is hardly any difference between myself and others. In fact, there is no other who stands in contrast with myself. The distinction between 'I' and 'thou' vanishes. So I cannot do anything harmful towards anybody, for that will be doing harm to myself. This is the very idea contained in a version of Kant's categorical imperative. Codes of conduct or moral codes must be universally applied. What is good for me is good for another. If an action is not good for me, it cannot be good for you. Universality is the outcome of the oneness taught in Advaita Vedanta.

Another corollary of the above thesis is that human dignity must be respected. If all is one, we have no right to look down upon those who may not come up to our level of development. Therefore, the sayings 'condemn none' are the most universal moral principle. Elsewhere Vivekananda writes that hatred is opposed to truth. What is the test of truth? Truth is that which makes for oneness. This is the quintessence of religion. Naturally, 'Everything that makes for oneness is truth. Love is truth, and hatred is false, because hatred makes for multiplicity. It is hatred that separates man from man;

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<sup>2</sup> Ibid

<sup>3</sup> Vivekananda, The Complete Works, vol. II, p.308

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therefore it is wrong and false. It is a disintegrating power; it separates and destroys'<sup>4</sup> (This conception of truth entails a criterion of goodness of human conduct. Whatever action makes for oneness is good and whatever action makes for diversity is bad. Goodness does not only qualify our action, it also characterizes our thought. Vivekananda says: 'We have to decide whether they make for disintegration, multiplicity or for oneness, binding soul to soul'<sup>5</sup> .

Vivekananda proposed a religion for all human beings, reared on the foundation of Advaita Vedanta. In a letter he said a person can look at all communities and religions with love and affection only from the point of view of Advaita. Vivekananda believed this must be the religion of the future human society. This is the essence of practical Vedanta, which looks at the whole world of human beings as one's own Self.

The philosophy of equality that Vivekananda preached for the world has its roots in Vedantic non-dualism. The concept of equality will be empty without an understanding of the identity of the individual and the supreme Self. If you harm another person you will harm yourself, because what you call the other is really your own self. You pervade everything under and above the sun. You exist in every soul—the rich and the poor, the ignorant and the wise, the weak and the strong. The realization of yourself as ubiquitous makes you sympathetic toward everybody. The lesson of this monistic approach is if you do evil to others you degrade yourself. Thus it is clear that Advaita, oneness, is the basis of morality. Other theories of morality can impart moral education but cannot explain why one should be moral.

## **ETHICS AND RENUNCIATION**

The ethics of Vivekananda may be described as the ethics of renunciation. He said: 'Renunciation is the very basis upon which ethics stands. There never was an ethical code preached which had not renunciation for its basis'<sup>6</sup> . He also stated that various ethical laws 'have that one central idea, eternal self-abnegation. Perfect self annihilation is the ideal of ethics'<sup>7</sup> .

The above statements do not only bring out the essence of ethics, it also unfolds Vivekananda's concept of religion. The most significant characteristic of religion is that it exhorts us to give up selfishness and to transcend the ego. The motto of

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<sup>4</sup>Vivekananda, The Complete Works, vol. II, p.308.

<sup>5</sup> Ibid

<sup>6</sup> Vivekananda, The Complete Works, vol. II, p.72

<sup>7</sup> Vivekananda, The Complete Works, vol. II, p. 73



ethics is effacement of individualism. We hear from Vivekananda that 'the highest ideal of morality and unselfishness goes hand in hand with the highest metaphysical conception'<sup>8</sup>, and therefore the more unselfish a person, the more moral he or she is. Understanding the relation between morality and self-abnegation requires a deep look at Vivekananda's philosophy of action and its apparent similarity with the philosophy propounded in the Bhagavadgita. Let us refer to karma yoga, which Sri Krishna preached to Arjuna. For Sri Krishna an action binds one to bondage so long as it is done with a desire to reap its fruit. An action is moral to the extent it is performed with complete detachment towards its result.

An action must produce its result. The question is to whom such result is to be consecrated if the doer does not share it. The metaphysics of the Gita establishes God as the sole agent of everything that happens in the world. We perform actions as mere instruments of God who is the real agent of them. Humans are not the real agents of their action, since they act as instruments of the divine agent, they cannot have any right to demand enjoyment of the result of action. The Gita therefore says that the result of all human actions should be consecrated to the supreme Person, God. Once we assume this point of view we do not take ourselves off from the field of action but become more active with the peace of complete detachment.

Vivekananda's ethics of renunciation is actually connected with his concept of duty. He tells us it is work through the sense of duty that leads us to work without any idea of duty. Vivekananda believes this is how work becomes worship. Duty imposes no obligation on us so we can work without any expectation its head. When the ego is neutralized love takes its place making an action unselfish and moral.

The moral philosophy of Vivekananda has a wider implication providing a basis for his much popular spiritual socialism. The world has witnessed social upheavals intended to guide in revolutionary changes leading to establishment of socialism. One can refer to the American War of Independence and the French Revolution, which were initiated to bring fraternity and equal opportunities in human society. Human society all over the world is cursed with social and economic inequality, which must be removed. Vivekananda was deeply moved by the miserable conditions of the poor of India. He realized the distress of the poor and the downtrodden cannot be removed unless inequality of every kind is eliminated from human society. The different revolutions mentioned above could not realize the goal they were intended to reach. They succeeded only to replace one kind of imperialism by another.

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<sup>8</sup> Vivekananda, The Complete Works, vol. II, p.356.



## CONCLUSION

In this research work, our endeavour has been to highlight the moral dimension of Vivekananda's philosophy. The intention of Vivekananda was not to awaken the declining masses of India and turn them into a political power. His was not a violent revolution affected through armed violence. It was a silent non-violent revolution making people aware of their oneness and inherent Dignity, which is the essence of Advaita Vedanta. It is a call to humanity to realize that all are equal thus paving the way for a kind of socialism aptly named Vedantic Socialism.

Swami Vivekananda's thoughts on ethics can be regarded as practical ethics based on normative ethics. It is practical as it throws lights on the practical life of a man. It addresses both the aspects of ethics containing two vital parts how and why a man will lead an ethical life. We are familiar with such propositions of ethics, don't hurt others, don't lie etc. from the very beginning of our lives, but why one should not behave like this was not there. It is not Meta ethics as it does not deal only with the theoretical meaning and reference of moral proposition and how their truth values (if any) may be determined. It cannot be designated as normative ethics as it does not deal only with the practical means of determining a moral course of action. Some may want to place it in the field of applied ethics as it tends to offer a guiding principle for practical life. But I think that the concept of ethics of Swami Vivekananda can't be designated as applied ethics also. Applied ethics draws upon ethical theories in order to ask what a person is obligated to do some very specific situation, or with some particular domain of action. Swamiji's ethics goes beyond the stipulated area of applied ethics as it encompasses the whole universe in the arena of ethics. So we have to find out a new horizon which is the proper subject matter of the ethics of Swami Vivekananda. According to my view the concept of ethics of Swami Vivekananda may be designated as holistic ethics, as it tends to address the whole world. It is the duty of human beings not to show ethical behaviour only to other fellow beings, but also to the whole universe. The whole universe is the subject matter of Swamiji's ethics.

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## ADVANCED NURSE PRACTICE: A CONCEPT ANALYSIS

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### Abstract

This literary criticism concludes that economical and effective Quality medical care is rendered by Advanced Nurse Practitioners in kind of settings. Advanced Nurse Practitioners add partnership with medical man, within the promotion of health and skilled advancement to Nursing Field.

Evidence-based follow has gained a momentum in nursing, and viewing the evidences for practices supported analysis findings square measure additional doubtless to support desired patient outcomes across varied settings and geographic locations. Evidences that cause the event of nursing profession

**Keywords:** Advanced Nurse Follow, Evidence-Based Follow, Nursing.

### Definition of Advanced Follow Nurse and Proof – Primarily Based Follow

The Advanced follow nurses that square measure taking position within the forefront of the quickly dynamical health care system, developing associate degree innumerable of roles in organizations that aim to produce cost-efficient, quality care that square measure supported by the evidences in clinical, educational and analysis space.

The International Council of Nurses (ICN) defines Advance follow Nurse (APN) as “ A nurse World Health Organization has noninheritable the professional mental object, advanced decision-making skills and clinical competencies for distended follow; the characteristics of that square measure formed by the context and/or country during which she is certified to practice.1”

Evidence-based follow is currently widely known because the key to up tending quality and patient outcomes. proof primarily based follow may be outlined as “nursing science must comprehend all manner of analysis, from discovery to translation, from bench to side, from mechanistic to holistic”. (Pickler, 2018)2

### Evidence Primarily Based Follow: Advanced Nurse Practitioners

Hamric, Spross, and Hanson (2009) state that: the State Nursing follow Act uses APNs to visit Nurse Practitioners (NPs), Clinical Nurse Specialist (CNSs), nurse specialist (CRNAs), and Nurse accoucheuse (CNMs) .3





According to Hamric, Spross, and Hanson (2009), analysis is one in all the core competencies of advanced follow nursing, and analysis skills square measure imperative for the Advanced follow Nurse (APN) to be able to fulfill their roles.<sup>3</sup>

### **Evidences Supporting Advanced Follow Nurses Effectiveness in Nursing**

Lot of evidences World Health Organization facilitate US to conclude the distinct contribution of Advanced follow Nurses towards information and skills. As advanced follow nurse, square measure unambiguously positioned to guide and participate in clinical space, lecturers and analysis that's important to their advanced follow environments.<sup>4</sup> whereas the literature so far outlines the role of Advanced follow Nurses in several setting like acute and important care, medical aid, Cardiac , etc

A review of literature on Nurse Practitioners in orthopaedic setting (Brittany G. Spence, Joanne Ricci, and Fairleth McCuaig.2019)<sup>4</sup> gave a read regarding Nurse practitioners qualification and ability to figure in an exceedingly kind of orthopaedic settings as well as surgical clinics, medical aid orthopaedics clinics, and pre-/postoperative care among the hospital. It talks regarding the advantages of NPs in orthopaedic surgical settings including redoubled access to worry, improved team communication, cut length of keep, improved quality of care, and improved patient satisfaction. Adding feather in cap,it was over NPs were found to satisfy patient desires expeditiously play a crucial positive role in resident medico education.

The telegraphic review of literature on Nurse Practitioners and medical man Assistants in Acute and important Care (Ruth M Kleinpell , W Henry M. Robert Grabenkort , April N Kapu , Roy Constantine , Corinna , Sicoutris . 2019)<sup>5</sup> knowledge pertaining 5 systematic reviews, four literature reviews, and forty four individual studies were known, reviewed, and critiqued the utilization of nurse practitioners and medical man assistants, jointly known as advanced follow suppliers, in unit and acute care settings, assessing a spread of effects of advanced follow supplier care, as well as length of keep, mortality, and quality-related metrics, with a majority demonstrating improved patient care outcomes.

An empirical study on registered nurse role to boost care to infarction Patients and Patients Undergoing surgery (M. A .M Wit , A. J .C M Bos-Schaap, R .W. M Hautvast, A. A. C .M Heestermans, V.A .W. M Umans 2012) half-dozen the registered nurse diode operative care unit of registered 1967 patients . These patients were transferred at a mean of five.<sup>5</sup> days once their bypass operation. All patients had a run of the mill clinical course in hospital and were discharged alive. Study confirms that a nurse-led operative care unit and post-ACS care unit is possible and effective for the treatment of infarction Patients and Patients Undergoing surgery patients.

A retrospective chart review was conducted on medical man Assistants Contribution to Emergency Department Productivity at a tertiary Emergency Department (Christopher Brook, Alexandra Chomut, and Rebekah K.

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Jeanmonod(2012)<sup>7</sup> specializing in 100 sixty PA shifts were enclosed. Shifts ranged from four to thirteen hours. Mean productivity was one.16 patients per hour (95% confidence interval [CI] = one.12–1.20). Medical man assistants generated a mean of two.35 relative price units (RVU) per hour (95% CI = one.98–2.72). Medical man assistants at this establishment see one.16 patients per hour, and generate a pair of.35 RVUs per hour. Productivity of medical man assistants square measure not wedged by shift length or changes in volume within the ED, however PA famed to statistically have higher volume, to soak up the additional patients.

A systematic review of the Effectiveness of Advanced follow Nurses in long-run Care (Faith Donald , Ruth Martin-Misener, urban center Carter, et. all 2013)<sup>8</sup> conducted on effectiveness of advanced follow nursing roles, clinical nurse specialists and nurse practitioners, in meeting the tending desires of older adults living in long-run care residential settings. It states advanced follow nurse's square measure related to enhancements in many measures of health standing and behaviors of older adults in long-run care settings and in family satisfaction.

A Potential Analysis on Advanced follow Nursing (APN) for Persons With insanity Living in long-run Care Facilities (Sabine Koch , Steffen Fleischer 2018)<sup>9</sup> showed a possible advantage of master-level geriatric advanced follow nurses (GAPNs) regarding the individuals with insanity in long-run care support improved nursing outcomes.

Pertaining to their role by Advanced Practise Nurses in lecturers . The RN (NP) unaccustomed a complicated role in a very specialty apply might realize the orientation amount difficult whereas increasing his or her skilled content. The medicine RN net Education Resource (ONc-PoWER), a web-enhanced continued education program, provides coaching for each the medicine NP (ONP) unaccustomed cancer care (Rosemary L. Hoffmann, Sara Klein, Virgin Mary Maureen Catherine Connolly and Margaret Quinn Rosenzweig (2018)<sup>10</sup> a complete of 103 dyads (i.e., a replacement ONP and his or her mentor) were recruited from twenty seven states to participate in ONc-PoWER, and seventy nine dyads completed surveys to guage the program. it had been discovered a applied math significance ( $p = .000$ ) between pre- and post-program self-assessment of cancer care data and confidence in delivering cancer care among ONP. Mentor agreement regarding whether or not or not the ONPs were able to with success perform thirty core clinical skills ranged from an occasional of ninety three to a high of 100 percent. what is more, mean variant the course satisfaction survey demonstrate that every medicine RN net Education Resource (ONc-PoWER) objective was met and it exceeded the learners expectations.

As advanced apply nurses (APNs), NPs ar unambiguously positioned to steer associated participate in analysis that's an proof that supports their advanced apply environments. Nurse practitioners ar needed to have interaction in evidence-based apply (EBP) and maintain clinical ability (Leah K. Lambert. Laura M. Housden. 2017) <sup>11</sup>. Nurse practitioners ar registered nurses World Health Organization have completed

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further education, typically at the Master's level, associated and able to add an dilated scope of apply (Donald et al., 2010; Kaasalainen et al., 2010)<sup>12</sup> . This includes the power to diagnose, write prescriptions, order laboratory tests, and refer patients to specialists (Sangster-Gormley, 2016)<sup>13</sup>.

A comprehensive and systematic review on The Impact of the Advanced apply Nursing Role on Quality of Care, Clinical Outcomes, Patient Satisfaction, and value within the Emergency and important Care Settings (Brigitte Fong Yeong Woo, shrub Xin Yu Lee, Wilson Wai San tam-o'-shanter.2017) <sup>14</sup> . This review suggests that the implementation of advanced apply nursing roles within the emergency and important care settings improves patient outcomes, which may be fruitfully be utilised in supplying, facilitating the increase in demand for health care services.

### **Evidences Supporting Promising Way Forward for Advanced Apply Nurse**

With the approaching rise in demand for health services, a good utilization of the force is predominate to make sure high-quality however cost-efficient health service delivery. One potential live may be a bigger utilization of nurses prior to apply. the world annual growth of the RN (NP) force has been calculable to be between 3 to nine fold bigger compared to physicians; so, of interest to health policymakers is that the utilization of NPs and advanced apply nurses (APNs)<sup>14</sup> . The literature supporting recommendations for APN in health care delivery system is down listed.

Randomized trials evaluating the outcomes of nurses operating as substitutes for doctors in medical aid (Miranda Laurant, Mieke van der Biezen, Nancy Wijers, Kanokwaroon Watananirun, Evangelos Kontopantelis, Anneke Jah van Vught . 2018) <sup>15</sup>. For this review, eighteen irregular trials were known and evaluated the impact of nurses operating as substitutes for doctors. This review shows that Nurses most likely attain higher levels of patient satisfaction, compared to medical aid doctors. What is more, consultation length is perhaps longer once nurses deliver care and therefore the frequency of attended come visits is perhaps slightly higher for nurses, compared to doctors.

The use of advanced apply suppliers (APPs), like nurse practitioners and Dr. Assistants, has big well in medical specialty practices. In hospital settings, they supply continuity of care, particularly for practices that rotate physicians into hospital services on a periodic basis. A Single-Center randomised Controlled Trial on Comparisons of Screening endoscopy Performed by a RN and Gastroenterologists (Michele Limoges-Gonzalez , Nirmal Singh Mann, Amar Al-Juburi, David Tsen , John Inadomi , Lorenzo Rossaro 2011) sixteen The GI-NP cluster had a better nonmalignant tumor detection rate compared with the combined GI-MD teams (42% and 17 November, severally,  $p = .0001$ ) and a better satisfaction score compared with the combined GI-MD teams (mean  $5.9 \pm 13.81$  and  $8.6 \pm 16.11$ , severally,  $p = .042$ ; visual analog scale 0-100 metric linear unit, "0" = fully happy, "100" = fully dissatisfied). there have been no immediate complications according in any cluster. The properly trained GI-NP in our study



performed screening endoscopy as safely, accurately, and satisfactorily because the GI-MDs. mistreatment well-trained NPs for screening endoscopy may be a good strategy to extend access to body part screening.

The nursing profession wants leaders in the least levels; ward, administration associated govt and in an era during which there's a shortage of social unit nurses, nursing leadership is very important, as positive leadership skills correlate with increased accomplishment and retention of those specialist nurses.20A qualitative descriptive methodology hip to by a well-established leadership framework was wont to explore advanced apply nurses' perceptions of their leadership. Purposive sampling of advanced applies nurses operating in tertiary acute care facilities. (Alyson Lamb, Ruth Martin-Misener, Denise Bryant-Lukosius, Margot Latimer. 2018)17 . Information sources enclosed face-to-face interviews and document analysis. 2 main themes were identified: "Patient-focused leadership" and "organization and system-focused leadership". These 2 themes ar more delineate through leadership domains and capabilities that clearly articulate advanced apply nursing leadership and its contribution to rising the care atmosphere for patients and families, nurses and different tending suppliers, organizations and therefore the tending system.

## Conclusion

Capitalizing Advanced apply Nurses to extend patients' access to Health by suggests that of prime quality care is appealing. This review supports APN's benchmark roles in numerous areas highlight their potency, efficacy, leadership domains and capability to supply quality health care atmosphere

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**Conflict of Interest:**

No conflict of interest has been declared by the authors.



## SELF CONCEPT OF VISUALLY CHALLENGED STUDENTS IN RELATION TO THEIR GENDER & LOCATION

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### **Abstract**

Self-concept is the mental and conceptual understanding. It is a persistent regard that sentient being hold for our own existence. Self Concept refers to self evaluation or self perception, and it represents the sum of an individual's beliefs about his or her own attributes. Self-concept reflects how an adolescent evaluates himself or herself in domains (or areas) in which he or she considers success important. The present study was conducted on 100 visually challenged students from Hyderabad and Medchal districts of Telangana State. The result reveals that there was a significant difference in self concept among visually challenged students with respect to gender and location.

**Keywords:** Self Concept, Visually Challenged Students.

### **Introduction**

Self Concept refers to self evaluation or self perception, and it represents the sum of an individual's beliefs about his or her own attributes. Self-concept reflects how an adolescent evaluates himself or herself in domains (or areas) in which he or she considers success important. Self-concept is the mental and conceptual understanding. It is a persistent regard that sentient being hold for our own existence. In other words, it is the sum total of being knowledge and understanding of his and herself. The self-concept is different from self- consciousness. Self-consciousness is awareness or pre- occupation with one's self whereas, self-concept is the vehicle of our symbolic behavior about what we think, understand, reason and judge up to which great extent i.e., it is controlled by our own concepts. It is therefore, regarded as the most vital tool of our thoughts and expressions. For an example: the child's mental and social development is very much influenced and controlled by the adequacy or non-adequacy of his concepts about things, persons, events and phenomena. His/ her concepts bring economy to his thinking, reasoning and problem solving behavior and help him much in acquiring the knowledge and skill with ease. An adolescent can have a positive self-concept in some domains and a negative self-concept in others. Research also suggests that each individual has a global (or overall) self-concept that reflects how the individual evaluates his or her self-worth as a whole.

An adolescent can make targeted self-evaluations in a number of different domains.



**The following eight domains that make up an adolescent's self-concept:**

- ❖ Scholastic competence
- ❖ Athletic competence
- ❖ Physical appearance
- ❖ Peer acceptance
- ❖ Close friendships
- ❖ Romantic relationships
- ❖ Job competence
- ❖ Conduct/morality

An adolescent's self-concept is dynamic, and causality is complex. Adolescents, having a high academic self-concept are associated with positive academic performance and having a high physical self-concept are related to increased physical activity, for example.

Positive overall self-concepts have been linked to various markers of positive development, including positive peer relationships and overall happiness. Having an overall negative self-concept in adolescence has been associated with depression, drug use, and eating disorders in girls. Both male and female adolescents struggle with negative self-concepts, but female adolescents tend to worry more about physical appearance than do males. Additionally, Black adolescents tend to have more positive self-concepts than do their white counterparts.

**Signs of negative Self Concept in Adolescents**

Several signs may indicate that an adolescent has a negative self-concept. These may include one or more of the following:

- ❖ Doing poorly in school;
- ❖ Having few friends;
- ❖ Putting down oneself and others;
- ❖ Rejecting compliments;
- ❖ Teasing others;
- ❖ Showing excessive amounts of anger;
- ❖ Being excessively jealous;
- ❖ Appearing conceited; or
- ❖ Hesitating to try new things

**Objectives of the Study**

1. To study the Self Concept among children with visual challenged with respect to gender.
  2. To study the Self Concept among children with visual challenged with respect to location.
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### Hypothesis of the Study

**Hypothesis – 1:** There will be no significant difference between Self Concept among children with visual challenged in relation to their gender.

**Hypothesis – 2:** There will be no significant difference between Self Concept among children with visual challenged in relation to their location.

### Sample of the Study

Survey method was adopted. Sample was selected in two phase.

- ❖ Selection of districts
- ❖ Selection of students (8th & 9th)

**Selection of districts:** In Telangana there are 33 districts. Out of which two districts were chosen viz. Hyderabad and MedchalMalkajgiri.

**Table:**Showing selected sample “District wise”

<i>S.No</i>	<i>District</i>	<i>Number of Students</i>
1	Hyderabad	50
2	MedchalMalkajgiri	50
<b>Total</b>		<b>100</b>

**Selectionofstudents:** Students were selected from 4 schools. From each school students studying in 8th& 9th class were selected. Thus, total students sample was 100.

### Tool of the Study

**Self Concept Scale:** The scale was developed by Dr. S. P. Ahluvalaya (2012). The scale consists of 80 item with 2 alternative response varying from Yes or No, each to be rated on 2 point scale. The maximum and minimum score obtained in the scale are 80 and 0 respectively. There reliability and validity were higher.

### Analysis and Interpretation

**Hypothesis – 1:** There will be no significant difference between Self Concept among children with visual challenged in relation to their gender.

To test the above hypothesis t-test was employed to test the sample.

**Table 1:** Distribution of scores gender wise

Self Concept	Gender	N	Mean	SD	t	Sig.	Df
	Boys	50	40.11	3.78			
	Girls	50	42.54	4.05			
	<b>Total</b>	<b>100</b>	<b>41.32</b>	<b>3.91</b>			





The above table gives the self concept of visually challenged students with respect to gender. From the above table, the mean score obtained for boys was 40.11 and girls was 42.54. The obtained t value 8.55 with a df of 1, 98 was found to be statistically significant at 0.05 level of significance. On the basis of this, the Hypothesis - 1 stated as 'There will be no significant difference between Self Concept among children with visual challenged in relation to their gender' is rejected. Majority of the sample was clear in accepting the significant role of gender in the self concept among visually challenged students.

**Hypothesis – 2:** There will be no significant difference between Self Concept among children with visual challenged in relation to their location.

To test the above hypothesis t-test was employed to test the sample.

**Table 2:** Distribution of scores medium wise

	Location	N	Mean	SD	t	Sig.	Df
Self Concept	Urban	50	42.88	5.44	2.651	0.87	1, 98
	Rural (Semi-Urban)	50	43.62	4.31			
	<b>Total</b>	<b>100</b>	<b>43.25</b>	<b>4.87</b>			

From the above table, the mean score obtained for English medium students were 42.88, and for Telugu medium students were 43.62. The obtained t value 2.651 with a df of 1, 98 was found to be statistically not significant. On the basis of this the Hypothesis - 2 stated as 'There will be no significant difference between Self Concept among children with visual challenged in relation to their location' is **accepted**. Majority of sample were clear in not accepting the significant role of location in the self concept among visually challenged students..

### Findings

1. There is a significant difference in the Self Concept among visually challenged Students with respect to gender.
2. There is no significant difference in the Self Concept among visually challenged Students with respect to location.

### Conclusion

Self-concept reflects how an adolescent evaluates himself or herself in domains (or areas) in which he or she considers success important. Self-concept is the mental and conceptual understanding. It is a persistent regard that sentient being hold for our own existence. In other words, it is the sum total of being knowledge and understanding of his and herself. The result of the study reveals that there is a significant difference with respect to gender whereas there exists no significant difference with respect to location in the self concept among visually challenged Students.



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## SPECIFIC LEARNING DISABILITY

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### ABSTRACT

Specific learning disability (SLD) affects learning in individuals. It is a disorder affecting the process of individual understanding and usage of language. The assessment of the children intelligence quotient (IQ) has limitations to assess specific learning disabilities. Teacher's assessments of academic abilities are equally important. Slow learners are not disabled. They have limited ability to deal with abstract ideas and symbolic materials. A delay occurs when the child falls outside the norms of expected development. If the delay is deep-seated and pervasive, the child is said to have a disorder. The specific developmental disorders need special attention from the parents and caregivers for the easy resolution of the associated problems in their education.

**Keywords:** Specific Learning Disability, Intelligence Quotient, Slow Learners

### INTRODUCTION

Specific learning disability is a neuro developmental disability. Specific learning disability affects learning in individuals who otherwise demonstrate normal levels of intellectual functioning. One essential feature of specific learning disability is persistent difficulties learning keystone academic skills. A difficulty causes a task take longer time or require more effort to complete, whereas a disability blocks the functioning of the task. A person with disabilities might have a mental impairment which affects their learning.

### DEFINITION

SLD is a disorder in one or more of the basic psychological processes involved in understanding of using language, spoken or written that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. It is not simply a consequence of lack of opportunity of learning or inadequate instruction<sup>1</sup>

### CAUSES

#### Genetic

Congenital brain abnormalities Children who have a parent with a learning disability are more likely to develop a learning disability themselves



**Fetal causes**

Low birth weight babies, babies born with prolonged labour, fetalexposue to alcohol or drugs, lack of oxygen to the brain during birth

**Environmental Influences**

Exposure to Smoking, lead paint, pesticides illegal drugs Alcohol or drug use, can put a child at higher risk for a learning problem or disability, suffocation/drowning can cause air loss and it can delays or prevent development in child

**Malnutrition-** Lack of nutrients in fetal life and early months of growthChronic illness

**INTELLIGENCE**

Mental age / Chronological age X 100 = Intelligence quotient

- One measure of intelligence is *Intelligence Quotient* (IQ)
- It is determined by standardized test
- There are limitations to the IQ score - it measures the current level of intelligence but not the intellectual capacity.
- Assessment of children should not solely depend on IQ tests. Teacher’s assessments of academic abilities are equally important.
- An intelligence of an SLD child is >90

IQ	Classification
>130	Very superior
120 -129	Superior
110 -119	High average
90 -109	Average
80 - 89	Low average
70 -79	Borderline

**Slow learners**

A slow learner learns at a slower pace compared to the children of their age. Slow learners are not disabled. They have limited ability to deal with abstract ideas and symbolic materials<sup>2</sup>.

Characteristics of a slow learner:

- Limited cognitive capacity
- Poor memory
- Difficulties in expressive speech
- Poor attention and concentration
- Social adaptation
- IQ between 70 and 85



How it looks like in a child?

- Takes longer time to complete tasks
- Have limited capacity for reasoning
- Need instruction to be repeated
- Score consistently low in most academic subjects
- Have challenges expressing themselves
- Better performer when individual help is given
- More likely to forget that had been taught recently

### **TYPES OF SLD**

- ❖ Disorders of language.
- ❖ Disorder of reading
- ❖ Disorder of written language
- ❖ Disorder of mathematics

### **DISORDERS OF LANGUAGE**

Receptive language

- The ability to understand verbal language. Difficulty in this area is also called as word deafness, sensory aphasia and auditory verbal agnosia.
- Its difficult for children to discriminate between speech sounds, poor understanding of word meanings and grammar.
- They have difficulty associating names with objects, naming them, recalling the names and interpreting environmental language<sup>3</sup>

Expressive language

- The ability to use language to communicate with others
- Children with difficulty in expressive language areas may comprehend but have difficulty expressing their thoughts and ideas.
- The children might also have motor difficulties and spontaneous speech may be limited

### **DISORDERS OF READING – DYSLEXIA**

Dyslexia is a term referring to a specific difficulty in the area of reading.<sup>3</sup>

- The term “dys” means difficult and “lexia” means words, together dyslexia means difficulty reading.
- Dyslexia is a specific learning disability that is neurological in origin which is characterized by difficulties with accurate/fluent word recognition and by poor spelling and decoding abilities.



- Some early indicators of dyslexia are delay in speaking, difficulty pronouncing words, less sensitive to rhyme, struggle to find precise label and difficulty learning the names of letters and their sounds.
- Reading is considered by many researchers to be the most complex function we require our brains to perform.
- Dyslexics often see the letters three-dimensionally, as if they were floating in space

#### *Early indicators of dyslexia*

Trouble in learning the letters of the alphabet

- Lack of grasp of rhyme
- Mispronouncing words
- Difficulty naming objects
- Slow progress in reading
- Difficulty reading from board
- Making numerous reading errors
- Poor spelling
- Oral performance better than written
- Fear of reading aloud
- Poor spelling

*What dyslexia looks like in a child?*

Inaccurate *reading* — omissions, distortions, reversals and substitutions in parts of words<sup>4</sup>

Difficulties in *spelling* — phonological errors (do/dog, sick/stick), orthographic errors (bick/back, hav/have), orthographic image errors (rane/rain, boyl/boil), morphological errors (smild/smiled, happy/unhappy), Transposition errors (nad/and, mta/mat)

Slow reading — reads word by word or sometimes even letter by letter.

Poor reading *comprehension* — poor decoding causes poor comprehension skills

## **DISORDER OF MATHEMATICS – DYSCALCULIA**

The term “dyscalculia” refers to all kinds of learning challenges related to math. Dyscalculia literally means difficulty with calculation.

- Children with dyscalculia have difficulty with story problems, reverse the numbers, poor digit memory, struggling to tell time, poor number concept, difficulty learning tables
- The grass-hopper and inch-worm theory explains individual differences.



*The qualitative-learner*, also called grasshopper. Need to see the whole of a concept first and learns in a disordered manner, may miss an important part. The child can see the whole, but fails to understand the parts that make the connection<sup>5</sup>

*The quantitative-learner*: cannot see the whole until the child has clarity with the parts. Takes one careful step at a time and hence called inchworm<sup>6</sup>

*Key features of dyscalculia*

Poor number sense and reduced ability to count or use of immature counting strategies

- Poor sense of number size, estimation and approximate calculation
- Limited procedural knowledge(calculations and operations)
- Reliance on laborious strategies for arithmetic i.e. counting using fingers
- Inability to grasp and remember mathematical concepts, rules and sequence
- Poor knowledge of place value
- Poor reasoning
- Difficulties with language of mathematics
- Inadequate problem-solving skills

### **Dyscalculia can be grouped into 6 categories**

*Verbal dyscalculia* - difficulty with verbal use of mathematical terms and symbols

- *Practognostic dyscalculia* - inability to recognize distinguishing features or to make comparisons of objects that vary on some dimensions - e.g. size
- *Lexical dyscalculia* - difficulty reading digits, symbols or multi-digit numbers
- *Graphical dyscalculia* - difficulty writing dictated numbers or copying symbols
- *Ideognostical dyscalculia* - difficulty comprehending mathematical ideas and making mental calculations
- *Operational dyscalculia* - difficulty operating basic operations of addition, subtraction and so on, including confusion among operations and the appropriate algorithm for each

### **DISORDERS OF WRITTEN LANGUAGE - DYSGRAPHIA**

Writing is the most important form of communication. Disorder in written language refers to dysgraphia which includes handwriting, spelling and content. Handwriting errors are caused by lack of developmental readiness, visual-perceptual weakness and confusion with directionality. The absence of pre-writing skills is also a major reason why some children fail to write quietly. Poor writing may also be identified as disorders of visual perception, failure to integrate the visual image of the letter with correct motor response, poor efficiency and control of the intrinsic muscles in the hand, faulty motor memory, difficulty perceiving the spatial requirements of a task<sup>6</sup>



### *Common Errors*

- The five most difficult letters - q, g, p, y and j
- The letters n, d, q and y were frequently written wrong
- The letter m was the most difficult of the non-descending letters
- Incorrect relationships of the letter parts was greater in letters k, r, and m than in any other letter
- The most frequent error in letter U was incorrect relationship of parts (partial omission)
- The inversion error occurred in the letter G The easiest letters were l, o, L, O and H
- Errors in the letter a were mainly due to incorrect size and relationship of the large arc to the vertical line
- Boys were more prone to errors than girls
- The next ten most difficult letters were: R, D, Y, u, M, S, b, e, r and Z

### **DEVELOPMENTAL HIERARCHY OF WRITING TASKS**

- ❖ Scribbling
- ❖ Tracing
  - Connected letters or figures
  - Disconnected letters or figures
- ❖ Copying
  - From a model
  - From a memory
  - Symbolic and non-symbolic
- ❖ Completion tasks
  - Figure
  - Word completion - supply missing letters
  - Multiple choice
  - Recall
  - Sentence completion
- ❖ Writing from dictation
  - Writing from letters as they are spoken
  - Writing words and sentences
  - Supply missing word
  - Supply missing sentence
- ❖ Propositional writing

### *Key features of dysgraphia*

- Inconsistency in letter formation. Mixture of upper and lower case letters, print and cursive letters
- Unfinished words or letters
- Improper use of lines and margins
- Lots of erasures





- Errors in spelling
- Inconsistent space between letters and words
- Illegible writing and poor composition of text
- Slow copying or writing<sup>7</sup>

## CONCLUSION

The inability to complete a task does not imply a disability it implies a difficulty. Inability must be caused by some defect which prohibits completion. A delay occurs when the child falls outside the norms of expected development. If the delay is deep-seated and pervasive, the child is said to have a disorder. The specific developmental disorders needs special attention from the parents and caregivers for the easy resolution of the associated problems in their education

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## IMPACT OF CLASSROOM CLIMATE ON PERSONALITY DEVELOPMENT OF SECONDARY SCHOOL STUDENTS

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### ABSTRACT

The school is a powerful agency in the development of behaviour of the child. It is a miniature of society in which children live, make interactions, get all round development, get socialized and perform mostly function under the supervision of their teachers or instructors. The school is a formal socializing institution which differs from the family. The development of child is influenced by various factors of school like physical development, moral development, emotional development, intelligence level, environment, population, socio economic condition, nutrition, age, type of schools, language, customs, beliefs, rituals, caste, religion, colour and most importantly its social culture & festivals. The present study was undertaken to study the academic stress and academic achievement of government and private secondary school students. The sample of the study comprised of 200 (101 from government and 99 from private) secondary school students which were selected randomly from 05 schools of district Patna, Bihar. For Classroom climate, Self-constructed and validated Classroom Climate Inventory is used and For Personality Development Self-constructed and validated PDI tool is used. Results revealed that there is no significant difference of classroom climate and personality development on the basis of Gender and types of schools.

**Key words:** Classroom Climate, Personality Development, Impact, Secondary School, Government School, Private School, Gender, Patna, Bihar, India

### INTRODUCTION

Education is an integral part of human beings right from the early generation. It is a pivotal means of bringing about the all-round development in an individual. It is an education which makes an individual distinct from any other beings living in the world. Education enables human beings to be considered as a rational being. Man by nature possesses innumerable potentialities and natural endowments. These endowments and natural potentialities gifted by supreme soul found remain in an inactive state is out by the means of education. An individual becomes active and energetic to carry out his every duty and responsibility in a sound and healthy way.

Education is an essential basis of good life. It has developed tremendously the way of living as a science, social science, agricultural science and so on due to the dynamic progress. Hence we can say that education is a pivotal means of bringing about the all-around development in an individual. By education we mean an attempt to give some desirable knowledge, understanding, skills, interest, attitude and critical thinking of an

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individual where he or she acquires knowledge of history, geography, arithmetic, languages and science. He develops some understanding about the deeper things in life, the complex of human relations. He gets an opportunity to develop the skills of writing, speaking, reading, drawing and operating some equipment. He develops some interest in an attitude towards social works, democratic living and co-operative management in the society. Thus, we can say education makes man distinct from animalism. It is an issue that touches everyone, personally, professionally, and as citizens of our respective nations and the world. Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits. Educational methods include teaching, training, storytelling, discussion and directed research. Education frequently takes place under the guidance of educators; however learners can also educate themselves.

### **CLASSROOM CLIMATE**

‘Classroom Climate’ sometimes is referred to as the learning environment, as well as by terms such as atmosphere, ambience, ecology, and milieu. The Impact of classroom climate on students and staff can be beneficial for or a barrier to learning regarding definitional considerations, Classroom climate is a perceived quality of the setting. It emerges in a somewhat fluid state from the complex transaction of many immediate environmental factors (e.g., physical, material, organizational, operational, and social variables). Both the climate of the classroom and the school reflect the influence of a school's culture, which is a stable quality emerging from underlying, institutionalized values and belief systems, norms, ideologies, rituals, and traditions. And, of course, classroom climate and culture both are shaped by the school's surrounding and embedded political, social, cultural, and economic contexts (e.g., home, neighbourhood, city, state, country).

Key concepts related to understanding classroom climate include (a) social system organization, (b) social attitudes, (c) staff and student morale, (d) power, control, guidance, support, and evaluation structures, (e) curricular and instructional practices, (f) communicated expectations, (g) efficacy, (h) accountability demands, (i) cohesion, (j) competition, (k) the "Fit" between key learner and classroom variables, (l) system maintenance, growth, and change, (m) orderliness, and (n) safety.

Rudolph Moos (1979) groups such concepts into three dimensions for classifying human environments and has used them to develop measures of school and classroom climate. Moos's three dimensions are

- Relationship -- the nature and intensity of personal relationships within the environment-, the extent to which people are involved in the environment and support and help each other.
  - Personal development -- basic directions along which personal growth and self enhancement tend to occur.
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- System maintenance and change -- the extent, to which the environment is orderly, clear in expectations, maintains control, and is responsive to change.

The concept of classroom climate implies the intent to establish and maintain a positive context that facilitates classroom learning, but in practice, classroom climates range from hostile or toxic to welcoming and supportive and can fluctuate daily and over the school year. Moreover, because the concept is a social psychological construct, different observers may have different perceptions of the climate in a given classroom. Therefore, for purposes of his early research, Moos (1979) measured classroom environment in terms of the shared perceptions of those in the classroom. Prevailing approaches to measuring classroom climate use (1) teacher and student perceptions, (2) external observer's ratings and systematic coding, and/or (3) naturalistic inquiry, ethnography, case study, and interpretative assessment techniques (Fraser, 1998; Freiberg, 1999).

### **Importance of Classroom Climate**

Classroom climate is seen as a major determiner of classroom behaviour and learning, Understanding how to establish and maintain a positive classroom climate is seen as basic to improving schools. Research suggests significant relationships between classroom climate and such matters as student engagement, behaviour, self-efficacy, achievement, and social and emotional development, principal leadership style, stages of educational reform, teacher burnout, and overall quality of school life (Fraser, 1998; Freiberg, 1999).

For example, studies report strong associations between achievement levels and classrooms that are perceived as having greater cohesion and goal-direction, and less disorganization and conflict. Research also suggests that the impact of classroom climate may be greater on students from low-income homes and groups that often are discriminated against. Given the nature of classroom climate research, cause and effect interpretations remain speculative. The broader body of research on organizational climate does suggest that increasing demands for higher achievement test scores and reliance on social and tangible rewards to control behaviour and motivate performance contribute to a classroom climate that is reactive and over-controlling (Mahony&Hextall, 2000).

### **PERSONALITY**

The word “personality” has been derived from the Latin word “persona” which means a mask worn by an actor while performing a character on the stage. Thus personality is taken to mean the characteristic pattern or style of behaviour of the person revealed from his external appearance. The external properties of a person include his dress, speech, bodily actions, postures, habits and expressions. Thus a person endowed with good external properties is considered to possess a good personality and vice versa. Personality is the unique combination of patterns that influence behaviour, thought,

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motivation, and emotion in a human being. An individual's personality is the combination of traits and patterns that influence their behaviour, thought, motivation, and emotion. It drives individuals to consistently think, feel, and behave in specific ways; in essence, it is what makes each individual unique. Over time, these patterns strongly influence personal expectations, perceptions, values, and attitudes.

Personality is the dynamic organisation with in the individual of those psychophysical systems that determine his unique adjustment to his environment. (Allport, 1938).

Personality is the more or less stable and enduring organisation of a person's character, temperament, intellect and physique that determine his unique adjustment to his environment.

Following Fiske's research, there were attempts by other researchers including Norman (1967), Smith (1967), Goldberg (1981), and McCrae & Costa (1987). The "big five" are broad categories of personality traits. While there is a significant body of literature supporting this five-factor model of personality, researchers do not always agree on the exact labels for each dimension. However, these five categories are usually described as follows:

- I. **Extraversion:** This is also called as Assurgency. The broad dimension of Extraversion encompasses specific traits as talkative, energetic, and assertive. More specifically these include characteristics such as excitability, sociability, talkativeness, assertiveness, and high amounts of emotional expressiveness.
- II. **Agreeableness:** This factor includes traits like sympathetic, kind, and affectionate. It also includes attributes such as trust, altruism, kindness, affection, and other prosaically behaviours.
- III. **Conscientiousness:** This includes traits like organised, thorough, and painful tendencies. Common features of this dimension include high levels of thoughtfulness, with good impulse control and goal-directed behaviours. Those high in conscientiousness tend to be organised and mindful of details.
- IV. **Neuroticism:** This is sometimes reversed and called Emotional Stability. This dimension includes traits like tense, moody, and anxious. Individuals high in this trait tend to experience emotional instability, anxiety, moodiness, irritability, and sadness.
- V. **Openness to Experience:** This is also called as Intellect or Intellect/Imagination. This dimension includes traits like having wide interests, and being imaginative and insightful. Those high in this trait also tend to have a broad range of interests.



## SIGNIFICANCE OF THE STUDY

In today's context classroom plays an important role. A classroom is a hub of interaction which forms the basis for the prevailing environment in any classroom. The environment is a shaping and reinforcing sources which acts on the individual learning. At the same time every individual becomes the part or the component of the environment. Positive classroom climate can give a new way to the students to develop their personality and thereby achieve their goals for their future. Personality development helps you to develop an impressive personality and make you stand apart from the rest. Personality development also plays an essential role in improving one's communication skills. Individuals ought to master the art of expressing their thoughts and feelings in the most desired way. Personality development is the main aim of education and hence proper personality development is very essential in life. This study can help the teachers and the curriculum developers and school administrators. Therefore to know how much the classroom climate can help the students to have the maximum personality development the researcher has selected this topic.

## STATEMENT OF THE PROBLEM

“Impact of Classroom Climate on Personality Development of Secondary School Students”

## OPERATIONAL DEFINITIONS

### Personality Development

It is the development of the organized pattern of behaviour and attitudes that makes a person distinctive. Personality development occurs by the on-going interaction of temperament, character and environment. Operationally personality development is defined as the scores obtained by an individual by personality development inventory (PDI).

### Classroom Climate

Classroom climate is the classroom environment, the social climate, the emotional and the physical aspects of the classroom. Operationally classroom climate is defined as the scores obtained by an individual by classroom climate inventory (CCI).

### Secondary School Students

Secondary school students refer to those students who are studying in 9<sup>th</sup> and 10<sup>th</sup> standard.

## OBJECTIVES

- i. To find whether there is any significant difference in the perception towards classroom climate of secondary school boys and girls.
  - ii. To find whether there is any significant difference in the perception towards classroom climate between private and government secondary school students.
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### **HYPOTHESES**

- i. There will be no significant difference between the mean scores of secondary school students in their perception towards classroom climate on the basis of gender.
- ii. There will be no significant difference between the mean scores of secondary school students in their perception towards classroom climate between government and private secondary school students.

### **METHOD ADOPTED FOR THE PRESENT STUDY**

The researcher, in order to achieve the determined objectives of the study has adopted the survey method for the present study. Survey is a process in which data are collected scientifically from a population through some form of direct solicitation such as face to face interview, questionnaire or schedule.

### **POPULATION OF THE PRESENT STUDY**

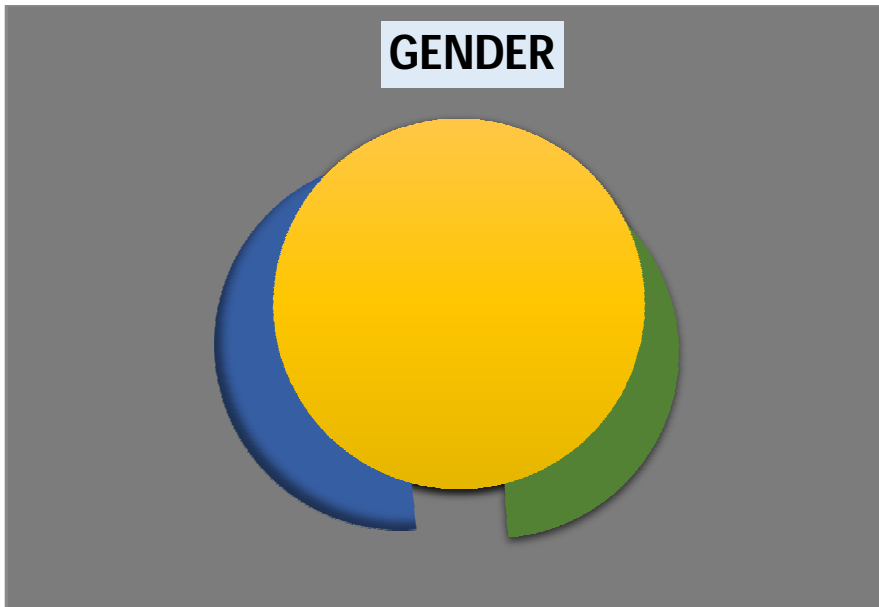
The population chosen for the study is the secondary school students (Class 1X and Class X students) of Patna studying in different school types. It includes the private, government and missionary schools of Patna.

### **SAMPLE OF THE PRESENT STUDY**

A sample of 200 students was selected through random sampling. The sample consisted of students from four secondary schools located in Patna. Among the sample, two schools government schools and other two are private schools. The samples were categorized on the basis of gender, medium of instruction, types of school and class they studied.

**Table No.1 DISTRIBUTION OF SAMPLE**

<b>Gender</b>	<b>Number of students</b>	<b>Percentage of students</b>
Male	104	52%
Female	96	48%



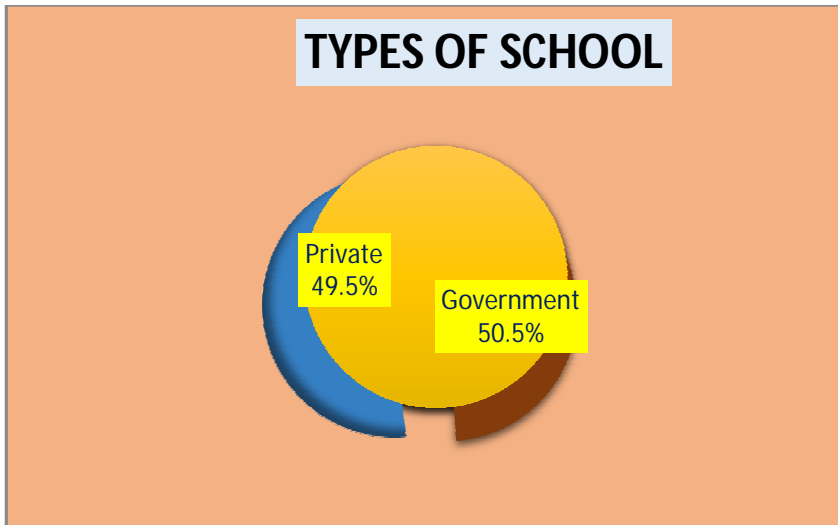
**Graphical representation of gender wise sample**

It is shown in the above table no.1 that the sample consists of 52% of boys and 48% of girls.

**Table No.2 School Type distribution of sample**

Type of school	Number of students	Percentage of students
Private	99	49.5%
Government	101	50.5%





**Figure no.2**Graphical representation of school type distribution of the sample

It is shown in the table 3.2 that, 49.5% of the secondary school students are from private school and 50.5% is from government school.

### **TOOLS USED IN THE STUDY**

A suitable research tool contributes to the validity of the findings of any research study. The sources of any research study depend largely on the nature of tool used. Factual materials and unknown facts are necessary for every study. This can be obtained from any sources, direct or indirect. It is necessary to adopt a systematic procedure to collect essential data. The researcher has used the following tools for the present study:

1. Self-constructed and validated Personality Development Inventory (PDI). (Appendix No.1)
2. Self-constructed and validated Classroom Climate Inventory. (Appendix No. II)

### **CLASSROOM CLIMATE INVENTORY**

A Classroom Climate Inventory was self-constructed by the investigator herself under the guidance of the supervisor. It was administered to find out the perception of Classroom Climate among the students. This tool has 30 items. Out of 30 items, 21 items were positive statements and 9 were negative statements. For positive statements, Items were given a score of 5, 4, 3, 2 and 1, and for negative statement items were scored as 1, 2, 3, 4, and 5 for strongly agree, agree, undecided, disagree and strongly disagree respectively.



## PERSONALITY DEVELOPMENT INVENTORY

A Personality Development Inventory was self-constructed by the investigator herself under the guidance of the supervisor. It was administered to find out the level of Personality Development among the students. This tool has 30 items and all the items in this tool are positive.

**Validity of the test** - For the validity of the test, the test items were given to the different subject experts. The validity of a tool was established by face validity. The experts established the face validity of the CCI. On the basis of their recommendation, the items were reconstructed.

**Reliability of the test** - Split half method was used to establish the reliability of the tool.

## SCORING PROCEDURE

Classroom climate inventory and personality development inventory was given to the sample of 200 secondary school students. The students were asked to tick the answer which they thought was most appropriate item. After the test was administered, each item was rated on five point scale. For positive statements, Items were given a score of 5,4, 3, 2 and 1, and for negative statement items were scored as 1, 2, 3, 4, and 5 for strongly agree, agree, undecided, disagree and strongly disagree respectively whereas personality development scale has 30 items, and all the items are positive.

## INTERPRETATION OF THE LEVEL OF CLASSROOM CLIMATE AND PERSONALITY DEVELOPMENT

The scores had been divided into two categories – High and Low Scores on the test. If the group is sufficiently heterogeneous the scores which are 1 S.D. above the Mean should denote the ‘High Personality Development Group’ and those which are 1 S.D. below the Mean should denote the ‘Low Personality Development Group’. The scores which fall between Mean  $\pm$  1 SD are considered to be average Personality Development. For interpreting the Classroom Climate of the students the scores which are 1 SD above the Mean should denote ‘high Classroom Climate group’ and the scores those are 1 SD below the Mean should denote ‘low Classroom Climate group’. The scores which fall between Mean  $\pm$  1 SD are considered to be average Classroom Climate.

**Ho1:** There is no significant difference between boys and girls of secondary school students in their perception towards classroom climate.

To test the differences t- test was applied and the results are shown in table 3.

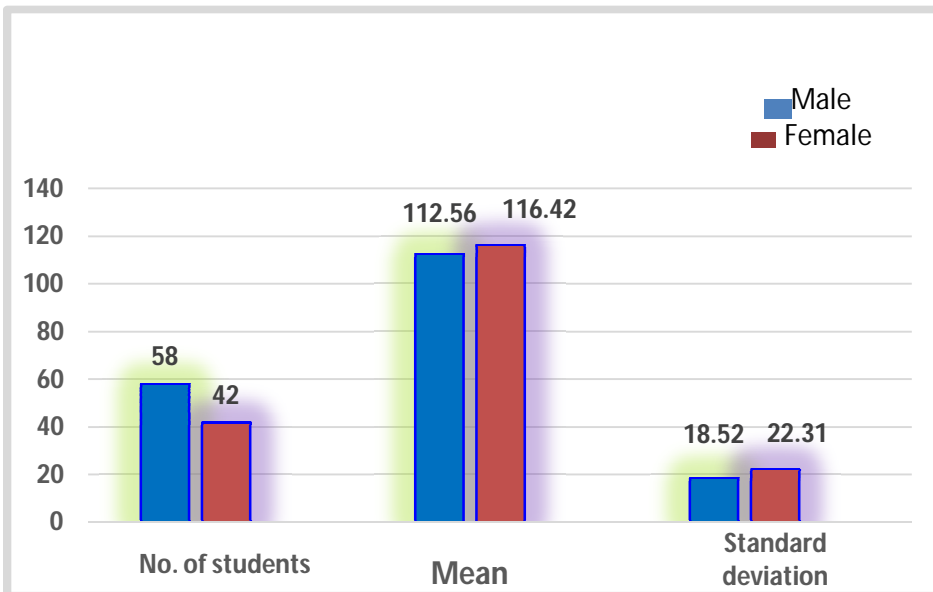
**TABLE NO. 3** Showing t- ratio Classroom climate of secondary school students on the basis of gender

Gender	N	Mean	S.D	t-ratio	Level of Significance
Boys	58	112.56	18.52	0.91	NS
Girls	42	116.42	22.31		

(At 0.05 levels of significance, the table value of t is 1.98)

It is inferred from the above table that the calculated t- ratio is 0.91 which is less than the table value 1.98 at 0.05% level of significance. Hence the null hypothesis **H01: “There is no significant difference between boys and girls of secondary school students in their perception towards classroom climate”** is accepted. It means that there is no significant difference between Male and Female secondary school students in their classroom climate. The graphical representation of N, Mean score and S.D of classroom climate of secondary school students on the basis of gender is shown in Fig. No.3

**FIGURE NO.3**



**Difference in Classroom Climate On The Basis Of Gender**

**Ho 2:** There will be no significant difference between government and private Secondary school students in their perception towards classroom climate.

To test the difference, t- test was applied and the results are shown in table 4.

TABLE NO. 4 Showing t- Ratio

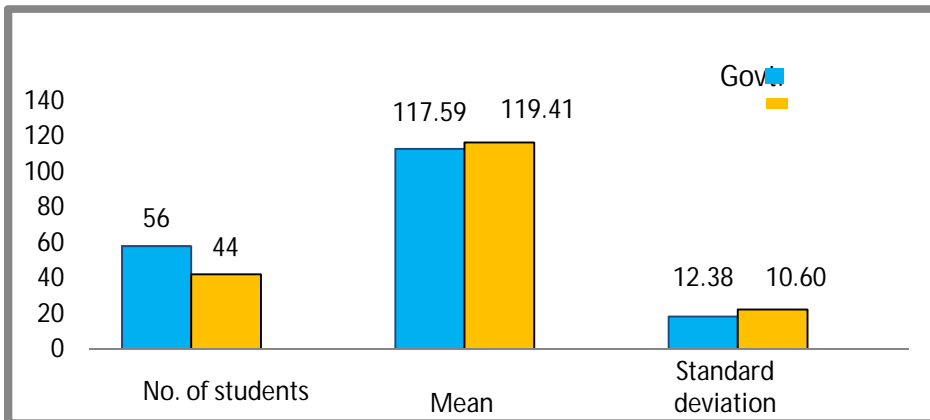
**Type of School Wise Classroom Climate of Secondary School Students**

Type of School	N	Mean	S.D	t-ratio	Level Of Significance
Govt.	56	117.59	12.38	0.79	NS
Private	44	119.41	10.60		

(At 0.05 level of significance, the table value is 1.98)

It is inferred from table No. 4 that t-ratio is 0.79 which is less than the table value 1.98 at 5% level of significance. Hence, the null hypothesis **H0 2: “There will be no significant difference between government and private secondary school students in their perception towards classroom climate”** is accepted. It means that there is no significant difference between government and private secondary school students in their classroom climate. The graphical representation of N, Mean score and S.D of classroom climate of secondary school students on the basis of gender is shown in Fig.No.4.

FIGURE NO.4



**Difference in the Perception towards Classroom Climate on The Basis of Types of School**



## **CONCLUSIONS**

On the basis of analysis and interpretation of the results it was found that there is a significant positive relationship between classroom climate and personality development of secondary school students. Hence, it can be concluded that classroom climate affects personality development of the students. Creating a conducive environment in the classroom can enhance the socio-emotional climate. Teachers should make all possible efforts to provide a pleasant and stimulating environment for the students. Students feel more secure in such environment and it can help them in enhancing their personality.

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**Barelwi Ulama and Issue of Dar al-Harb: Is Ahmed Raza Khan Barelwi in line with the ‘Dar al-Harb’ (house of war)?**

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**Abstract**

The paper attempts to look at the issue of Dar al-Harb and its position by the Barelwiulama especially Ahmed Raza Khan Barelwi. The main objective of this paper is to explore the debate on the issue of Dar al-Harb and Dar al-Salam and what is the position by various nationalist leaders. The paper argues that Ahmed Raza fatwa based on the Hanafi jurisprudence, that Hindustan was Dar al-Islam during the time of British India and by no means of Hindustan was Dar al-Harb. He stoutly rejected the issue of dar al-aman, and he found that there was no place for dar al-aman in Hanafifiqh. In addition, he expounds that three pertinent things needed to take dar al-harb from dar al-Islam. It is one of these conditions, where continue idol worship and Sharia practice is stopped by the authority.

**Keywords:** Dar al-Harb, Dar al-Salam, Fatāwá, Nationalist Leaders, Ahmed Raza Khan Barelwi.

**Introduction**

The 1919-1920 was the crucial period for the Ahmed Raza Khan Barelwi. On the one side, Barelwiulama were intentionally corroborated the Khilafat and deliberately rejected non-cooperation movement, and on the other side, they tried to prove that whether Hindustan is dar al-Islam (abode of Islam) or dar al-harb (house of war). The issue came to limelight, when Shah Abdul Aziz (1745-1823) was issued a fatwa; concerning that Hindustan is a dar al-harb, in which he declared that interest (*munāfa*) as the correct practice in accordance with the Hanafi jurisprudence. Shah Abdul Aziz gave fatwas that India was no longer “Dar al-Salam, but was Dar al-harb. And that it was duty to every Muslim to expel the intruders (Khalid, 1973:73). The pith of Shah Abdul Aziz argument was: British India is dar al-harb, and therefore Hijrat from India is not mandatory. He writes in his *Fatāwá-Azizia*;

‘As far as the issue of interest (*munāfa*) in the dar al-harb is concern, it is not unlawful between the Muslim and infidel. It is legitimate to accept interest from infidels, and even to keep the goods and property of the infidels is also lawful. In case, it should not be suspicion and breach of agreement when taking property and goods from infidels.....that’s not case the followers of Islam have already promised with the infidels that it will not take goods and property as unlawfully. In such a situation, if it takes goods illegally from infidels, it will be a breach of trust. Therefore, in the land of dar al-

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harb, it is lawful to take interest (*munāfa*) from infidels and to give interest (Aziz, 1978: 580-88).

Individuals like, ShibliNu'mānī (1857-1914) not only agreed with Shah Abd al-Aziz's famous fatwa that India is *dar al-harb* and *ribā* is lawful in it, but also wrote an independent treatise on this subject in which he went one step further and argued that bank interest (*munāfa*) is not usury (*sūd*) (Murad, 1996:87). Sayyid Ahmed Bareilwi has continued endorse that India was *dar al-harb*, but after the 1870, he avoided open conflict with their rulers. British officials knew very well that the issue would be decided on political, social and economic, rather than upon theological considerations (Hardy, 1972:110). Although a group of ulama, who issued a fatwa that India, is neither *dar al-harb* nor *dar al-Islam*, rather, it is *dar al-aman*. For instance, Mufti Kifayatullah (1875-1952), one of the founder members of the JamiaMilliaIslamia, declared in his fatwa that India is a *dar al-aman*. Even Maulana Anwar Shah Kashmiri (1875-1833) has declared that India was not a *dar al-harb* but it was the *dar al-aman*. People like Haji Shariat Allah (1781-1840), the founder of the Faraizi movement in Bengal, declared areas under British control as *dar al-harb* (house of war), and banned the performance of the Friday congregational prayers in these areas (Sevea, 2012:8 & Rizvi, 1971:76). Later, the lecture given by MaulanaKaramat Ali Jaunpuri (1800-1873) referred to Haji Shariat Ali and critic the Faraizi movement that Friday and Eid prayers should not be banned under British rule and had debated the question with the Faraizi leader. Jaunpuri was the follower of the Hanafi School and in his lecture was pronounced that British India was *dar al-Islam* and therefore jihad was unlawful, as the three conditions he states in his lecture that Hanafifiqh Imam Abdu Hanifa laid down three conditions for the conversion of *dar al-Islam* into a *dar al-harb* (Hardy, 1972:11).

Individual like, Sir Syed Ahmed Khan (1817-1898) presented arguments from Hanafi School of jurisprudence as MaulanaKaramat Ali did in the context of the West Bengal. He stated that Hanafi jurisprudence does not allow jihad to be valid against infidels, where Muslims are living in peace and security under the non-Muslim government. However, Sir Syed has not considered that India was neither *dar al-Islam* nor *dar al-harb*, but something of both and he adds significantly that there is no religious obligation upon Muslims to fight against the British (1972:11). After that it proved with great acumen and ability, that India has now lapsed into *dar al-harb*, refuting at by the Calcutta Mohammedan Literacy Society, viz., that Hindustan is still a *dar al-Islam* (Khan, 1972:79).

Men like Abdul Hay FirangiMahal madrasa in Lucknow, though, he was argued by the Hanafi jurisprudence that British India remained a *dar al-Islam* until the Muslims were given the right to obey their religion and pursue their livelihoods. However, he issued a fatwa to avoid social intercourse with infidels, but at the same time he pronounced that the acceptance of British pensions and employment and the learning of English does not harm to Islam (1972:114-5). Other theologians and scholar like Chirag Ali (1844-1895) deliberately and intentionally rejected the entire debate

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between dar al-Islam, and dar al-harb. He argued that it was superfluous' even to raise the question of whether British India was a dar al-Islam or dar al-harb, as fiqh had been formulated with the assumption that Muslims were in political control (Hardy, 1972:114 & Sevea, 2012:8). He proposed that India was neither a dar al-Islam nor a dar al-harb, as the Muslims in India were protected by the British; it was instead a dar al-aman or dar al-zimma, the house of security or of protection (Sevea, 2012:9). Mufti like, Rashid Ahmed Gangohi (1828-1905) from Deoband School deliberately refused to give a clear answer when bluntly asked for a fatwa. He even preferred silence and avoided not to express their opinion on the issue of dar al-harb and dar al-Islam.

### Is Ahmed Raza Khan Barelwi in line with the 'Dar al-Harb' (house of war)?

The pith of Ahmed Raza argument was: British India is dar al-Islam, and therefore Hijrat from India is not mandatory. Ahmed Raza Khan Barelwi wittingly rejected the Shah Abd al-Aziz's famous fatwa that India was *dar al-harb* and *ribā* was lawful in it, rather he provided that India was neither dar al-harb nor dar al-amn but India was the dar al-Islam. In 1298/1880, Mirza Ali Beg from Badaun asked a fatwa from Ahmed Raza, as indicated in his letter that, is Hindustan dar al-Islam or dar al-harb, In response to this fatwas, Ahmed Raza wrote a short treatise on '*Ālam al-ālabān Hindustan dar al-Islam* (Khan, 1972)' on the basis of Hanafi law. He has responded in his fatwa that, 'in the Dar al-Islam, the state or authority will not be against Sharia, and if they continue against the Sharia and the freedom of religion, then it will be called completely Dar al-Harb. He writes that Hindustan is a dar al-Islam and in any case Hindustan is not a dar al-harb. For Ahmed Raza Khan, it is require two main terms and conditions along with the imperial domination. First condition, in Dar al-Islam, where idol worship is practiced openly by the commandment and the authority preclude the practice of Sharia and absolute unity. But such things were not happening in British India. In other words, he explained that, if complete imperial domination of infidels, the practice of Islam is stopped by the colonial imperial authority. The second condition is that, the boundary of Dar al-Islam does not match with Dar al-Harb. In short, two things are required to take Dar al-Islam to Dar al-Harb.

- (1) Complete imperial domination by infidels, the commandment of Islam closed by the imperial domination
- (2) And the boundary of Dar al-Islam does not match with Dar al-Harb.

Ahmed Raza made a clear that in which Dar al-Islam; Muslim can offer *namaz* and celebrate their festivals such as Eid, Bakrid. Moreover, the Muslims have a right to propagate their religion, and also have right to practice their everyday life such as marriage, divorce (*talaq*), *iddat* maintenance (receiving back a divorced wife), dower (*mahr*). Here Muslims, worship God, celebrate Eid, and Azan (call to prayer), on pray Friday and five times Namaz, without any hindrance. But these things are not happening inside the British India, then it requires to takes dar al-harb. For Ahmed Raza, in the dar al-Islam, the Muslim will chose their freedom of religion and law, and propagate their



religion and feel free to choose the Sharia and state law. If these things will not happen in the dar al-Islam, then it is possible to move from dar al-Islam to dar al-harb.

## Conclusion

The section attempted to make it clear that the issue of dar al-Islam was made it clear by Ahmed Raza fatwa based on the Hanafi jurisprudence, that Hindustan was Dar al-Islam during the time of British India and by no means of Hindustan was Dar al-Harb. He stoutly rejected the issue of dar al-aman, and he found that there was no place for dar al-aman in Hanafifiqh. In addition, he expounds that three pertinent things needed to take dar al-harb from dar al-Islam. It is one of these conditions, where continue idol worship and Sharia practice is stopped by the authority.

## Endnotes

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<sup>1</sup>The term of probation incumbent upon a woman in consequence of dissolution of marriage either by divorce or by the death of her husband. After divorce the period is three month, and after the death of her husband four months and ten days.

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## A SURVEY OF DATA MINING ALGORITHMS IN AGRICULTURE

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### ABSTRACT

Big data plays a crucial role in different fields like agriculture, banking, data mining, education, chemistry, finance, cloud computing, marketing, health care stocks. Agriculture is the backbone of India for many years. Nowadays in India agriculture has lost its dominance over the world. As the industries are paying better for the employers than in agriculture and also due to less government support the agriculture has taken the big downfall.

Data mining in agriculture field is a relatively narrative analysis field. an overview of Data Mining techniques applied to agricultural and their applications to agricultural related area is discussed in this paper. To associate the soil with the crops that could provide maximum yield using Apriori algorithm .A few of the data mining methods, such as the k-means, the K Nearest Neighbour(KNN), SVM, Artificial Neural Networks (ANN) were presented. Apriori algorithms were user friendly and the accuracy of predictions were above 77% in all the crops.

**Keywords:**Data Analytics, Data Classification, Data Mining, Agriculture

### 1.0 INTRODUCTION

Data science is an umbrella term that encompasses data analytics, data processing, machine learning, and a number of other other related disciplines. Data science is an inter-disciplinary field that uses scientific methods, processes, algorithms and systems to extract knowledge and insights from structured and unstructured data. It's associated with data processing and massive data.

The sphere of massive data plays an essential role in various fields, like agriculture, banking, data processing, education, chemistry, finance, cloud computing, marketing, health care stocks. Big data analytics is that the method for viewing big data to reveal hidden patterns, incomprehensible relationship and other important data that may be utilize to resolve on enhanced decisions.Agriculture has been the backbone of the Indian economy for several years. But within the past few years, Agriculture in India has lost its dominance over world Agriculture development. There are many reasons for the pitfall of agriculture in India. Considering the facts that Industrial sector is providing better rate compared to Agriculture and also minimized government support, the Agriculture has taken an enormous downfall.



Data Mining is that the process of extracting knowledge from large sets of knowledge. during this paper describe an summary of information Mining techniques applied to agricultural and their applications to agricultural related areas. Yield prediction may be a most significant agricultural issues. Any farmer is curious about knowing what quantity of yield he's on the point of expect. within the past, yield prediction was performed by considering farmer's experience on particular field and crop. Consider that data are available for a few time back to the past, where the corresponding yield predictions are recorded. In any of information Mining procedures the training data is to be collected from your time back to the past and therefore the gathered data is employed in terms of coaching which should be exploited to be told a way to classify future yield predictions.

Data mining techniques are ready to get the advantages of automation on existing software and hardware platforms that may be implemented on new systems which may be upgraded and new products are often developed. When data processing tools are defined on high performance parallel systems, they will be analyzed with massive databases in minutes. Faster processing is required in such system to derive the effective results from complex systems. High speed processing and accurate outcome from the system makes it possible for users to research large set of data. Larger databases, in turn, gives more improved predictions.

Agricultural organizations store huge amounts of information within the style of crop databases. Trends in these databases will be identified using data processing practices, which kind and model the info so as to make a conclusion. the information mining applications present the info within the type of data marts. Data mining tasks are often classified into two categories: Descriptive data processing and Predictive data processing. Descriptive data processing tasks characterize the final properties of the information within the database while predictive data processing is employed to predict explicit values supported patterns determined from known results.

Prediction involves using some variables or fields within the database to predict unknown or future values of other variables of interest. As far as data processing technique is concern; within the most of cases predictive data processing approach is employed. Predictive data processing technique is employed to predict future crop, prognostication, pesticides and fertilizers to be used, revenue to be generated then on.

The yield prediction problem is solved by employing data processing techniques like K-Means, K Nearest Neighbor (KNN), Artificial Neural Network and Support Vector Machine (SVM). Research paper aims at finding suitable data models that achieve a high precision and a high generality with relevancy four



parameters namely rainfall, year, production and area of sowing. For this purpose, differing types of information Mining techniques were evaluated on different data sets.

## 2.0 RELATED WORK

Sellam, et al [1] explained various environmental parameters like Area Under Cultivation (AUC), Annual Rainfall (AR) and Food Price Index (FPI) that influences the yield of crop and the relationship among these parameters was established. Using Regression Analysis (RA), Linear Regression (LR) the various environmental factors and their infliction on crop yield was analyzed.

Hemageetha, et al [2] mainly focused on the soil parameters like pH, Nitrogen, and Moisture for crop yield prediction. Naive Bayes algorithm was used to classify the soil and 77% of accuracy was achieved. Apriori algorithm was used to associate the soil with the crops that could provide maximum yield. A comparison of accuracy achieved during classification using Naïve Bayes, J48 and JRIP is also presented.

Sujatha, et al [3] described about the purpose of various classification techniques that could be utilized for crop yield prediction. A few of the data mining methods, such as the Naïve Bayes, J48, random forests, SVM, artificial neural networks were presented. A system using climate data and crop parameters used to predict crop growth has been proposed.

Ankalaki, et al [4] presented a comparative study on DBSCAN and AGNES algorithm for clustering. Crop yield was forecasted using MLR (Multiple Linear Regression) and a formula was derived for each crops. From the proposed work, we can conclude that DBSCAN was more time consuming than the optimal and efficient number of clusters. Regression analysis performed for the forecasting that showed a highly dependency on the dataset. Proper data collection will make the model significant, otherwise it can lead to inaccurate results.

Kushwaha, et al. [5] predicted the suitability of a crop for a particular climatic condition and the possibilities of improving the crops quality by using weather and disease related data sets. They have proposed an analysis, classification and prediction algorithm that helps in building a decision support system for precision farming. It was based on the Hadoop file system.

Bendre, et al. [6] collected the data from GIS (Global Information System), GPS (Global Positioning System), VRT (Variable Rate Fertilizer) and RS (Remote sensing) were manipulated using Map Reduce algorithm and linear regression algorithm to forecast the weather data that can be used in precision agriculture.

Fathima, et al. [7] utilized data mining techniques on real time data that help in knowledge discovery. They used k-means clustering algorithm to cluster the farmers based on the crop type and irrigation parameters. Apriori algorithm was used to determine, which two crops were selected as a frequent item set. They generally focus on the policies that government could frame by the cropping practices of farmers.

Kaur, et al. [8] analyzed the different data mining techniques to find suitable data model that helps in achieving high accuracy for price prediction. Coimbatore market price of tomato data are collected and price was predicted using BP neural network and the result was simulated using MATLAB.

Veenadhari, et al. [9] described the purpose of data mining methods in the area of agriculture. A few of the data mining methods, such as the k-means, ID3 algorithms, the k nearest neighbor, SVM, Artificial Neural Networks (ANN) were presented. Developed algorithms were user friendly and the accuracy of predictions were above 75% in all the crops.

Raorane, et al. [10] discussed about the various data mining techniques for improving the crop production in agriculture. A few of Data mining methods, such as ANN, Decision Tree algorithm, Regression Tree, Bayesian network, SVM, k means were used for classification.

The purpose of this study was to investigate the effective model to improve the accuracy of rainfall forecasting.

## 2.0 TYPES OF DATA ANALYSIS

There are four types of techniques used for Data Analysis:



### 1. Descriptive Analysis

With the assistance of descriptive analysis, we analyze and describe the features of knowledge. It deals with the summarization of knowledge. Descriptive analysis, when let alone visual analysis provides us with a comprehensive structure of information. In the descriptive analysis, we accommodate the past data to draw conclusions and present our data within the style of dashboards. In businesses, descriptive analysis is employed for determining the Key Performance Indicator or KPI to gauge the performance of the business.



## 2. Predictive Analysis

With the assistance of predictive analysis, we determine the longer term outcome. supported the analysis of the historical data, we are ready to forecast the long run. It makes use of descriptive analysis to come up with predictions about the longer term. With the assistance of technological advancements and machine learning, we are ready to obtain predictive insights about the longer term. Predictive analytics may be a complex field that needs an oversized amount of information, skilled implementation of predictive models and its tuning to get accurate predictions. this needs a talented workforce that's well versed in machine learning to develop effective models.

## 3. Diagnostic Analysis

At times, businesses are required to think critically about the character of information and understand the descriptive analysis comprehensive. so as to seek out issues within the data, we'd like to search out anomalous patterns that may contribute towards the poor performance of our model. With diagnostic analysis, you're ready to diagnose various problems that are exhibited through your data. Businesses use this method to cut back their losses and optimize their performances. a number of the examples where businesses use diagnostic analysis are: Businesses implement diagnostic analysis to scale back latency in logistics and optimize their production process. With the assistance of diagnostic analysis within the sales domain, one can update the marketing strategies which might otherwise attenuate the full revenue.

## 4. Prescriptive Analysis

Prescriptive analysis combines insights from all of the above analytical techniques. it's remarked because the final frontier of knowledge analytics. Prescriptive analytics allows companies to create decisions supported them. It makes heavy usage of AI so as to facilitate companies into making careful business decisions.

Major industrial players like Facebook, Netflix, Amazon, and Google are using prescriptive analytics to create key business decisions. Furthermore, financial institutions are gradually leveraging the facility of this system to extend their revenue.

## 3.0 DATA MINING TECHNIQUES



- A. Multiple simple regression (MLR) is that the method accustomed model the linear relationship between a variable and one or more independent variable(s). The variable quantity is typically termed as predictant and independent variables are called predictors. MLR is predicated on method of least squares and possibly the foremost widely used method in climatology for developing models to reconstruct climate variables from tree ring services.
- B. B. K-Means Approach is one amongst the foremost used clustering within the data processing. the concept behind the KMeans approach is incredibly simple that certain partition of the information in K clusters, the middle of the cluster are often computed because the mean of the all sample belonging to a cluster. the middle of the cluster may be considered because the representative of the cluster. the middle is kind of near all samples within the cluster.
- C. K-Nearest Neighbor technique is one among the classification technique in data processing. It doesn't have learning phase because it uses the training set whenever a classification is performed. Nearest Neighbor search also called proximity search, similarity search or closest point each and it's an optimization problem for locating closest points in metric spaces.
- D. Artificial Neural Networks (ANN) is a lovely alternative for building a knowledge-discovery environment for a crop production system. An ANN can use yield history with measured input factors for automatic learning and automatic generation of a system model. A MultiLayer Perceptron (MLP) may be a feed forward Artificial Neural Network model that maps sets of input file into a collection of appropriate output. The MLP consists of an input and an output layer with one or more hidden layers of non linearly activating nodes. Each node in one layer connects with a specific weight to each node within the following layer.
- E. Support Vector Machines (SVMs) are binary classifiers able to classify data samples in two disjoint classes. the fundamental idea behind this method comes from the simplified case within which the 2 classes are linearly separable. SVM are a collection of related supervised learning method used for classification and regression. i.e. the SVM can build a model that predicts whether a replacement example falls into category or the opposite. A support vector machine could be a concept is statistics and applied science for a collection of related supervised learning methods that analyze data and recognize patterns used for classification and multivariate analysis. The SVM takes a collection of computer file and predicts for every given input which of two





possible classes forms the input making the SVM a non-probabilistic binary linear classifier.

- F. Decision tree is that the one in every of the popular classification method that offers lead to variety of tree structure. Decision-tree is mostly built by recursive partitioning. during this there's root and child of the tree. For the foundation of the tree, one attribute split is chosen by using some criterion. for every child, the info is then divided in line with the test, and therefore the process repeats recursively. After built of the tree, a pruning step is executed, which reduces the tree size. In short, each node indicates a test on an attribute value and every branch indicates an outcome of test. it's widely utilized in the sector of pattern recognition, machine learning and prediction. Decision tree can easily be converted to classification tree. it's very easy to grasp and also the provided result's worthy with small yet as large data. the information from different domain like Agriculture, Education, Medical, Diseases Analysis, Health Care, Medicine, Manufacturing, Production, Analysis of economic, Fraud Detection and Astronomy etc. are analysed using Decision tree induction algorithms.
- G. Apriori algorithm was the first algorithm that was proposed for frequent itemset mining. It was later improved by R Agarwal and R Srikant and came to be known as Apriori. This algorithm uses two steps “join” and “prune” to reduce the search space. It is an iterative approach to discover the most frequent itemsets.

## 5.0 CONCLUSION

Agriculture is that the most important application area particularly within the developing countries like India. Use of data technology in agriculture can change the case of deciding and farmers can yield in better way. data processing plays an important role for deciding on several issues associated with agriculture field. It discusses about the role of knowledge mining within the agriculture field and their related work by several authors in context to agriculture domain. It also discusses on different data processing applications in solving the various agricultural problems. This paper integrates the work of assorted authors in one place so it's useful for researchers to induce information of current scenario of information mining techniques and applications in context to agriculture field.



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**A STUDY ON GENDER EQUALITY WITH REFERENCE TO LABOUR  
FORCE PARTICIPATION: A STUDY UNDERTAKEN IN SELECTED  
VILLAGES OF ANAND DISTRICT**

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**Abstract**

Gender equality or sexual equality is the domain when all human beings can have easy and identical access to all the prospects, sources, and so on, although their biological differences. The problem of gender equality is an immense issue of concern of India to achieve high development and growth in the social, cultural and economic context. In the emerging trend, the female labour force participation is lower than male. The level of raising participation of women in labour force could boost to the economic growth and development. This paper is based on the primary data. The study has been conducted in four selected villages of the Anand District of Gujarat. The sample size has taken 125 labour women worker of villages named the Jol, Samarkha, Lingada and Sanjaya. The present study examines the perception and attitude of labour women workers regarding gender equality with reference to labour force participation.

**Keywords:** Gender Equality, Labour Force Participation, Development, Economic Growth

**Introduction**

Men and women each are equal and play a paramount function in the introduction and development of society. Indeed, the struggle for equality has been one of the fundamental concerns of the women's motion all-round the global. The difference in sex and bodily shape denotes no distinction in popularity. Woman is the complement of man, not inferior. In India, since lengthy returned, women were taken into consideration as an oppressed phase of the society and that they have been omitted for hundreds of years. The born of son is being celebrated whilst the birth of a daughter is packed with pain. Boys are recommended to be hard and outgoing however ladies are encouraged to be homebound and shy. All these variations are gender differences and they may be created via society. It has damaging effect on development desires and therefore reduces economic growth. It hampers the general nicely-being due to the fact blockading ladies from participation in social, political, cultural and economic sorts can adversely have an effect on the entire society. Gender inequality in India is a critical truth. In current, instances, girls are acting particular nicely in one of a kind spheres of activities. Still majority of Indian women are going through the trouble of gender inequality and discrimination. The society has defined roles and works for men and women, due to this things women cannot part in earning activities effectively, women

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have to associate with the household activities which are affecting on their enhancement. Women are also suffering from lack of education that is why they are taking less participation in the labour market. In present day society, gender inequalities amongst workplace has been very apparent, in which women are handled inferior less than men. Women are getting paid less than men, and there may be male-dominant populace in workplaces. Overall, women are segregated, despite the fact that they're just as wise as men. Patriarchal society has been obvious in the course of records, where male had been constantly advanced over women. However, instances have passed, and research display that girls are simply as capable of doing a selected task as men. Gender prejudice in workplaces are inaccurate assumptions and have to be discounted because girls are just as green as a men are in doing a venture and gender inequalities are really useful to workplaces.

### **Review of Literature**

Batra and Reio (2016) have studies to analyses the causes of gender inequality in India. In this research study, the focus on the issues of gender inequality and its worse effect on the society to develop, because of gender inequality is a global or worldwide problem. India is suffering from the issue of gender inequality due to unequal distribution of property, unequal educational opportunities and rights and unequal economic growth with unequal participation. There is socially predefined gender roles in society and family, which is creating gender inequality. Gender inequality has deep socially and cultural roots from the ancient time. Male dominance, stereotypes, predefined gender roles, unequal opportunities and rights, lack of education and awareness and so on are causes for existence of gender inequality.

Jha and Nagar (2015) have studied to perceive the elements which might be answerable for gender inequality in addition to provide recommendation for preventing gender inequality and promoting gender equality. It is truly known as gender biases or gender discrimination, which refers in easy that means that making difference between males and females as in step with the roles to perform which is described by means of the society. Gender inequality prevents the improvement of economy of state, which is existed at every social elegance. Also at the running vicinity, instructional institutions, fitness and so on. There are seven varieties of gender inequality, that's considered mortality inequality, natality inequality, employment inequality, possession inequality, special possibility inequality, primary facility inequality, household inequality. There are many factors answerable for gender inequality, which are social, financial, cultural, criminal factors. The factors are access to credit, labour participation, unequal employment opportunities, instructional rights, assets rights, fitness, dowry, gender primarily based violence and so forth. For getting equal repute of ladies and men, we still have miles to go.

A majority of global countries shows a positive trend of female workforce participation especially in regards of labour force participation instead of India. There is negative trend of women labour force participation rate in rural India, which is shows in

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the year between 2004 to 2005 and 2011 to 2012 as per the given data by the sixty eight set of National Sample Survey Organization (NSSO).

Nair (2015) has found that Bangladesh have 57 percent, China have 63.9 percent while India have only 27 percent for the women labour force participation (Nair, 2015). The Government of India has initiated number of programmes, policies and schemes to reduce gender gap and achieve gender equality in the country.

Banerjee (2019) has studied to emphasis attempts to analyze how social mindset of women being homemaker as a reason to influence on gender equality and labour force participation. Another reasons are also responsible for creating gender gap at the workplace, which are involved lack of education, discrimination, lack of mobility, lack of job-oriented courses etc. As per this study, in India labour force participation rate of women is very low from the world followed data of International Labour Organization (ILO, 2017). Women are discrimination from the recruitment stage at the workplace. Women are enough able to work like men in all fields, but they are facing inequality at all the stages of working to payment. Women are facing struggles to get less opportunity to work and temporary work than men. Women are working in hospitals, industries, companies, organizations and so on now a days. Women are always suspected and questions by other peoples for the efficiency of their work. Men are usually preferred for upper class cadres than women, with having similar qualification between men and women.

Sankaran and Madhav (2011) found that there is low participation of women in labour market due to occupation sex segregation. It has also emphasized on study regarding gender discrimination at the workplace. Their study has been provide a valuable information regarding to provide employment to skilled or unskilled women for uplifting them by its few achievements, laws, legislation and policies. The Indian society are suffering from the inequality between men and women due to the gender and social origin.

Channar, et al (2011) have studied on exploring the problem of gender discrimination in the workforce and its influence motivation, job satisfaction, enthusiasm, stress level, commitment of employees. The study conducted on 526 male and female, who associated with the public and private department of education and health of the Hyderabad and Jamshoro district belonging from the higher, middle and lower category of employees. The independent Samples T- test used for the measurement of gender discrimination in the workforce. The study resulted that in private department, the female employees are more exploited than men. The gender discrimination has impacted on declining level of job satisfaction and motivation of women employees from the lower category. It also increase the stress level of work among women than men.



## Significance of the Study

Gender Equality is a human right or a fundamental right in that women are entitled to live with dignity and with freedom from need. Worldwide, maximum international locations recognize that identical rights must exist between males and females. Many have produced policies supposed to combat discrimination and programmes granting girls get right of entry to health, training and financial rights. However, the fact remains that fewer possibilities than men to gain from monetary improvement with decrease participation in labour force. Gender Equality is completed when males and females esteemed the identical rights and opportunities across all sectors of society, along with social participation, economic participation and involvement decision making process, and when the one-of-a-kind behaviors, aspirations and wishes of males and females are similarly valued and favored. The gender pay gap is the difference among male and female pays. This distinction is expressed as a percent of male earnings. The gender pay gap reduces women's lifetime income and also affects their social security - that is one of the tremendous reasons of poverty in later life for girls. When we talk approximately gender equality in India, we have a look at the records that says girls in India earn 19 percent much less than men. According to the Monster Salary Index (MSI), the median gross salary of a man in India stood at Rs. 242.49 for an hour, while it was Rs.196.3 for girls. And at the same time as the statistic is factually correct, there's loads that hides behind this hole. While the numbers are an evaluation of the amount of payment women and men get for the identical amount of labor and time. The aim of this research study is to analyze the consequence on women against discrimination, which is exploring status of women at the workplace. The important aspect of every nation is educate to women. Women are able to take active participation in every field of specially for receiving income accomplishments such as agriculture, handicraft making, farming, medicine, and livestock and so on. This study has been undertaken in the rural areas of the Anand District to measure the level of awareness regarding gender equality with reference to labour force participation among women who are labour workers. This study has focus on to explore the perception and attitude of women towards equal payment for equal work, equal facilities, equal treatment, and equal opportunities to work at the workplace like men.

## Objectives of the Study

- To study attitude and perception of rural women about gender equality with reference to labour force participation
- To examine working conditions of labour women worker in the rural areas
- To analyze standard of living of women worker in rural areas

## Research Methodology

The Research Method has used Explanatory cum Descriptive in nature as it explored the fact about level of awareness of rural women about gender equality, equal

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payment and treatment at the workplace. And it is descriptive in nature because it described the perception and attitudes of rural women are labour worker regarding gender equality. The sample size has been 125 labour women worker of the four villages named Jol, Samarkha, Lingada and Sanjaya of the Anand District of Gujarat.

### Variables

**Independent Variables:** The Independent Variables were age, occupation, income and educational qualification of respondents.

**Dependent Variables:** The Dependent Variables include attitude and perception towards gender equality, experience of gender discrimination and job satisfaction.

### Result & Discussion

**Table 1:** Showing whether respondents have experienced gender inequality

Particular	Frequency	Percentage (%)
Yes	57	45.6
No	68	54.4
<b>Total</b>	<b>125</b>	<b>100.0</b>

Above table shows that,

Out of 100 percent, 54.4 percent (n=68) of the respondents have never experienced gender inequality, while 45.6 (n=57) of the respondents have ever experienced gender inequality.

**Table 2:** Showing at where respondents have experienced gender inequality

Particular	Frequency	Percentage (%)
Family	17	29.82
Society	21	36.84
Educational Place	02	3.51
Workplace	03	5.26
Others	14	24.56
Not Applicable	68	54.4
<b>Total</b>	<b>125</b>	<b>100.0</b>

Above table describes that,

Out of 100 percent, 36.84 percent (n=21) of the respondents have experienced gender inequality in the society, while family 29.82 percent (n=17), at the other places 24.56 percent (n=14), workplace 5.26 percent (n=03), educational place 3.51 percent (n=02). Whereas 54.4 percent (n=68) of the respondent have never experienced gender inequality, that is why it is not applicable in this table interpretation.



**Table 3:** Showing problems experienced by respondents because of their gender

Particular	Frequency	Percentage (%)
Lower Payment	10	8.0
Gender Discrimination	18	14.4
Poor Workplace Treatment	08	6.4
Sexual Harassment	02	1.6
Less Facilities	27	21.6
None of These	60	48.0
<b>Total</b>	<b>125</b>	<b>100.0</b>

Above table shows that,

Out of 100 percent, 48 percent (n=60) of the respondent answered that they have not experienced any problem because of their gender. Whereas the other problems are involved that less facilities 21.6 percent (n=27), gender discrimination 14.4 percent (n=18), lower payment 8 percent (n=10), poor workplace treatment 6.4 percent (n=08). Very less 1.6 percent (n=02) of the respondents have experienced the problems of sexual harassment because of their gender.

**Table 4:** Showing respondents feel that men and women are treated equally at their workplace

Particular	Frequency	Percentage (%)
Yes	85	68.0
No	40	32.0
<b>Total</b>	<b>125</b>	<b>100.0</b>

Above table identifies that,

Out of 100 percent, 68 percent (n=85) of the respondents feel that men and women are treated equally at their workplace. While 32 percent (n=40) of the respondents do not feel in that context.

**Table 5:** Showing proportion of income spent for current expenses of the household

Proportion	Frequency	Percentage (%)
25 %	37	29.6
50 %	25	20.0
75 %	18	14.4
100 %	30	24.0
Nothing	15	12.0
<b>Total</b>	<b>125</b>	<b>100.0</b>

Above table indicates that,

Out of 100 percent, 29.6 percent (n=37) of the respondents have been spending 25 % proportion of their earning or income for current expenses of the household. While 24 percent (n=30) of the respondents had expenditure 100 % proportion of their earning. 20





percent (n=25) of the respondents had been spending 50 % proportion of their income. 14.4 percent (n=18) of the respondents have using 75 % proportion of their earning. Very less 12 percent (n=15) of the respondents have not been expenditure anything from there.

**Table 6:** Showing respondents are getting any statutory welfare facilities from the employer

Particular	Frequency	Percentage (%)
Yes	44	35.2
No	81	64.8
<b>Total</b>	<b>125</b>	<b>100.0</b>

Above table indicates that, Out of 100 percent, 64. 8 percent (n=81) of the respondents are not getting any statutory welfare facilities from their employer. While 35.2 percent (n=44) are receiving.

**Table 7:** Showing daily working hours of respondents

Daily Working Hours	Frequency	Percentage (%)
Less than 6 hours	21	16.8
6 to 9 hours	42	33.6
More than 9 hours	62	49.6
<b>Total</b>	<b>125</b>	<b>100.0</b>

Above table indicates that, Out of 100 percent, 49.6 percent (n=62) of the respondents are working more than 9 hours daily. While 33.6 percent (n=42) of the respondents are able to work 6 to 9 hours daily and 16.8 percent (n=21) can less than 6 hours daily.

**Table 8:** Showing whether respondents are getting facilities at workplace by the employer

Facilities at Workplace	Frequency	Percentage (%)
Toilet	08	6.4
Shelter for Rest	14	11.2
Drinking Water	41	32.8
First Aid Box	04	3.2
Transportation	29	23.2
Other	29	23.2
<b>Total</b>	<b>125</b>	<b>100.0</b>

Above table indicates that, Out of 100 percent, 32.8 percent (n=41) of the respondents are getting facilities of drinking water at workplace by their employer. While another facilities are receiving by respondents that transportation 23.2 percent (n=29), other facilities such as snack, lunch



23.2 percent (n=29), shelter for rest 11.2 percent (n=14), toilet 6.4 percent (n=08), first aid box 3.2 percent (n=04).

**Table 9:** Showing respondents have ever been a victim of gender discrimination at the workplace

Particular	Frequency	Percentage (%)
Yes	43	34.4
No	82	65.6
<b>Total</b>	<b>125</b>	<b>100.0</b>

Above table identifies that,

Out of 100 percent, 65.6 percent (n=82) of the respondents have never been a victim of gender discrimination at their workplace. Whereas 34.4 percent (n=43) of the respondents have been a victim.

**Table 10:** Showing respondents believe about contributing factors of gender wage gap

Factors	Frequency	Percentage (%)
Political	13	10.4
Marital Status	19	15.2
Ethnicity	06	4.8
Education & Experience	40	32.0
Discrimination	15	12.0
Other	32	25.6
<b>Total</b>	<b>125</b>	<b>100.0</b>

Above table indicates that,

Out of 100 percent, 32 percent (n=40) of the respondents believe that education and experience is a contributing factor of the gender wage gap, while further factors can be noted that other factors like as caste, society and so on, 25.6 percent (n=32), marital status 15.2 percent (n=19), discrimination 12 percent (n=15), political factor 10.4 percent (n=13), ethnicity 4.8 percent (n=06).

### Conclusion

Since the purpose of study were to study perception and attitude of labour women worker towards gender equality with reference to labour force participation and examine working condition of the labour women workers in the Anand District. This study has conducted in the four villages of Anand District named Jol, Samarkha, Lingda and Sanjya. The study found that the most of respondents were illiterate. Labour worker have experienced gender inequality in the society. They have main expenditure of food, clothes, education, medicines, transportation and so on. Women have to work more than nine hours daily for their livelihood. Women aren't getting same charge to identical



work, they've become sufferer of harassment and exploitation. Women have pressured to simply accept lower wages, decrease odds of being hired (paywall) or promoted. Women are discriminated on the place of work. The gender wage gap is the common difference among the remuneration for ladies and men who're working. Women are commonly taken into consideration to be paid less than men.

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## DIGITAL MARKETING CHALLENGE AND OPPORTUNITY WITH REFERENCE TO TIKTOK-A NEW RISING SOCIAL MEDIA PLATFORM

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**Abstract:** Recent years have witnessed a totally speedy adoption of new digital channels that allowed billions of people to connect share and collaborate like by no means before. These new channels described a brand new advertising and marketing surroundings complete of demanding situations. And with Great Challenges Comes Great Opportunities. In this research, I define foremost definitions and characteristics of digital media. Then identify challenges that include the significance of consumer insights, impact of social media on branding, virtual metrics and expertise gap. And within every task, I spotlight solutions and opportunities that lie in the shifting virtual landscape.

**Keywords-** Social Media, Digital Marketing, Tiktok , Entertainment Platform, Influence of Tiktok

### I. INTRODUCTION

The content of the 15-second short video innovated the “micro narrative” model. It greatly satisfies the user’s curiosity. According to the American scholar E. M. Rogers, “theory of diffusion of innovation”, refers to a “concept, practice, or thing” that is considered novel by an individual or other adopting organization. It spreads among members of a certain social group through certain channels over a period of time. The novel narrative mode of the short video has enriched the expression of the content and is loved by the public.

### II. REVIEWLITERATURE

The operation of TikTok has been trying to strongly guide the content production behaviour of users. In the 1970s, American scholar of communication McCombs and Donald Shaw’s agenda setting theory: there is a highly corresponding relationship between the public’s understanding and judgment of important issues in social public affairs and the reporting activities of the media[4]. That is to say, the “big things” reported by the media are also reflected in the public’s consciousness as “big things”. The challenges and hot topics of TikTok reflect the guiding role of agenda setting theory. Challenges and topics motivate netizens to create content and engage in interaction. It is easy to get millions and billions of users’ attention. It can guide users to content production and implement boot functions. Under the guidance of specific

topics, whether it is watching or participating in it, the user is concerned with similar content, providing the user with the focus of triggering common interests or actions. Therefore, there is interaction between the TikTok users. The mutual attention and interaction of users further stimulates the sharing experience of each other's emotions[1]. TikTok often combines the topic of online hotspots to create shared themes such as finger dance and seaweed dance. This encourages users to create and upload audio and video. Hot topics can attract hundreds of millions of people to pay attention.

TikTok is an app to be had in 154 international locations that changed into formerly TikTok's reputation is growing rapidly and there may be a center of influencers growing on the platform. In India, it has 20 Million energetic customers. In the method starting stage foTikTok (Musically) maximum of its top stars are female however now male customers are also showing their talent through this app. TikTok's Users add greater than thirteen million videos every day.

Users Number in 2018 Mid and 2019: In mid-2018, TikTok cross 500 million customers globally. TikTok allows more youthful performers to percent quick performance videos. The most well-known of these are lip-sync motion snap shots, despite the fact that people are definitely importing more quick movies of genuine content material.

TikTok's young fanatics are referred to as "TikToker". Seventy five% of the TikTok users are female; 54% are elderly among 13 and 24. TikTok presents live-streaming with the constructed in function of the app with which you can interact your targetmarketplace[2].

Nowadays, the TikTok app is in lots of controversies due to the type of motion snap shots content cloth are created at the app. But later after growing safety for its clients, this app is again in India. The TikTok app is a great platform for brand spanking new video creators who has precise content material material[3]. So with out dropping time permit's have a observe.Top Indian TikTok Stars and how they earned thisstardom.

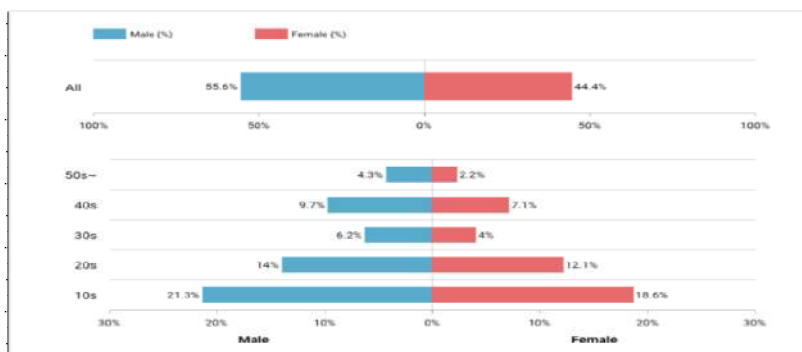


Fig.1. TikTok users by age and gender



## OBJECTIVE OF THE STUDY

The objective of study is to find out the opportunity for digital marketing and focus on challenge for the same.

## OPPORTUNITY AND CHALLENGE FOR DIGITAL MEDIA

**A. Brand's opportunity-** As brands are becoming pissed off with the excessive costs and declining natural acquire on other systems, they're increasingly turning to TikTok. According to Hub Spot, the ones 7 manufacturers are proactively using TikTok as part of their Digital Marketing sports[5].

1. Chipotle
2. NBA
3. United National FAD
4. The Washington Post
5. Guess
6. The San Diego Zoo
7. NBC's Stay Tuned

**B. Influencer Marketing for TikTok -** Influencer Marketing has turned out to be one of the essential techniques utilized by Digital Marketers a very good way to obtain their audience by way of way of leveraging the social proportion of clients with a sizeable-undertaking target audience base. When adopting Influencer Marketing inside your Digital Marketing approach the maximum essential requirement is that target the types of human beings you want will become your clients[6].

According to businessinsider.Com followings are the influencers at international stage

1. Loren Grey – 32.6 million followers
2. Baby Ariel – 29.8 million followers
3. Mr. Faisu – 23.7 million followers (currently suspended)
4. Kristen Hancher – 23 million followers
5. Jacob Sartorius – 20.7 million followers
6. Jiff Pom – 19.4 million followers
7. Jannat Zubair Rahmani – 19.2 million followers
8. Gilmher Croes – 18.4 million followers
9. Riyaz Afreen – 18.3 million followers
10. The Dobre Twins – 16.6 million followers

Top Indian social media Influencers on TikTok are as follows:

1. RiyazAly – 24.2 Million Followers
2. Faisal Shaikh – 22.7 Million Followers
3. Nisha Guragain – 20.7 Million Followers
4. Jannat Zubair – 20.1 Million Followers
5. Arishfa Khan – 19.7 Million Followers
6. AwezDarbar – 19.6 Million Followers
7. Avneet Kaur – 17.3 Million Followers.

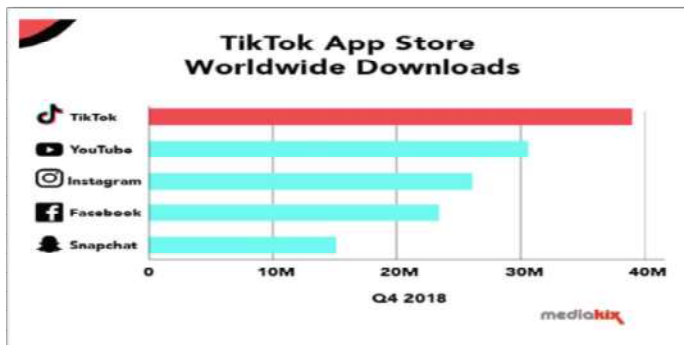


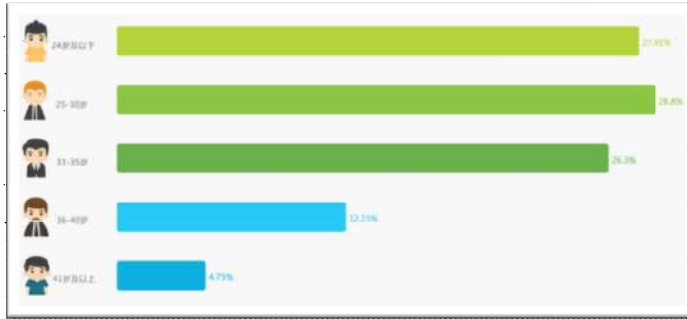
Fig.2. Tiktokapp store & play store worldwide downloads

**C. Features of TikTok-** There are diverse capabilities that TikTok affords with its customers.

- It we could the users create brief movies of the duration of three seconds, 15 seconds and 60seconds.
- Videos can be created with heritage song andLip-sync.
- Viewers can “react” to the video with a counter video or with a “duet” on the samevideo.
- Videos can be created with some of filters, Hash tags, in rapid and in gradual motion.
- The video may be shared at the consumer’s Tik-Tok account in addition to on the user’s different social media moneyowed.

**D.Security** - Tik-Tok takes the security of the users with full concern. It gives the option to the users to keep their accounts “Public”, “Only Friends” and “ Private”. It also provides a feature of “For You” were the users 16 and above get recommended video as theirinterest[7].





### E. Growth and Expansion of TikTok

**Fig.3.** According to the Douyin, the original Chinese version of the app, over 40% of their users are aged from 24 to 30, while previously the app's largest user group was aged 18 to 24.

TikTok has examined to be one of the maximum famous apps in its section. As mentioned above it had the larger wide variety of active clients in the time frame of one year internal its release. As TikTok developed this recognition even celebrities like Ariana Grande Britney Spears, Disha Patani, Jacqueline Fernandez and Shahid Kapoor started out the use of it. And faster this reputation gave growth start to TikTok with a high-quality and a success. Within a year this is on 9th November 2017, TikTok took over a Chinese organization established in Shanghai named musical.Ly that operated outside China. Musical.Ly is the app that has similar capabilities as TikTok[8]. Later TikTok redirected the musical. Ly web page to its up to date model of Tik-Tok. Similarly, Tik-Tok has taken over organizations with a similar product to abolish the marketplace competition.

### F. TikTok's Growth

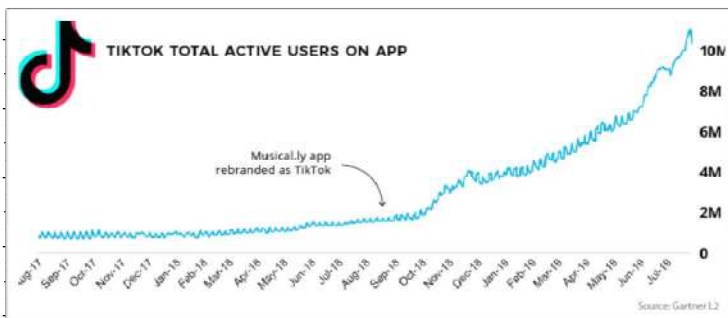


Fig.4. Tiktok growth

TikTok has faced a lot of issues in its Domestic as well as in foreign markets.

- On third July 2018, Indonesia banned TikTok for importing pornographic movies. As a result, TikTok had to hire 20 personnel to take a look at the motion snap shots clipped by using the use of the users after which upload them. Later on 11th July 2018, TikTok became unbanned.
- In the identical twelve months 2018, Douyin the Chinese variation of this app modified into objected with the resource of Chinese Govt. For uploading unacceptable content cloth like depicting adolescent being pregnant motion pictures. And banned videos associated with human rights and additionally issued a listing of a entire of 100 varieties of films that could be objectionable.
- Content associated with remote places leaders like Vladimir Putin, Donald Trump, Barack Obama and Mahatma Gandhi had been additionally banned.
- TikTok have become also banned in India in the early section of the year 2019 in India for sexually explicit content material material, cyber bullying and deepfaux.
- TikTok needed to banned content material material related to homosexuality even in the ones international locations in which it's miles jail because of some similar instances.

**G. Revenue of Tik-Tok** - Tik-Tok does not have any form of paid Ads however it has in-app purchase of emojis and virtual gives. Though this does not sound a proper profits technology method Tik-Tok earned as a good deal as \$3.Five million every month inside the 12 months 2018. This have become an boom of 275% as compared to the yr2017. Out of this excellent 42% of the sales modified into been generated via manner of the united nations and the relaxation have become been generated through China.

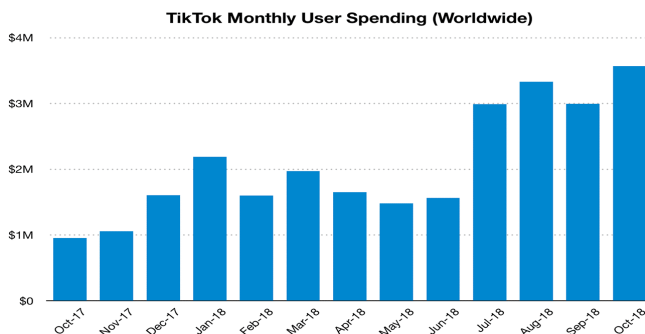


Fig.5. Users Spending time with Tiktok

**H.**This way the Chinese target audience spent over \$ 50 million on Doyen within a 12 months. But the answer to the question of how does Tik-Tok plan to generate its in addition profits stays unanswered. Byte Dance says it has generated \$2.Five billion in the year 2017 and \$7.Five billion in 2018 it objectives to generate 521% boom in income with the resource of 2018-2020. Tik-Tok end up worth \$seventy five million and stated to be the maximum valuable privately held begin-up in the yr2018 which result in Soft bank

making an funding \$3billion.

### I. TikTok global downloads –



Fig.6. Tiktok growth global level

Looking at numerous Southeast and East Asian markets, we are able to see that TikTok enjoys a immoderate Google Play rank – particularly if we slim the evaluation to video player apps.

These stats date lower back to March 2018, drastically earlier than TikTok have become banned in Indonesia (see TikTok controversies below). These markets are mentioned for having more youthful populations, that means a massive prospective individual base for TikTok.

### J. TikTok rank across Southeast Asianmarkets-

Country	All	Change	Video Player...
1  Indonesia	2	=	1
2  Thailand	3	↑ 2	1
3  Cambodia	3	↑ 1	1
4  Taiwan	4	↓ 1	1
5  Malaysia	9	↑ 2	1
6  Vietnam	11	=	1
7  Hong Kong	13	↑ 2	1
8  Japan	16	↑ 6	1
9  Singapore	22	=	1
10  Philippines	63	↓ 5	3

Fig.7. tiktok rank in asian markets



TikTok's Google Play download rank in Asia shows it outstripping Instagram across Asia, with the exception of pre-ban Indonesia. In five of these markets it claims the top spot.

## V. ADVANTAGES OF TIKTOK FOR DIGITALMARKETING

It is a totally popular app that now has more than 500 million month-to-month lively customers around the arena. It is a quick video sharing social app that allows users to record and percentage as much as 60 seconds of movies[9]. There are exclusive kinds of films that may be shared within the app such as Montages, Comedic Shorts, Duets, etc.

## VI. CONCLUSION

The authors studied about all of the social media app. Authors highlights the key factor of social media app of tiktok, as it is the fasted growing app at world level. TikTok became released to start with as Douyin in China in September 2016. It changed into driven out globally as TikTok the following 12 months. As of overdue September 2018, TikTok also have become the most-downloaded free app at the Apple App Store in the US, and additionally ranked first on Google Play over October. It's no longer just in the international's largest economies where TikTok has verified famous, however. Counting both Apple App Store and Google Play down load stats, TikTok ranked 1/3 in the international as of November 2018. It has been in the international pinnacle 4 due to the fact at least June 2018. TikTok grow to be a sturdy virtual advertising region to spend proper time proper money on proper platform. Target target audience may be discovering on this platform for any brandingroups.

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