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Chief Editor
Avdhesh S Jha



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Dr. Avdhesh S. Jha

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EDITORIAL

To sustain in a dynamic environment with bulk of challenges and changes, it is necessary to inculcate research attitude and initiate the research movement throughout the country in the different faculties. This issue enriches us with the discussion of topics related to psychology, education, management, entrepreneurship, and law with ambitions, motivation, belief and action of the potential researchers.

To widen the horizon of knowledge in psychology and education Bose and Bhattacharya studies work attachment and priority needs; Nandi & Sony Kumari presents effect of yoga on perceptibility of stress and emotional competence based on coping strategies on diabetes mellitus patients; Battalwar reveals high prevalence of malnutrition in children; Mistry discusses adjustment; Singh compares the private and government high schools; Sapre comes up with professional competence test; Vijaya Lakshmi talks of inclusion in education whereas Murthy enriches us with role of ICT in primary mathematics education.

To expand the ideas in Management and technology, Solanki initiates with biotech inventions and its protection; Chingtham focuses on talks of women and human resource development; Harish Kumar stresses on promoting work life balance; Deota further elaborates work life balance of women; Bhardwaj discusses emotional and family influences in family owned businesses; Shah reveals an experience in rural management education; Goel and Om prakash analyse micro enterprises in Haryana; Gupta presents a case of inclusive responsible leadership; Gaikwad and Kalpande describes the design & analysis of crankshaft of die station of vacuum forming machine whereas Hasan focuses on secularism with special reference to constituent assembly debates.

Research is deeply rooted in social science, humanities and technology. With inclusion of variety of topics as such work life balance, women leadership, entrepreneurship, child education, health, nutrition and psychology which is the need of the time, I am sure that this issue will be of much concern to all those interested in research, education and thus upliftment of society.

Chief Editor

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WORK ATTACHMENT AND PRIORITY NEEDS – A STUDY ON TEACHERS

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Abstract

Work attachment is the degree to which a person psychologically identifies himself with his work. This study investigated the attachment that the teachers of Government and Government-aided colleges have towards their work and how they prioritize their needs. Accordingly, a group of 120 college teachers (60 from government colleges and 60 from government-aided colleges) were selected as sample. A general information schedule, work attachment questionnaire and priority need questionnaire were used as tools. The findings reveal that work attachment of both groups of teachers is moderate. But duration of service period takes an important role in this regard. Work attachment of the teachers who are engaged in government colleges and whose duration of service is 10 years or less is better than those whose duration of service is above 10 years. On the contrary, no significant difference was observed for the government-aided colleges. Findings also revealed that priority need as expressed by two groups of teachers differ significantly in some areas.

Keywords: Work Attachment, Priority Needs, Teachers

Work attachment is the degree to which a person psychologically identifies himself with his work. Alienation is the feeling of estrangement that a person feels towards his work. Work attachment and alienation have been used loosely to explain work related problems like low morale, absenteeism, turnover, etc. Knoop and Robert (1980) investigated the relationship between job involvement and three sets of variables: nine personal, three structural, and eight job factors. Results indicated that involvement is mainly related to three variables: job motivation, job satisfaction, and marital status. Mistry (1985) found that to fill some of the gaps in the existing field of knowledge regarding job satisfaction, job involvement and achievement as outcome variables of locus of control, motivational climate, participation in academic climate and various types of role stresses the teaching population faced. The climate of academic motivation was found to be significantly associated with such dimensions as job satisfaction, involvement as well as overall satisfaction. Job involvement was found to be significantly and positively related with different aspects of job satisfaction. Cherian and Victor (2012) sought to explore the two dimensions of teacher commitment, job involvement and their work ethics. The analysis of the data revealed that there was a significant positive correlation between job involvement of degree college teachers and their work ethics. Kaur and Sidana (2009) aimed at finding the level of job satisfaction of college teachers of Punjab with respect to area, gender and type of institution. The study revealed that rural college teachers were more satisfied as compared to urban college teachers because of their low expectations. On the other hand, male college teachers were more satisfied as compared to their female counterparts. Majority of women teachers pointed that they have not got recognition for job and work done. Furthermore,

government owned college teachers were more satisfied than government aided and self-financed college teachers. Ishwara and Laxman (2007) evaluated the perceived level of job involvement among the university teachers working at the postgraduate departments is at moderate level. The present investigation has been designed to study the work attachment and priority needs of teachers of Government and Government-Aided colleges across Kolkata.

Objectives

To study the work attachment of the teachers of Government and Government-Aided colleges across Kolkata.

To study the priority need assessment of the teachers of Government and Government-Aided colleges across Kolkata.

Hypotheses

Hypothesis-I : The teachers of the Government colleges and that of the Government-aided colleges differ in terms of their work attachment.

Hypothesis-II : Work attachment as expressed by the teachers of the Government colleges is differentially associated with gender differences.

Hypothesis-III : Work attachment as expressed by teachers of the Government- aided colleges is differentially associated with gender differences.

Hypothesis-IV : Work attachment as expressed by the teachers of Government colleges is differentially associated with duration of service.

Hypothesis-V : Work attachment as expressed by the teachers of the Government-aided colleges is differentially associated with duration of service.

Hypothesis-VI : Teachers of Government colleges and Government-aided colleges differ among themselves in terms of perceived priority need.

Research Design

A group of 120 teachers (60 from Government and 60 from Government –Aided colleges across Kolkata) were selected as the sample. They were between the ages 30 to 50 years and their duration of service is below and above 10 years. Tools as such General Information Schedule that consists of name, address, age, gender, duration of service etc.; Work Attachment Questionnaire that consists of 50 statements answerable in a five point scale from strongly agree to strongly disagree where high score indicates good work attachment and vice versa. Odd-even split-half reliability is 0.82; Priority Need Questionnaire that consists of set of 6 priority needs viz., good pay package, significant post in the hierarchy, comfortable workplace, friendly work environment, job inspiring a creative instinct and job offering incentives after regular appraisals were considered to be ranked according to the priority of the respondents.

General Information Schedule, Work Attachment Questionnaire and Priority Need Questionnaire were administered to the subjects. Data were collected and properly scrutinized. Scoring was done with the help of standard scoring key. Mean and SD were calculated for work attachment questionnaire. Rank was done for priority need questionnaire. Comparisons were made by applying t-test and chi-square.

Results and Interpretation

The Data inserted Table-1 reveals that there seems to be indication of moderate level of work attachment as expressed by the teachers of government and government-aided colleges across Kolkata. Analysis of data reveals that the government college teachers are happy with their job security and hefty pay package. On the other hand, the government-aided college teachers are satisfied with the significant role they play in the decision-making processes, comparatively less competition and the scope to work together in case of crises. Overall picture reveals no significant difference between the two groups. Thus, the Hypothesis - I is rejected.

Table 1 – Comparison between the teachers of Government and Government-aided colleges in terms of work attachment

Category	Work Attachment				t-value
	Govt. colleges		Govt. aided colleges		
	Mean	SD	Mean	SD	
Combined	136.75	14.34	139.50	15.47	0.71*
Male	135.90	15.99	137.83	16.62	0.46*
Female	137.60	12.40	141.17	14.03	1.04*

Score – range: 50 to 200 * Difference is insignificant

High score indicates good work attachment and vice-versa.

Comparison was made between the male and female group of teachers of the government colleges of Kolkata

in terms of work attachment. No significant difference between the two groups. The Hypothesis -II is also rejected

Table 2 – Comparison between male and female group of teachers of Government colleges in terms of work attachment

Govt. colleges	Work Attachment		t-value
	Mean	SD	
Male	135.90	15.99	0.46*
Female	137.60	12.40	

* Difference is insignificant

Comparison was also made between the male and female group of teachers of the government-aided colleges of Kolkata in terms of their work attachment. Here also no significant difference was observed. The Hypothesis – III is rejected.

Table 3 – Comparison between male and female group of teachers of Government-aided colleges in terms of work attachment

Category	Work Attachment		t-value
	Mean	SD	
Govt.-aided colleges	137.83	16.62	0.84*
Male	137.83	16.62	
Female	141.17	14.03	

* Difference is insignificant

Data inserted in Table - 4 reveals that work attachment as expressed by the teachers of the Government colleges whose service is below 10 years is comparatively better than those whose service is above 10 years. The analysis of data reveals that scope of self development and comparatively less fatigue to carry out the job are the main reasons behind this. When comparison was made between the two groups, significant difference was observed. Thus, the Hypothesis - IV is accepted.

Table 4 – Comparison between the teachers of Government colleges whose duration of service is below and above 10 years in terms of work attachment

Category	Work Attachment		t-value
	Mean	SD	
Govt. colleges	148.10	12.68	3.78*
Below 10 years	148.10	12.68	
Above 10 years	134.50	14.61	

* $p < 0.01$

Comparison was also made between the two groups of teachers of Government-aided colleges whose duration of service is below and above 10 years in terms of work attachment, no significant difference was observed. Thus, the Hypothesis – V is rejected.

Table 5 – Comparison between the teachers of Government-aided colleges whose duration of service is below and above 10 years in terms of work attachment

Category	Work Attachment		t-value
	Mean	SD	
Govt. Aided colleges	140.27	15.10	0.39*
Below 10 years	140.27	15.10	
Above 10 years	138.73	15.79	

* Difference is insignificant



Data inserted in Table-6 reveals the six different types of priority need as ranked by the teachers of government and government-aided colleges of Kolkata city

Table 6 – Priority needs as expressed by the teachers of government and government-aided colleges

Cate gories	Good Pay Package		Significant Post in the Hierarchy		Friendly working environment		Comfortable workplace		Job inspiring a creative instinct		Job offering incentives after regular appraisals		Chi-square value
	G.	G.A.	G.	G.A.	G.	G.A.	G.	G.A.	G.	G.A.	G.	G.A.	
R A N K S													
1 st	18	22	9	4	16	8	11	11	4	15	2	0	13.34**
2 nd	6	3	5	10	18	25	23	7	4	9	4	6	14.66**
3 rd	10	6	9	9	9	7	11	27	14	7	7	4	11.15**
4 th	15	9	8	14	8	9	6	7	17	11	6	10	5.56*
5 th	8	9	13	10	5	8	6	5	12	13	16	15	1.88*
6 th	3	11	16	13	4	3	3	3	9	5	25	25	6.18*

* Difference is insignificant, ** $p < 0.01$

Thus, the Hypothesis – VI is accepted for the assessment of 1st, 2nd and 3rd ranks, and is rejected for 4th, 5th and 6th ranks in this investigation.

Concluding Remarks

The significant highlights of the study may help to create a congenial work environment considering the work attachment of the teachers in educational institutions. Incentives are remotely available for the teachers in most of the educational institutions. This can be a potential factor because of which, some teachers feel the lack of scope of self-development in their job. Incentives can not only motivate the teachers to perform well, it can also improve the overall working climate of the institutions. The teachers of the government-aided colleges have expressed slight apprehension about their job security. Appropriate measures should be taken to ward off this feeling of insecurity, as it can result in the feeling of alienation towards the job, which is very detrimental to the whole educational scenario of those institutions. Care should also be taken to create a pleasant working environment which will finally lead to much better educational environment in comparison to the existing setting.

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EFFECT OF INTEGRATED YOGA MODULE ON PERCEPTIBILITY OF STRESS AND EMOTIONAL COMPETENCE BASED ON COPING STRATEGIES ON DIABETES MELLITUS PATIENTS

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Abstract

The present study is aimed at assessing the perceived stress and emotional competence in various group of subjects, coping of their stress by using different strategies. A sample size of sixty five (n=65) subjects undergoing a yoga training of 10 days participated in the trial were included in the study. Variables such as Coping Strategy (CS) and Perceived Stress Scale (PSS) were assessed at once before the start of intervention, where as Emotional Competence (EC) was assessed twice i.e., before and after the intervention. Paired 'T' Test was used to compare the effect of intervention within the group but no statistical test was taken into consideration as the other variables were recorded once. It was reported that the Emotional Competence Score was higher ($p < 0.05$) following a 10 days of yoga intervention. More clearly perceived stress is highly related with Emotional Competence and yoga plays a vital role in managing their stress and makes them emotionally competent.

Keywords: Coping Strategy, Emotional Competence, Perceived Stress.

Stress has been a major etiological cause behind many health-related problems. Stress is currently understood in terms of an individual's sense of control over the events and symptoms in one's life (Bandura, 1995). When individuals believe that they can control negative events, they cope better and experience less stress. It is commonly defined as "a particular relationship between the person and environment that is appraised by the person as taxing or exceeding his or her resources and endangering his other wellbeing" (Rosengren, 2004). Stress is associated with physiological hyper arousal, negative cognitions, and negative mood and has been associated with a wide variety of physical and mental health problems. Another interesting fact is that Type-A personalities tend to acquire more amount stress and this been well understood and implicated. Hyper arousals caused by stress may express various psychosomatic ailments viz., type-2 DM, hypertension, stroke, metabolic disorders etc.

Emotional competence can lead to improved health through avoiding stress that would otherwise result from suppressing emotions. It can also lead to improved relationships since inappropriate emotions are less likely to be expressed and appropriate behaviour is not avoided through fear of triggering some emotion.

The new study focused on teens with type 1 diabetes. It suggests that negative emotions like anger or sadness interferes with their management of diabetes (Mendosa, 2009) Adolescents dealing with type 1 diabetes experience disruptions in affect and diabetes management that may influence their blood glucose.

Yoga can be used as an effective therapy in reducing oxidative stress in type 2 diabetes. Yoga in addition to standard care helps reduce BMI and improve glycemic control in type 2 diabetic patients (Hegde and dhikari 2011). Treatment with CAM widely used in persons with diabetes. Ethnic group differences determine a variety of

practices, reflecting groups' cultural preferences. (Caballero and Morello, 2010).

Methods

Sample

The sample consisted of sixty five participants between the age 25 and 65 years Type-2 DM subjects were recruited in the present study following a clinical screening. All subjects were recruited from a Diabetes camp, planned to be held in Husarghatta, Bangalore, Karnataka. India.

A simple 'Test and Retest' design were followed for the current research trial. Subjects were assessed with Coping Strategy, Perceived Stress Scale (PSS) and Emotional Competence Scale.

Table 1 – Depicting the Structure of the Research Design

Pre Recording	Intervention	Pre Recording
<ul style="list-style-type: none">• Coping Strategy• Perceived Stress Scale• Emotional Competence Scale.	Yoga Intervention	Emotional Competence Scale

Variables viz., Emotional competence was recorded before and after ten days of a therapeutic intervention where as perceived stress scale and coping strategy were assessed once.

Coping Strategy

This Scale is used to assess the coping ability of a person. A 12-item questionnaire was used to assess coping strategies. The coping strategy questionnaire consisted of 6 questions. These covered the possible coping strategy each person used to cope with stress under 3 main categories such as

1. Philosophical-spiritual strategies, 2. Interpersonal strategies, 3. Denial strategies

These questions intend to find out the various strategies used by subject to cope up with stress. The validity and

consistency of the questionnaire were varied when the questionnaire was administered to 518 tsunami survivors in the Andaman islands (Telles, Dash & Naveen, 2007).

Perceived Stress Scale

The *Perceived Stress Scale* (PSS) is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one's life are appraised as stressful. The questions in the PSS ask about feelings and thoughts during the last month. In each case, respondents are asked how often they felt a certain way.

Emotional Competence

The Emotional Competence Scale developed by Sharma and Bharadwaj (1995) was used as the emotional competence measuring instrument. The scale was developed as follows: for its preliminary form: 50 experts were asked to suggest items suitable to measure the 5 emotional competences separately and objectively, which are-

ADF-Adequate depth of feelings (Subscale A)

ACE-Adequate expressions and control of emotions (Subscale B)

AFE- Ability to function with emotions (Subscale C)

ACPE - Ability to Cope with Problem Emotions (Subscale D)

EPE - Encouragement of Positive Emotions (Subscale E)

EC - Emotional Competence Score

Their responses were consolidated, and scale values determined for each item separately. From these scale values, 15 items were identified as more important in measuring each emotional competency; each was given five alternative responses.

Intervention

All subjects in the camp will be trained with two hours of therapeutic yogic intervention specially designed for Type-2 DM patients

Table 2 – Depicting the practices and duration of Yogic intervention

Sl. No.	Practices	Duration
1	Special Yoga Technique	2 hours
2	Lecture	1 hour
3	Pranayama	1 hour
4	Bhajan	½ hour
5	Games	½ hour
6	C.M (Advance Technique)	½ hour
7	D.R.T (Relaxation Technique)	½ hour

Results & Discussion

Coping strategy

When the entire sample size was divided into 3 sub-categories, it was observed that there were significant no

of philosophical and inter-personal categories where as denial sub category was almost negligible.

Perceived stress scale (PSS)

There was no significant change in PSS in any one of the sub categories.

Table 3, Perceived Stress Scale		
Variable	MEAN±SD	P. Value
PSS	18.12±0.48	0.04

Emotional Competence

Scores of AEC was significantly higher (p.05) and AFE(p<0.01) following the practice of therapeutic yoga module.

Fig 4: Graph Showing the Pre and Post Score of E.C. score.

Table 1, Emotional Competence				
Variable	Pre MEAN±SD	Post MEAN±SD	t-value	p-value
ADF	16.38±0.48	16.95±0.48	0.79	0.42
AEC	17.84±0.48	19.92±0.48	3.26	0.00
AFE	18.55±0.48	19.83±0.48	2.08	0.04
ACPE	19.10±0.48	19.64±0.48	0.86	0.39
EPE	20.63±0.48	21.07±0.48	0.72	0.47

There is high correlation between the stress that we perceive in our day to day life and emotional competency, when the stress is perceived high the competency declines and vice-versa during the low level of stress. Earlier studies have already documented that yoga reduces the amount PSS and improves the competency. Since yoga reduces the perceived stress, it would have been contributed in benefitting the diabetics to control and function their own emotions.

Conclusion

In the present study the EC scores of AEC and AFE were higher suggestive of better managing to control and function with emotions. To understand the correlation between emotional competence and emotion need to be understood emotional competence well. It has been well experimented that yoga practices benefited the company employees in reducing the blood pressure, improving sleep, consumption of the tranquilizers, clarity in thinking and relaxed feeling in action. Earlier research reported that yoga can be an effective tool in managing the emotion of an individual.

Based on the previous discussion three statements can be made such as-

Baseline data based on the coping strategy suggest that those who fall under denial category have low score of EC & high score of PSS compare to interpersonal and philosophical category.

After having 10 days IYM intervention result shows that there are high scores of EC in all the five dimensions in

denial group compare to interpersonal and philosophical category

In all the five dimensions of EC result of post data shows trend of getting significant changes, out of which AEC and AFE scores compare to other three dimensions has shown the significant changes at 0.005 level.

Yoga practices have been found to be beneficial in Diabetics to control and function their emotions following the practice of yoga.

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HIGH PREVALENCE OF MALNUTRITION IN CHILDREN UNDER 5 YEARS FROM RURAL THANE DISTRICT, MAHARASHTRA

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Abstract

Malnutrition in children is a wide spread public health problem. Preschool children constitute the most vulnerable segment. Considering the increasing prevalence of malnutrition, the present study attempts to assess nutritional status of pre-school children in the age group 0-5 years in rural Thane district of Maharashtra. The objective of the study comprised to evaluate the prevalence of malnutrition in children, to assess the nutritional status of the children and to assess the prevalence of other nutritional deficiency disorders in the children. A cross sectional study was conducted in rural Thane district, India during November 2006 to February 2007. 444 children (254 boys) aged 0 – 5 years Height and weight were measured and body mass index (BMI) was calculated. Height (HAZ), weight (WAZ) and BMI (BAZ) for age Z scores were calculated using World Health Organization growth charts. 24 hours dietary recall method was used to collect the dietary intake details of the children. Clinical examination was conducted by the paediatrician to assess the prevalence of other nutritional deficiency disorders. The results depicted that the height (83.8 ± 12.2 cm) and weight (11.3 ± 2.6 kg) was significantly higher in boys than that in girls [height (81.3 ± 12.2 cm); weight (10.7 ± 2.6)] ($p < 0.05$). In boys, 67.7% had stunting (HAZ < -1) and 73.6% boys were underweight (WAZ < -1). In girls, 58.9% and 67.4% were stunted and underweight respectively. When BAZ was evaluated 22.4% boys and 13.7% girls had BAZ low (BAZ < -1). The mean energy 637 Kcal ($p < 0.012$), carbohydrate 123.65 gms ($p < 0.023$), protein 13.1 gms ($p < 0.042$) and fat 10 gms ($p < 0.001$) intake was significantly less than the recommended daily allowances (RDA). 16.9 % of children suffered from Vitamin A deficiency, 18.7 % from B Complex deficiency, 8.5 % from Vitamin C deficiency, 100 % from Iron deficiency and 55.3 % from Amoebiasis & Worm infestations.

Keywords: Stunting, Underweight, Z-Score, India, Nutritional deficiencies.

Malnutrition in children is a wide spread public health problem. The most neglected form of human deprivation is malnutrition, particularly among preschool children. Preschool children constitute the most vulnerable segment of any community because of their rapid growth rate. Their nutritional status is a sensitive indicator of community health and nutrition. Nutrition of preschool children is of considerable importance not only because they are in formative stage but also has persistent impact on their physical and mental development and on their health status as adults.^[1]

The best global indicator of children's wellbeing is growth. Assessment of growth best defines the nutritional and health status of children.^[2] Indicators like underweight, wasting, stunting are generally used in children for assessment of nutritional status.

Chronic under-nutrition is considered to be the primary cause of ill health and premature mortality among children in developing countries.^[3] About 50% of the children less than 5 years in India are moderately or severely undernourished.^[4] Under-nutrition among children is prevalent in almost all the states in India.^[5] Child malnutrition has risen in recent years in India. Thus, considering the increasing prevalence of malnutrition, the present study attempts to assess nutritional status of pre-school children in the age group 0-5 years in rural Thane district of Maharashtra.

Methodology

A cross sectional study was conducted to analyse the prevalence of malnutrition in rural Thane district, India during November 2006 to February 2007 in children aged 0 – 5 years. Study subjects consisted of 444 (254 boys) children. Informed consent was obtained from parents. All measurements were recorded in morning between 8am to 11am.

Length was measured in children aged 0–1 years in a supine position using a flexible measuring tape from crown to heel. For children older than one year of age, standing height was measured using a flexible measuring tape which was fixed on the wall. Weight was measured on an electronic weighing scale to the accuracy of 100 g. For children less than 2 years of age, the mother was weighed with the child and then the weight for child was calculated by subtracting the weight of mother alone. Body mass index (BMI) was calculated by dividing weight (kg) by height (m^2). All the measurements were taken thrice and the average was taken.

Height, weight and BMI for age Z scores were calculated using World Health Organization (WHO) growth charts.^[6] 24 hours dietary recall method was used to collect the dietary intake details of the children. Clinical examination was conducted by the paediatrician to assess the prevalence of other nutritional deficiency disorders.

Analyses were performed using SPSS software for Windows (version 16.0, 2007, SPSS Inc, Chicago, IL). Data are presented as Mean \pm SD. Independent sample T-test was used to analyse the difference in the anthropometric measurements between boys and girls.

Results :

Table 1 – Anthropometric Parameters in the study group

	Boys (n=254)	Girls (n=190)	P value
Age (years)	2.7 \pm 1.4	2.6 \pm 1.4	0.530
Height (cm)	83.8 \pm 12.2	81.3 \pm 12.2	0.024
Weight (kg)	11.3 \pm 2.6	10.7 \pm 2.6	0.011
Body mass index (kg/m ²)	16.2 \pm 3.0	16.2 \pm 2.7	0.897
HAZ	-0.57 \pm 4.91	-0.22 \pm 5.42	0.486
WAZ	-1.70 \pm 1.67	-1.61 \pm 1.95	0.617
BAZ	0.88 \pm 3.02	1.52 \pm 3.66	0.052

Data presented as Mean \pm SD

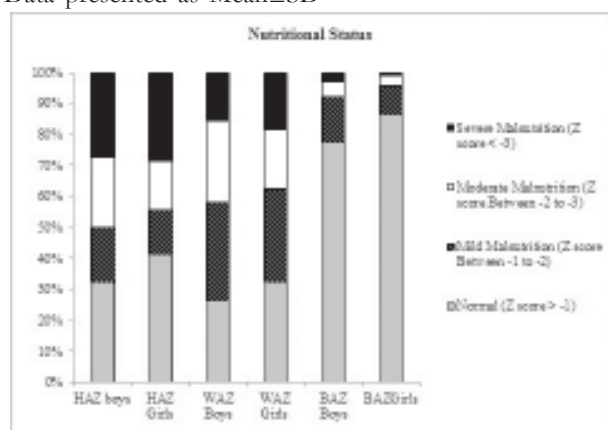


Figure 1: prevalence of malnutrition in boys and girls

Table 2: Major Nutrient levels of the study group

Nutrients	Mean Intakes	Std.Deviation	p values
Energy (Kcal)	637.0	206.19	0.012
RDA	1060.0	240.86	
CHO (gms)	123.65	40.62	0.023
RDA	187.6	53.5	
Protein (gms)	13.1	5.62	0.042
RDA	16.7	4.40	
Fat (gms)	10	2.50	0.001
RDA	27	5.30	

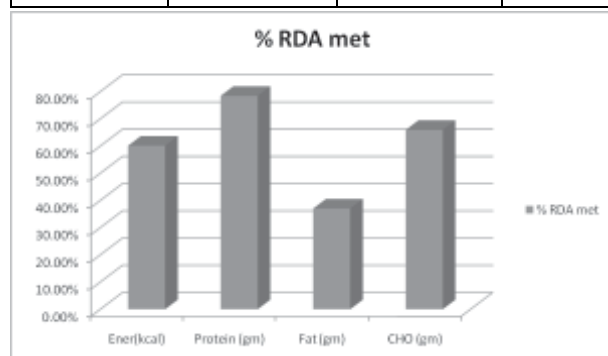


Figure 2 – Percentage of Recommended Daily Allowances met for Major Nutrients by the study group

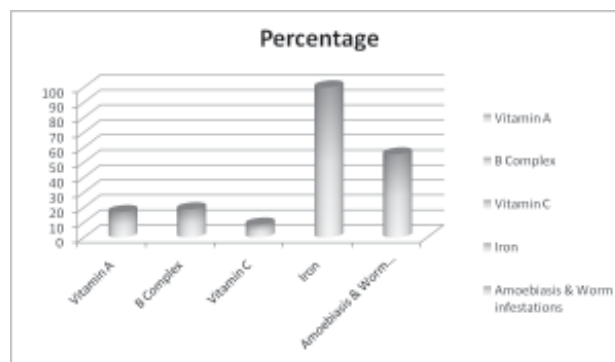


Figure 3 – Associated Nutritional Deficiency Diseases in the study group

Discussion

In the present study the mean age of the study group was 2.6 \pm 1.4 years. 61.5 percent of the children belonged to low income group and 38.5 percent belonged to middle income group. Table 1 presents the anthropometric parameters of the study group according to gender. There was no significant difference in age of the two groups ($p>0.1$). The height (83.8 \pm 12.2 cm) and weight (11.3 \pm 2.6 kg) was significantly higher in boys than that in girls [height (81.3 \pm 12.2 cm); weight (10.7 \pm 2.6)] ($p<0.05$). There was no significant difference in BMI between boys and girls ($p>0.1$). As seen in table 1, there were no significant differences in the mean height for age (HAZ), weight for age (WAZ) and BMI for age (BAZ) Z score between boys and girls ($p>0.1$).

In comparison to the WHO Standards, of the 444 children, 64% had stunting whereas 70.9% (HAZ <-1) children were underweight (WAZ <-1). Overall, 19.7% children had BAZ less than -1. Figure 1 describes the gender wise percentage prevalence of malnutrition in comparison to the WHO Standards. As seen in **Figure 1**, 67.7% boys had stunting (HAZ <-1) whereas 73.6% boys were underweight (WAZ <-1). In girls, 58.9% and 67.4% were stunted and underweight respectively. When BAZ was evaluated 22.4% boys and 13.7% girls had BAZ low (BAZ <-1). A very high prevalence of stunting (64%) and underweight (70.9%) was observed in the subjects in the study.

Chronic stunting and underweight is a pandemic affecting children across the world. Stunting is found in 28.6 – 44.2% children whereas 11.4 – 26.7% are found to be underweight in the Sub-Saharan Africa.^[7] The prevalence of stunting has been reported to be between 14 – 54% and that of underweight between 19 – 48% in the South Asian Region.^[8] In India, 48-78% children under 5 years in India are stunted and 40-43 % are underweight.^[9,10] Similar results were seen in the current study.

As per Table 2 the mean intakes of the energy 637 Kcal ($p < 0.012$), carbohydrate 123.65 gms ($p < 0.023$), protein 13.1 gms ($p < 0.042$) and fat 10 gms ($p < 0.001$) intake was significantly less than the recommended daily allowances (RDA). This observation highlights that basically the dietary intake of the nutrients is not able to meet the normal requirements of the children, which further complicates because of the rapid growth period in this pediatric age group.

Figure 2 describes the percentage of Recommended Daily Allowances met for Major Nutrients i.e. total energy, carbohydrate, protein intake by the children which are lower than the standards. The reason for protein intake which is better than the other nutrients though less than the standards may be because the study group was staying in the coastal areas and the intake of sea food available locally was consumed.

Under-nutrition predisposes the children to multiple nutrient deficiencies leading to various nutritional deficiency disorders. the gut functioning is also affected in this condition. Figure 3, describes the percentage (%) prevalence of other nutritional deficiency diseases observed in the children on clinical examination. 16.9 % of children suffered from Vitamin A deficiency, 18.7 % of children from B Complex deficiency, 8.5 % of children from Vitamin C deficiency, 100 % of children from Iron deficiency and 55.3 % of children suffered from Amoebiasis & Worm infestations.

Conclusion

A variety of factors like poverty, low literacy rates, poor infrastructure, inadequate health and sanitary conditions could be a reason for the high prevalence of malnutrition in the current study. A further study, comparing the nutritional intake, paternal education and income can be required to determine the causes of malnutrition in Indian rural children.

In conclusion, a high prevalence of malnutrition and nutritional deficiencies is prevalent in children under the age of 5 years in rural Thane district, India and steps need to be taken to combat high levels of malnutrition. There is a strong felt need to implement effective nutrition intervention programmes to improve the nutritional status of the children in rural areas with poor economic status.

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ADJUSTMENT OF THE HIGH SCHOOL STUDENT WITH REFERENCE TO THEIR BIRTHORDER AND SES

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Abstract

Adjustment is very important for a successful and harmonious life. The present study focuses on birth-order and SES and thus studies the adjustment of the high school students with reference to these variables. The research aimed to study effect of birthorder and SES on the adjustment of the high school students of Ahmedabad district. The study comprised of 800 high school students of Ahmedabad selected by cluster multistage sampling. In the present study the survey method was used and the verbal adjustment scale was used. To conduct analysis and interpretation of data Mean, S.D, and t-test was used. The results declared that there exists significant difference in the adjustment of the high school students with the first and second birthorder as well with high and low SES.

Keywords: adjustment, birthorder, SES

Education is necessary to understand the life, the world, the nature, the happening and the invent a system for learning, earning, improving and distinguishing between the right and the wrong, the good and the evil, the vice and the virtue, the angel and the devil. Education is process in life to developing personality of an individual. The true goal of education is to teach a person about the way and means of learning language, interaction with difficult things in the world, acquiring moral and ethical values, adjustment and other psychological aspects in nature preparation of gainful employment and service in the society attainment of satisfaction of the mind and finally to become a flawless perfect person on earth. One of the aspects of education is adjustment. Education strives to make the child adjusted with environment but the same is not possible always. With the advent of 21st century and the awareness towards education every child has now a chance to go to the school. Further each child passes through different stages of growth and development whereby they undergo different changes. With these changes they feel uncomfortable and the need of adjustment arises. In the school also the child faces several troubles related to the infrastructure, instructional facility and the human resources whereby they are supposed to do the adjustment. Adjustment is the most important aspect for an individual. Age, gender and category all these are origin of the maladjustment of the students with inferiority complex in the students. Hence, it is the necessary to assess the factors affecting adjustment or display in a positive manner to face the problem and do the adjustment. Again, it is possible that adjustment may be affected by birthorder and SES related to the high school student. In order to fasten their adjustment it is necessary to know the level of adjustment and the effect of these variables on the adjustment of the high school students. Looking to the aspects of adjustment the present investigation seeks to know the amount of adjustment in the high school students and the way the adjustment are related to these variables.

The studies by Ramakrishnan. P. (2008) revealed that majority of the pupils in the whole sample are highly adjusted with the school environment and majority of the pupils possess more characteristics of all Thinking Styles. K.Ranganayagam (2008) suggested that higher secondary adolescent girls have scored less in the adjustment problems in the post-test than in the pre-test. Ranjit Singh (2010) declares that the degree/level of job stress, job satisfaction and adjustment with which the Physical

Education teachers working in various types of schools in the state of Haryana differ amongst one another. Laurier Fortin, (2003) declares that the Students' antisocial behavior can often lead to violence in school. Heck, and Voliter, (1998) indicated that interpersonal variables (e.g, school adjustment, delinquency, relationships with parents and community) primarily affected reported substance use. Intrapersonal variables (e.g, self-concept, attitudes toward school), however, were unrelated to substance use. Townsend, and Wan, (2007) identified that socio-cultural adaptation statistically demonstrates an initial negative relationship with multicultural experience, but develops beyond this period with a positive increase and relationship at the end of three years. The studies by Makkar, Narinder, Kaur, Pushpinder (2010) is concerned with Educational Aspirations and School Adjustment of students in relation to Organizational climate revealed the significant differences in the adjustment of with respect to the location, type of school and gender of secondary school students. Studies by Bharti (2008) revealed difference in terms of home adjustment of the high and low intelligent subjects.

Objectives

The objectives comprised to study the effect of birthorder and SES on the adjustment of the high school students of Ahmedabad district.

Hypothesis

There will be no significant difference between the mean scores of adjustment of the high school boys and girls of Ahmedabad district with first and second birthorder

There will be no significant difference between the mean scores of adjustment of the high school students of Ahmedabad with high and low SES

Research Design

The study comprised of 800 high school students of Ahmedabad selected by cluster multistage sampling. In the present study the survey method was used and the verbal adjustment scale was used. To conduct analysis and interpretation of data Mean, S.D, and t-test was used.

Analysis and Interpretation

There will be no significant difference between the mean scores of adjustment of the high school students of Ahmedabad district with first and second birthorder.

Table 4.1 – Test of Significance of the Adjustment of the High School Students with First and Second Birthorder

	Birthorder	N	Mean	Std. Deviation	Std. Error Mean	t-value
Adjustment	First Birthorder	306	50.35	8.52	0.48	8.62**
	Second Birthorder	494	55.66	8.45	0.38	

** Significant at 0.01 level of significance

From table 4.1, it is evident that the $t_{cal} = 8.62$ which is significant at 0.01 level of significance. It indicates that the hypothesis may be rejected at 0.01 level of significance. Thus the hypothesis that there will be no significant difference between the mean scores of adjustment of the high school students of Ahmedabad district with first and second birthorder may be rejected at 0.01 level of significance. It clarifies that there may be significant difference between the adjustment of the high school students of Ahmedabad district with different birthorder. Further from the table it is observed that the mean score of adjustment of the high school students having second birthorder is higher than the students having first birthorder. Thus it could be said that the adjustment of the high school students having second birthorder is more than the students having first birthorder.

There will be no significant difference between the mean scores of adjustment of the high school students of Ahmedabad with high and low SES

Table 4.2 – Test of Significance of Adjustment of high school students of Ahmedabad District with High and Low SES

	SES	N	Mean	Std. Deviation	Std. Error Mean	t-value
Adjustment	High	374	51.98	9.06	0.46	5.02**
	Low	426	55.08	8.42	0.40	

** Significant at 0.01 level of significance

From table 4.2, it is evident that the $t_{cal} = 5.02$ which is significant at 0.01 level of significance. It indicates that the hypothesis may be rejected at 0.01 level of significance. Thus the hypothesis that there will be no significant difference between the mean scores of adjustment of the high school students of Ahmedabad with high and low SES may be rejected at 0.01 level of significance. It clarifies that there may be significant difference between the adjustment of the high school students of Ahmedabad district belonging to different SES. Further from the table it is evident that the mean score of adjustment of the high school students with low SES is higher than the high school students with high SES. Thus it could be said that the adjustment of the high school students with low SES is more than the high school students with high SES.

Results

There exists significant difference between the adjustment of the high school students of Ahmedabad district with the first and second birthorder and that the adjustment of the high school students with second birthorder is more than the high school students with first birthorder.

There exists significant difference between the adjustment of high school students of Ahmedabad district with high and low SES and that adjustment with low SES students is higher than the high school students with high SES.

Discussion

The adjustment of the high school students with second birthorder is more than the high school students with first birthorder. It might be possible due to the birthorder consciousness. The first child is normally given more freedom and hardly has to face compromise than the other.

There exists significant difference between the adjustment of high school students of Ahmedabad district with high and low SES and that adjustment with low SES students is higher than the high school students with high SES. This might be possible due to the societal structure. The high school students with high SES are more free and capable to get what they want which might be possible for this result. On the contrary high school students with low SES are more inclined to adjust.

Conclusion

The objectives of the present study comprised to study the effect of birthorder, and SES of the high school students on their adjustment. The present study was conducted on 800 high school students selected by cluster multistage sampling. The standardized tool of adjustment was used. Data was collected by survey from the sample. The analysis was conducted by descriptive statistics, t-test. The results declared that there exists significant difference between the adjustment of the high school students of Ahmedabad district with the first and second birthorder and that the adjustment of the high school students with second birthorder is more than the high school students with first birthorder as well there exists significant difference between the adjustment of high school students of Ahmedabad district with high and low SES and that adjustment with low SES students is higher than the high school students with high SES.

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A COMPARATIVE STUDY ON THE ACADEMIC ACHIEVEMENTS BETWEEN THE STUDENTS OF PRIVATE AND GOVERNMENT HIGH SCHOOLS WITHIN IMPHAL EAST DISTRICT (MANIPUR)

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Abstract

The main objective of the formal system of education in India is to achieve more academic achievement by the students in the public examination result as Indian schooling system is mainly examination based education. So, general people like to send their wards to the schools, where more academic achievement is found. Because, the student having high division with high percentage of marks has a lot of opportunity at the time of admission, training and vocation purposes. To improve the academic achievement is the need of the hour. It is due to some factors affecting like input, process, and output. The overall academic improvement in an institution leads more and high achievement in the public examination. The present study is trying to check the position of academic achievement at government and private high schools in the state as a whole. Specially, the article tries to study and to find out the reasons of the different academic achievements of students between the government and private high schools in the district of Imphal East of Manipur State during 2009-2011. Moreover, the article also tries to find out some of the suggestive measures for the improvement of high school education in the said district on the basis of (a) findings of the study and (b) the opinion given by the principals of the reputed institutions.

Keywords: *academic achievement, type of schools, and Khurai Assembly Constituency.*

In today's 21st century, various changes from the socio-economic, political, cultural, science and technology, etc. have brought about large impacts on the educational system. With the view of the modern educational system, today, education in India as well as in our state, have virtually segregated into public and private educational systems. And there are mushrooming up of Private and Public Secondary Schools, in the past ten years. But the academic achievement and performance of Private and Govt. School students, has been widening a gap. Factors like inadequate infrastructure, facilities and lack of trained teacher, geographic location, demography of places, transport and communication etc. has been drastically brought difference in the academic performance between public and private schools in our state. Modern system of education demands a comprehensive education i.e. scholastic and non-scholastic area of children. The academic achievement at the High Secondary Level plays an important role in determining the career of the students, ultimately in the overall development of the society and state, at large. It is of utmost importance to study the current status of the academic achievements of Manipur as it plays the foundation to the growth and development of the state as well. Though, on a brighter side, the overall academic performance has been on the rise in Manipur. But, along with it, there has also been a widening gap between the percentage of academic achievements amongst the student of the private schools and the public schools. This needs to be studied and addressed, so as to rectify the various factors that have been behind this cause. And at a time, when the National and the state, together, are focusing on the educational sector through various schemes, it is worth studying if the past factors have been addressed to successfully. If it has been, there ought to be a change in the academic performance of public schools vis-a-vis the academic performance of private schools, with respect to

the past performance. The following researches support the study.

Canadian Council on learning (2009) : *Impact of Homework on Academic Achievement, Main objectives:* The research addresses the question, 'Is there an academic benefit to homework for students enrolled in the K-12 school system, *Major findings:* (i) Moderate evidence that home work which engages students in active learning (rather than rote repetition) increases achievement; (ii) Credible evidence that students in classes that assign more homework, (iii) Perform modestly to moderately better than those in classes that assign less, though no causal link could be established; (iv) Evidence that effort spent on homework is a stronger correlate of achievement than time spent on homework; (v) Inconclusive evidence that involving parents in homework helps achievement, but no evidence that they impede it.

Julia Dille (2009): *The School based Health Interventions and Academic Achievement. Objectives:* What is the relationship between a student's health and academic achievement? Are they competing priorities? Or do healthy students really learn better?, *Major findings:* (i) Data from Washington show a clear relationship between increasing numbers of health risks and increasing academic risk. (ii) The data from Washington are similar to national data findings. (iv) They do not have longitudinal information to tell whether the health risks discussed in their report precede achievement risk. In some cases, they may see a synergistic relationship; potentially, challenges in school may lead to unhealthy choices which compound school challenges. These studies suggested that health risks do precede achievement risks, or that health interventions address some common underlying condition that benefits both health and achievement outcomes.

BARUA, A.P. (1989): *Causes of Failure in Higher Secondary Leaving Certificate Examination Independent Study. Assam : State*



Council of Educational Research and Training. Major Findings: (1) Various teacher factors that cause failure in the HSLC examination included inadequate number of teachers, a large number of teachers who did not teach incentives, inadequate school inspection, and attaching more importance to private tuitions. (2) Various students' factors included no specific time for study at home irregular attendance, getting promotion with grace marks, and various sources of distraction in studies. (3) The parent's factor included their negligence towards their children once they were admitted to schools and

Satyanandam, B.D. (1969): *A Study of Socio-Economic Status and Academic Achievement Government College of Education Kurnool*. The findings : (i) The children of graduate parents performed far better than the children of matriculate parents. (ii) The children of upper economic strata and lower economic strata differed very significantly. (iii) The upper and middle economic groups differed significantly. (iv) The middle and the lower economic groups did not differ significantly. However, the middle economic group was better than the lower economic group and (v) Sex had no bearing upon the achievement level.

As it has been commonly observed in the past, there still exist a clear demarcation between the academic performance of the students of public schools and private schools at the High School Level. Since the academic performance at this level is considered to be the initial frontier to the career that a student is likely to choose in the future, their academic achievement at the High School level is of outmost significance to them and the society as well. This has been the scenarios in the past, but today when the state as well as the central govt. has been earnestly putting in effort towards the education with various educational schemes and reforms; it is worth revisiting and re-examining if public schools has managed to narrow down the widening gap of academic achievement when compared to that of the private schools, or thus the rift still exist despite of all the efforts put in by the government. And also, if the past factor still continue to exist. Therefore, the study tried to find out the actual difference on the academic achievement between government and private at the High School Leaving Certificate Examination of Manipur (2009-2011) within Khurai Assembly Constituency of Imphal East District, Manipur. The study also found out the factors and remedial measures for the improvement of academic achievement of the students at HSLC examination.

In the present study, Academic Achievement means the level of actual accomplishment or proficiency one has achieved in an academic area, as opposed to one's potential based on examination result at HSLC; Student means those boys and girls who appeared in Class X at the High School Leaving Certificate Examination, Manipur; Private High Schools means High Schools, which are under management of the private individuals without the support of Government; Government high Schools means High Schools, which are

under management of the Government and Khurai Assembly Constituency means a constituency in the Imphal East District of Manipur.

The present study was limited only to the High/Higher Schools in the Khurai Assembly Constituency of Imphal East District, Manipur. Only areas of High School Leaving Certificate Examination results of Government and Private Schools within Khurai Assembly Constituency of Imphal East District, Manipur were concerned. That study was confined to a period of 3 (three) years (2009- 2011) of the Academic Achievement of the students in the High School Leaving Certificate Examination of Manipur within the Khurai Assembly Constituency of Imphal East District, Manipur.

Objectives

To compare the academic achievements of the students of HSLC Examination in Manipur in regards to the pass and fail % in the following areas: (i) overall and (ii) sex wise (2009 to 2011).

To compare the overall academic achievements of the students of Private and Government Schools at HSLC Examination within Imphal East District (Khurai Assembly Constituency) during 2009 to 2011.

To compare the academic achievements of the boys and girls students of the Schools at HSLC Examination within Khurai Assembly Constituency during 2009 to 2011.

To compare the School wise academic achievement at the High School Leaving Certificate Examination in Manipur within Khurai Assembly Constituency of Imphal East District during 2009 to 2011.

To find out the related problems and their suggestive measures for more academic achievement.

Hypotheses

There are significant differences between the academic achievements of the students of HSLC Examination in Manipur in regards to the pass and fail % in the following areas: (i) overall and (ii) sex wise (2009 to 2011).

There is a significant difference between the overall academic achievements of the students of private and government at HSLC Examination within Imphal East District (Khurai Assembly Constituency) during 2009 to 2011.

There is a significant difference in the academic achievement at the H.S.L.C. Examination of Manipur between the boys and the girls within Imphal East District (Khurai Assembly Constituency) during 2009 to 2011.

There is a significant difference between the School-wise academic achievement at HSLC Examination within Imphal East District (Khurai Assembly Constituency) during 2009 to 2011.

Research Design

The investigator selected 3 (Three) Schools out of four Government High schools and 3 (three) Private High Schools out of six schools through random sampling technique

respectively. The government high schools were Khurai sajar leikai high school, Lamphel High School, and Top Dusara High School, whereas private high schools were Bal Vidya Mandir, Kongpal, Young Pioneers' English School, and North Eastern English School. Examination results of the HSLC in Manipur (2009-2011) was the tool in order to find out the differences on the academic achievements of the students of Private and Government High Schools within the state and Imphal East District (Khurai Assembly Constituency). For the proper interpretation and analysis of the collected

data in view of the hypothesis of the study, the Percentage and Graphs were used.

Analysis and Interpretation

The analysis and interpretation of results have been presented under the five hypothesis:

Hypothesis-1 : To compare the academic achievements of the students of hslc examination of manipur in regards to the pass and fail % in the following areas: (1) overall (2) sex wise (2009 to 2011).

Table 1 – Comparative statement of the hslc examination results of manipur for the years 2009 to 2011

Yr	No of candidates enrolled			No of candidates appeared			No of candidates passed			Sex-wise pass %		Overall pass %
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	
2009	14041	13935	27976	13888	13796	27684	8699	6989	15688	55.45	44.54	56.66 %
2010	14264	13290	27554	14093	13188	27281	9338	7239	16577	56.33	43.66	60.76 %
2011	18819	16756	35575	18458	16485	34943	13869	10856	24725	56.09	43.90	70.75 %

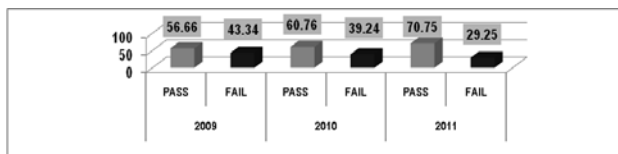


Figure 1 – Comparative statement of the hslc examination results of manipur (2009 to 2011)

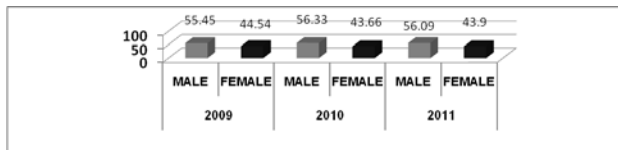


Figure 2 – Sex wise comparative statement of the hslc examination results of manipur (2009 to 2011).

Table No: 1, figure No: 1 and 2 shown above reveals the academic Achievement of students at HSLC examination in Manipur state context in the following ways:

The highest enrollment of male and female students is found in 2011, whereas lowest enrollment of male and female students is found in 2010.

The highest number of male and female appeared students is found in 2011, whereas lowest is found in 2010.

The highest number of appeared of male and female students are found in 2011, whereas lowest male and female is found in 2009 and 2010.

The highest number of passed out of male and female students are found in 2011, whereas lowest passed out male and female is found in 2009.

The highest number of overall passed out students is found in 2011, whereas lowest over all passed out is found in 2009.

It is therefore, the First hypothesis of the present study that was constructed for testing "There are significant differences between the academic achievements of the students of HSLC Examination of Manipur in regards to the pass and fail % in the following areas: (i) overall and (ii) sex wise (2009 to 2011)" is accepted.

Hypothesis-2 : To compare the overall academic achievement of the students of private and government schools at hslc examination within imphal east district (2009-11).

Table 2 – The academic achievement of students of government and private high schools within khurai a/c (2009 to 2011).

Year	No of candidates appeared			No of candidates passed			Pass percentage		Overall pass %
	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	
2009	28	68	96	4	53	57	14.28	77.94	59.37
2010	23	69	92	4	45	49	17.39	65.21	53.26
2011	27	69	96	8	46	54	29.62	66.66	56.25

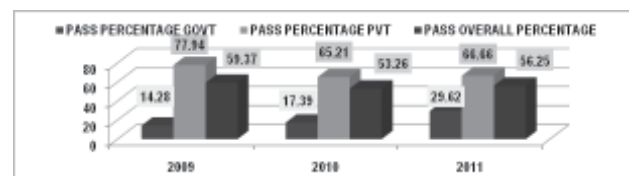


Figure 3 – The academic achievement of students of government and private high schools within khurai assembly constituency during 2009 to 2011.

Interpretation: Table No. 2 and figure no: 3 shown above reveals in the following:

In 2009, the overall academic achievement of Govt. Schools is at 04 (14.28%), whereas the overall academic achievement of Pvt. Schools is at 53 (77.94%).

In 2010, the overall academic achievement of Govt. Schools is at 04 (17.39%), whereas the overall academic achievement of Pvt. Schools is at 45 (65.21%).

In 2011, the overall academic achievement of Govt. Schools is at 08 (29.62%), whereas the overall academic achievement of Pvt. Schools is at 46 (66.66%).

It can be concluded that the second hypothesis "There is a significant difference between the overall academic achievements of the students of Private and Government Schools at the High School Leaving Certificate Examination within Imphal East District, during 2009 to 2011." is accepted.

Hypothesis 3 – To compare the academic achievements of the boys and girls students of the schools at hslc examination within khurai assembly constituency (2009 to 2011).

Table 3 – Showing the academic achievement of the boys and girl students of the high schools at the hslc examination of the high schools within khurai assembly constituency during 2009 to 2011.

Year	No of candidates appeared			No of candidates passed			Sexwise pass p.c.		Overall pass p.c.
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	
2009	45	51	96	28	29	57	62.22	56.86	59.37
2010	49	43	92	32	17	49	65.3	39.53	53.26
2011	38	58	96	24	30	54	63.15	51.72	56.25

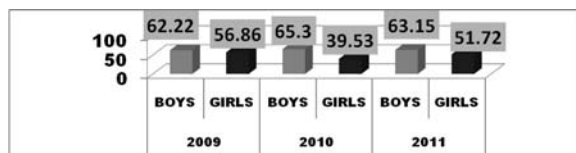


Figure 4 – Showing the academic achievement of the boys and girl students of the high schools at the hslc examination of the high schools within khurai assembly constituency during 2009 to 2011.

Interpretation: Table no 3 and figure No: 4 indicate the sex-wise academic achievement of students of HSLC examination in Khurai A/C in the following ways :

The pass percentage of boys was higher than that of the pass percentage of girl students in all the three years.

The highest percentage of male candidates was passed in the year 2010 with 65.3% while the lowest was in the year 2009 with 62.22%.

The highest percentage of female candidates passed was in the year 2009 with 56.86% while the lowest was in 2010 with 39.53%. The highest overall pass percentage was in the year 2009 with 59.37%.

The overall pass percentage of male candidates is 63.55% whereas the overall pass percentage of female candidates is 49.37% during 2009 to 2011 in Khurai Assembly Constituency. It is therefore, the 3rd hypothesis that “There is a significant difference in the academic achievement at the HSLC Examination of Manipur between the boys and the girls within Khurai Assembly Constituency of Imphal East District, during 2009 to 2011” is accepted.

Hypothesis 4 – To compare the school-wise academic achievement at the hslc examination of manipur within khurai assembly constituency during 2009 to 2011.

Table 4 – Showing the school wise academic achievement of class x students of government high schools during 2009 to 2011.

YEAR	LAMPHEL HIGH SCHOOL			TOP DUSARA HIGH SCHOOL			KHURAI SAJOR HIGH SCHOOL		
	APPEARED	APPEARED	P.C.	APPEARED	PASSED	P.C.	APPEARED	PASSED	P.C.
2009	11	11	16.66	11	02	18.18	11	01	9.09
2010	06	06	22.22	08	02	25	06	00	00.00
2011	08	08	71.42	12	02	16.66	08	01	12.50
Overall %			36.77	Overall %			Overall %		

Table 5 – Showing the school wise academic achievement of class x students of private high schools during 2009 to 2011.

Year	NORTH EASTERN ENGLISH SCHOOL			BAL VIDYA MANDIR			YOUNG PIONEERS' ENGLISH SCHOOL		
	Appeared	Passed	%	Appeared	Passed	%	Appeared	Passed	%
2009	24	21	87.5	34	29	85.29	10	03	30
2010	36	27	75	31	17	54.83	2	01	50
2011	33	29	87.87	29	16	55.17	7	01	14.28
Overall %			83.46	Overall %			Overall %		

Interpretation: Table No. 4 and 5 shown above indicate that the school-wise academic achievement of class X students of Government and private High Schools in the following ways:

All the overall academic achievement of students of three government high schools at HSLC examination is found differently at three government high schools in 2009, 2010 and 2011.

The Government schools, where highest academic achievement is found at the Lamphel High School at 36.77%, whereas the lowest academic achievement is found at the Khurai Sajor High School at 07.20%

All the overall academic achievement of students of three private high schools at HSLC examination is found different in 2009, 2010 and 2011.

The private schools, where highest academic achievement is found at the North Eastern High School at 83.46%, whereas the lowest academic achievement is found at the Young Pioneers' English High School at 07.20%

It is therefore, the 3rd hypothesis of the present study that was constructed for testing “There is a significant difference between the school-wise academic achievement at the High School Leaving Certificate Examination between Government and Private Schools during 2009 to 2011” is accepted as the academic achievements of the students of Government and Private Schools are quite different.

Main findings of the study

The First hypothesis that “There is a significant differences between the academic achievements of the students of HSLC Examination of Manipur in regards to the pass and fail % in the following areas: (i) overall and (ii) sex wise (2009 to 2011)” is accepted.

The second hypothesis that “There is a significant difference between the overall academic achievements of the students of Private and Government Schools at the High School Leaving Certificate Examination within Khurai Assembly Constituency of Imphal East District, during 2009 to 2011” is accepted.

The 3rd hypothesis that “There is a significant difference in the academic achievement at the HSLC Examination of Manipur between the boys and the girls within Khurai Assembly Constituency of Imphal East District, during 2009 to 2011” is accepted.

The 4th hypothesis that “There is a significant difference between the school-wise academic achievement at the High School Leaving Certificate Examination between Government and Private Schools during 2009 to 2011” is accepted.

The reasons for low academic achievement of Government Schools are:

Lack of supervision by Govt. authorities.

Lack of more dedicated teachers and lack of competition among students.

Lack of involvement of parents in the education of students.

Lack of professional qualifications among teachers.

Improper teaching methods, not systematic and regular. The teacher teaching is being provided is not at the national standard as the curriculum is not up-to-date yet.

Adequate transport facility is provided at a few government schools only.

The reasons for the better academic achievement of Private Schools are :

Teachers are devoted, dedicated, systematic, punctual, and regular.

There is a better interaction and cooperation among the students, teachers and school authorities.

There is a better infrastructure and good administration.

There is a good spirit of competition.

School authorities keep a strict supervision on the teachers and students.

There are regular tests and examinations conducted. Healthy appointment process of qualified teachers and selection of good students at the time of admission.

Adequate transport facility is provided at most of the private schools.

Suggestions for remedial measures

To maintain a good academic calendar through the year.

Frequent inspection of the school by the supervising authority.
Well built infrastructure and equipments should be available as per RTE norms.

Regular attendance of teachers and students must be checked by biometric devices.

Full support and cooperation should be extended by the Government to the schools.

Common question pattern should be framed and followed in all schools.

To develop democratic academic environment in all schools.

Availability of modern teaching aids should be made at all schools.

The syllabus and standard of text books should be at the level of CBSE.

Effective training should be provided for all principals of the schools for efficient management system in the campus.

Periodical exams should be encouraged.

The teacher-students ratio should be 1:50.

Education should be free zone from political interference.

Education should be considered as essential service and freed from bandhs and strikes.

Modified Text books by SCERT should be made available in time at the market.

Co-curricular activities should be encouraged as the compulsory part of syllabus.

There should be Parent-Teacher association in every school.

Workshops, seminars and orientation programme should be conducted for the teachers before the new session.

Life skill training and counselling service should be provided at the schools.

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CONSTRUCTION AND STANDARDIZATION OF THE TEST OF PROFESSIONAL COMPETENCE OF SCHOOL SUPERVISORS

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Abstract

School supervision plays significant role in the development of education system, by monitoring the quality of schools and by supporting their improvement. For school supervision, supervisor plays an important role for the improvement of educational quality, controlling, decision making and guidance etc. The actions of supervisors are in principle based. For this supervisors should be competent enough. The research was of survey type, which consists of a multistage random sample of 252 supervisors of the GSEB English medium schools of Gujarat state. An opinionaire was constructed and standardized by the researcher and administered on the sample subject. The interpretation of data was done with the statistical methods mean, standard deviation and t-test. It was found that there exists the significant difference between the professional competence of male and female school supervisors and no significant difference found between the professional competence of granted and non-granted school supervisors.

Keywords: Professional Competence, Supervisors

School supervision plays significant role in the development of education system, by monitoring the quality of schools and by supporting their improvement. In almost all countries, the main performer incharge of supporting and controlling schools and teachers is the school supervision. The term supervision generally refers to two different, but corresponding tasks: one, to control and evaluate and other, to advice and support teachers. To undertake these functions, supervisors are in principle based. The actions of supervisors are expected to contribute to quality improvement. For school supervision, a supervisor plays an important role for the improvement of educational quality, controlling, decision making and guidance, etc. Core role of supervision is to support by offering advice and guidance on how to improve.

According to Igwe (2001) supervision includes evaluation, quality control and monitoring for the purpose of infrastructural and curriculum growth and development. In order to accomplish this, definite tasks of the supervisor in a current school have been identified as such help head teachers for knowing the students better, helping teachers for professional enlargement, making better use of teaching materials, acquiring cooperating spirit for team work, improving teacher's appraisal of his standards, getting better methods of teaching, attainment of uniqueness for the teacher in the service, and curriculum development plan for the faculties.

Perception of professional competence has developed over the last four decades from a basic creation representing specific knowledge to a more universal one which includes an application of particular knowledge. The familiar meaning of the professional competence used now a days as routine and sensible use of values, clinical reasoning, knowledge, technological skills, reflections, emotions and communication in routine practice for the advantage of a commune and individual. The professional competence implies a minimum level of expertise in performance.

The observation of professional competence articulates a

set of qualification preconditions which are skills, professional knowledge and attitudes essential for a flourishing professional performance. The core competencies should be always present at the commence of teaching profession and these conditions can be formed and developed over the career development.

Objectives of the study

To study whether there is any difference between the professional competence of male and female school supervisors

To study whether there is any difference between the professional competence of granted and non-granted school supervisors

Hypothesis of the study

H₀₁: There will be no significant difference between the mean scores of the professional competence of male and female school supervisors.

H₀₂: There will be no significant difference between the mean scores of the professional competence of granted and non-granted school supervisors.

Research Design

The study is limited to the components of professional competency only. The study is limited to supervisors of schools only. The study is limited to the GSEB (English medium) schools only. The population of the present study comprises of supervisors of English medium schools of Gujarat. In the present study, the probability sampling technique, of which the multistage sampling will be used to select 252 supervisors as the sample subject from the given population. Here researcher selected 'Survey Method' to collect the information regarding the Professional Competence of school supervisors. For the present study, researcher decided to construct and standardized an opinionaire on the Professional Competence of school supervisors, for which the researcher adopted Likert's method.

Analysis and Interpretation of the data

Analysis of the data means studying the organized material in order to discover the inherent facts. The researcher collected the data representing the gender (male and female respondent) and type of schools (granted and non-granted).

Table 1 – Mean, S.D., t-value and p-value of male and female supervisors

Statistical parameters	Scores of Genders	
	Male	Female
N (No. of supervisor)	61	191
Mean	182.2787	185.5602
Std. Deviation	16.24000	4.53470
t-value	-2.512	
p-value	0.013	

It is observed from the table 1 that the calculated absolute value of t-test is 2.512 which is more than the table 't' value 1.96, at 0.05 level of significance. Therefore, the null hypothesis, "There will be no significant difference between the mean scores of the professional competence of male and female supervisors" is rejected. So, it is concluded that there is significant difference found between the mean scores of male and female supervisors.

Table 2 – Mean, S.D., t-value and p-value of Granted and Non-granted school supervisors

Statistical parameters	Scores of different types of school supervisors	
	Granted	Non-granted
N (No. of supervisor)	68	184
Mean	184.2206	184.9674
Std. Deviation	9.22172	8.90257
t-value	-0.585	
p-value	0.559	

It is observed from the table 2 that the calculated absolute value of t-test is 0.585 which is less than the table 't' value 1.96, at 0.05 level of significance. Therefore, the null hypothesis, "There will be no significant difference between the mean scores of the professional competence of supervisors of granted and non-granted schools" is accepted. So, it is concluded that there is no significant difference found between the mean scores of professional competence of supervisors of granted and non-granted schools.

Findings of the study

There is significant difference between the mean scores of the professional competence of male and female supervisors of Gujarat will be rejected at 0.05 level. The male and female teachers differ in their professional competence. This may be due to the difference between the treatment given to the male and female supervisors. The mean professional competence score of the female supervisors being more than the mean professional competence score of the male supervisors, the female supervisors tend to bear more professional competence than the male school supervisors of Gujarat.

There is no significant difference between the mean scores of the professional competence of supervisors of Gujarat belonging to different types of schools will be accepted at

0.05 levels. The granted and non- granted school supervisors do not differ in their professional competence. This may be due to they are earning similar type of salary and grade. The mean professional competence score of the granted and non-granted school supervisors is almost similar.

Suggestions

The difference exists between the male and female school supervisors of Gujarat with respect to their professional competence. Hence, some extra programmes should be conducted to raise the professional competencies of male supervisors. Share various educational experiences with colleagues with a view to enriching knowledge to improve the development of common skills of male supervisors. The difference does not exist between the granted and non-granted school supervisors of Gujarat with respect to their professional competence. Hence, similar financial and non-financial incentives should be given to lift up their professional competencies.

Educational Implications

The educational implications of the present study were: Such test can help us in gathering vital information about the standards of the supervisors at the school level. Our supervisors should be encouraged to take such test for their self assessment, which can lead to the self improvement. The use of standardized test of professional competence can in the long run have a positive impact for the improvement of school system. Such test can also be used for diagnostic and remedial purpose.

Conclusion

The researcher collected the data by using self constructed tool, analysed and interpreted by applying relevant statistical methods. On the basis of interpretation, researcher presented the findings, suggestions and new areas of research.

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INCLUSION IN EDUCATION: SOME APPRECIABLE EFFORTS IN PRIMARY SCHOOLS OF GUJARAT

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Abstract

An increase in the rate of enrolment of children in the primary education is clearly visible in India. The credit for this goes to number of initiatives being taken in the country to ensure that each and every child gets access to quality education. The enactment of Right to Education Act (RtE) 2009 adds further strength and as a result, today we see that the concept of inclusion in education is getting broader. Inclusion in education is an ideology which emphasizes that we need to enjoy the existence of each and every child in education system and also we have to develop the skill of enjoying the diversity existing in the classrooms. Inclusion in education integrates all such efforts done by various stakeholders of education system which would remove the discrimination done in the system in the name of social aspects, gender, ability, language, caste/religion etc. Thus, today, inclusion in education means accepting and celebrating all kind of differences whether it is social, gender, ability, language, caste/religion etc. The present article presents efforts done by the primary school teachers of Gujarat state to minimize the exclusion factors and to bring improvement in Enrolment, Retention and quality of education.

Keywords: Enrolment, Retention and quality of education

Right to Education Act (RtE) provides every child of the age six to fourteen years a right to free and compulsory education. The act states that the curriculum of the school education should be developed in consonance with the values enshrined in the Constitution, and it should ensure the all-round development of the child, building on the child's knowledge, potentiality and talent and making the child free of fear, trauma and anxiety through a system of child friendly and child centred learning. Such a positive environment in the schools system can only be developed when each and every child of the system enjoys his/her school life. This also implies that each and every teacher should not only recognize the existence of the child but she/he should be able to celebrate the existence and diversity present in each and every child.

What are the problems? To be clearer, let us see the following short anecdotes:

Ramya is a short and shy girl. She always remains quite in the class and sits in the last line in the class. Due to her calmness she always remains away from the sight of teacher and during class she remains in her own world.

Jayant is a short boy. Once in a week he gets the turn to sit in the 1st bench and other days he struggles very hard to look at the blackboard.

Rajeev does labour work in the field in the early morning time and comes to school only to have his mid-day meal. Teacher knows this fact but remains indifferent to him.

Riya has drunken parents at home. She still struggles to come to school.

Rajan and sameer are good friends in school. Rajan and the class teacher belong to same caste so Ranjan gets more preference over Sameer.

Sahiti is the teacher of class 8. Most of the boys of her class go to work in food courts in the evening. As a result they do not study anything at home. These children feel excluded in the class when compared to other children of the class.

Ramesh is the head teacher of the school and has lot of bias for his caste. As a result of his stereotype mentality he does not believe in any of his teachers who belong to other caste and also does not support their good initiatives this indirectly affects the school environment.

Seema is a child of migrated parents. She joined the new school just now. She is presently struggling very hard to match her previous learning experiences with the current one.

The situations narrated in these anecdotes are more common

in our Indian classroom. When seen individually, they do not seem to be a major issue. However, if they are not addressed properly it would lead to the exclusion of children from the learning process and would finally affect the quality of education. Thus, exclusion practices happening in our education system play a prominent role in reducing the quality of education.

Why should we care? It is high time to realize that we need to look at inclusion in education from a broader perspective. An increase in the rate of enrolment of children in the primary education in general and enrolment of children belonging to economically disabled classes like SC, ST, muslims etc in particular is clearly visible in our country. The credit for this goes to number of initiative being taken in the country to ensure that each and every child gets access to quality education. The enactment of RtE 2009, adds further strength to these initiatives. As a result today we see that the concept of inclusion in education is getting broader.

What is Inclusion and exclusion of education? Inclusion in education is not just a special drive that deals with physically and mentally challenged children rather it is an ideology which emphasizes the need to enjoy the existence and uniqueness of each and every child. Inclusion in education integrates all such practices (adopted by various stakeholders of education system) which leads to removal of the discrimination done in the schools in the name of social aspects, gender, ability, language, caste/religion etc. Thus, today, inclusion is a broader term and it means accepting and celebrating all kind of differences existing among children whether it is social, gender, ability, language, caste/religion etc.

The practice of exclusion shows its existence in various forms like in curriculum, in daily practices of teachers, inside school campus, outside the campus etc. Teachers intentionally or unintentionally carry these practices with them and it effects the overall development of the children. Hence, exclusion which happens in schools due to various aspects like social, economical, health, educational etc should be addressed seriously and immediately lest it would further degrade the quality of our education system.

What are the effects of exclusion practices? Teachers in the schools intentionally or unintentionally follow these exclusion practices which have a negative impact on the overall development of child. Hence, the ideology and spirit of inclusion in education should be developed and teachers

should be made sensitized to celebrate the existence and uniqueness of each and every child.

An analysis of the innovations made by various school teachers which were published in the Educational Innovations Bank (developed as an outcome of the MOU among GCERT, IIM-A and GEIC) shows the efforts of many such teachers who believed in the ideology of inclusion in education. These teachers believed that each and every child in the school is important and they tried to address various issues of exclusion like learning disabilities, learning styles, malnutrition, religious/caste beliefs, language, gender biases, health aspects etc. Addressing these issues helped the teachers to improve not only enrolment and retention of children but it also helped in improving the quality of education in their schools. Some such worthy efforts are mentioned below:

Effect of efforts of teachers in Gujarat: Inactive teaching learning process, inappropriate teaching methods, abstract concepts in the curriculum, lack of linkage of the curricular content with the daily life experiences of the children etc. are some of the factors which lead to exclusion of the children from the teaching learning process and thus reduce their retention in the system. The effect of these factors of exclusion can be reduced to a great extent by good efforts of teachers. Many such efforts are being done by the teachers who are teaching at elementary level in the government elementary schools of Gujarat as such Use of local day to day materials like product wrappers, tickets, advertisements cuttings etc helped a teacher to encourage the students to learn English language and enabled them to make their own English language dictionary. A language teacher used music to set the tunes to the poems included in English, Hindi, Sanskrit and Gujarati textbooks of standard 6 to 8 and it helped the teacher to increase the interest of students towards languages. On the other hand, use of drama by developing the paper masks for the roles students have to play on the basis of content given in the Sanskrit lessons helped a teacher to make Sanskrit a child friendly language. It also helped in developing their life skills like communication skill, creativity, inter-personal skills etc. Learning the concepts like volume, positive and negative numbers, pollution etc through activities made the classroom teaching learning process lively and thus improved students interest in learning. Technology aided activities in various forms like giving laptops for self learning, involving students in developing animated lessons based on textbook content, developing e-lessons and giving access to students, developing e-quiz, e-bank (collection of pictures, videos and other materials related to curricular subjects), communicating about the child's performance through SMS to parents helped various teachers in improving the students retention. On the other side, use of various techniques like differentiated instruction, peer group assessment, developing customized dictionaries, mobile library kits etc helped the teachers a lot to improve the reading skill of students and in turn it improved the confidence of students which had a good impact on student's retention. Activities like creating subject wise rooms, creating student oriented schools (where students themselves decide in advance on what to bring to schools, where to keep things in class, which book to read and when etc.), involving the youth of the villages as students mentors, orienting parents about the teaching methodology adopted in Pragna classrooms, creating learning spaces outside classroom, developing local dialect dictionary etc helped the teachers to increase the students interest in teaching learning process and thus increased their retention in the system. Health factors like malnutrition, illness etc often

play an important role in exclusion of the children from education. Swami Vivekananda says that "a strong mind lies in a strong body" i.e., first you have to build the body by nutritious food then only will the mind be strong. Many teachers have made praisable efforts to improve the health of their children which had a positive impact on their retention in schools. A teacher from Rajkot district made appraisable efforts to gain the support from the community members to encourage their participation in the mid day meal programme. As a result he became successful in acquiring maximum Thiti Bhojan (donors) which helped in increasing the food supplements like milk, fruits etc to children. The improvement in the health of the children started showing its reflection in improving their achievement level in curricular subjects. A teacher from Nagar Primary Girls school-1 brings daily a handful of grains and also encourages the students to do the same. As a result he could increase the supplements in the midday meal and thus could solve the problem of anemia in students. A teacher from Surat started the practice of including tulsi and other ayurvedic leaves in mid-day meal. He also included the practice of yoga in daily schedule of students and thus could improve their health. Another teacher developed a checklist to inculcate good habits among students and gets it filled up by them daily. Giving students a tracking mechanism for measuring good habits is increasing their self awareness and is giving them a clear bar to measure their progress on a daily basis. Another teacher from Surendranagar district is making efforts to provide nutritious food to students by setting up a kitchen garden in school and use its produce during mid day meal.

Conclusion

All these efforts made by teachers to improve the health of children are showing a good impact on their retention in the school system. Improving the life skills of students and linking their learning with the day to day required skills helped the teachers to increase the retention of students in schools and also resulted in improving the quality of education. Activities like initiating a school newspaper (where the students are wholly responsible right from collecting the articles to sending the paper to nearby schools), forming street wise peer based learning groups (who take up the responsibility of bringing the irregular children to schools, teaching the children in the evenings etc), organizing the content quiz in KBC (Kaun Banega Crorepati) format, teaching work based skills like (book binding, making paper bags/pen stands, painting, toy making, embroidery), Street-wise monitoring of attendance by student leaders, students lead process to resolve the school problems, incentivizing students' regularity, hard work and good behavior, felicitating mothers of first grade students, encouraging for sharing responsibility of the disabled and mentally challenged children by other students of the class, spreading awareness about girls education among community members etc paid good results to improve the enrolment, retention and quality of education. Such appreciable efforts by teachers show us that inclusive practices in education are not something which demands a lot of time and a lot of hard work from teachers. Rather, inclusion in education is an attitude which all of us have but only need is to bring it out and put it in practice.

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ICT AND ITS' ROLE IN PRIMARY MATHEMATICS EDUCATION

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Abstract

We live in a dynamic society with knowledge increasing at an unpredictable rate. With the accompanying advance in technology, developing countries are no longer insulated from the effects of these changes, as evidenced by the extent to which the whole world is fast becoming a global village with constant interaction on many levels. One goal of education is the preparation of the young not only for this changed world, but also with the willingness and ability to face new and changing situations. Social, economic, and technological changes of the past decades are making education and training for all more crucial than ever. Yet, educational systems, to different degrees worldwide, are struggling to afford educational opportunities for all, to provide their graduates with the necessary knowledge and skills for evolving marketplaces and sophisticated living environments, and to prepare citizens for lifelong learning. To meet these challenges, countries have to focus concurrently on expanding access, improving internal efficiency, promoting the quality of teaching and learning right from the elementary level, and improving system management.

Keywords: ICT, education, mathematics

Mathematics continues to be an important component in the formation of the educated person and as such, mathematics education should reflect the goals of education in a dynamic society. We must therefore address not only the acquisition of skills and mastery of ideas. We must address more than the accumulation of facts and principles. Mathematics education in the age of information must place emphasis on the higher skills of discussion, interpreting and evaluation. Also, the acquisition of communication skills must become one of its prime goals. Since many mathematical ideas are abstract in nature, every effort must be made to reduce the range of such concepts at the lower level. It is the understanding and grasp of concepts in practical experiences that give children the confidence to go on to more abstract ideas in later years.

A linear expansion of existing processes and methods may not be sufficient to meet these objectives within a reasonable time. Some countries and institutions have turned to information and communication technologies (ICTs) and are exploring ways by which ICTs may help them in pursuing their educational goals. Frequently, users and experts tend to concentrate on what a specific technology can and cannot do for education. But, as Table illustrates, one technology may have different potentials depending on the purpose for using it. Also, many of the technologies have similar characteristics. Therefore assessments of the potential and appropriateness of particular technologies must be based on educational needs and objectives, rather than on the technologies themselves.

ICTs and their potential for education

Technology	Outreach	Flexibility	Sensorial Stimulation	Interactivity
Radio	High	Limited	Audio Only	Limited
Television	High	Limited	Audiovisual	Limited
Video	Low	High	Audiovisual	Limited
PC	Low	High	Audiovisual	High
Internet	Highest	High	Audiovisual	Highest

* Limited = students and teachers must be present during transmission.

High = students can access the material at different times.

The main hindrances in the teaching-learning of Math as identified are variations in difficulty level of topics, some concepts are abstract, lack of student interest in the subject, shortage of teaching time, variations in teacher competencies, and The initial grooming at home (parental attitude and competencies)

To tackle these challenges the teaching of Math needs to be handled differently. A partial solution to all the above can be through introduction of audio visual aids in classroom teaching.

Learning perceptions

1% of what is learned is from the sense of TASTE.

1.5% of what is learned is from the sense of TOUCH.

3.5 % of what is learned is from the sense of SMELL.

11 % of what is learned is from the sense of HEARING.

83 % of what is learned is from the sense of SIGHT.

Technology And Innovation In Mathematics Education

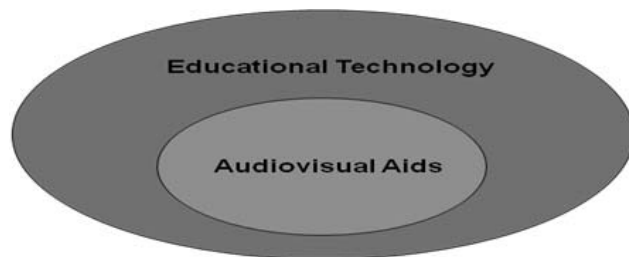
This is a very exciting time in the development of the educational use of ICT (Information and Communication Technology) because of recent breakthroughs in technology which are making mobile computing devices ever smaller, powerful, robust, affordable and practicable .

In UK there has been considerable developments in the educational use of ICT to support classroom teaching of mathematics with nearly all teachers having access to laptops, data projectors and the Internet, and most also having the use of Interactive White Boards (IWB) and Virtual Learning Environment platforms (VLE). The

problem now being addressed is that of providing hands-on access for students to ICT in their normal mathematics lessons when and where needed.

Educational Technology

It is concerned with the application of scientific knowledge about learning and conditions of learning. It helps to improve the effectiveness of teaching, learning and evaluation. Audio visual aids are an integral part of Educational Technology.



Audio visual aids (general) helps to introduce a new topic, reinforce stated facts, aid the understanding of ideas, clarify relationships or physical layouts, and distance learning (no space and time bar). Audio visual aids can be used in Math to clarify and establish concepts co-relate and co-ordinate concepts, to interpret abstract concepts, make learning more concrete, make learning more effective, and diagnosis and treatment of discalculia. With audio visual learning Math can become more interesting, meaningful and vivid.

ICT offer(s) opportunities in mathematics for practicing and consolidating number skills; developing mathematical models through exploring, interpreting and explaining data; exploring the links between shape and space and algebra; developing logical thinking; making connections within and across areas of mathematics; working with realistic data; exploring patterns and relationships; and working with graphic images.

PowerPoint Presentations can be created for a wide range of topics to help improve the average performance of students in Mathematics e.g. Numbers and number sense; Fractions; Basics concepts geometry; Area and perimeter; Time distance and speed; Circle; Angles; Elementary algebra; Mensuration; Proof without words; Audio visual proofs

Integration of PowerPoint lessons in classroom teaching can help in the effectiveness of teaching-learning of concepts in a large group is maximum, teachers find it easy to bridge the gap, when and wherever textbooks are not updated, using visuals to clarify concepts and to bring accuracy in learning Mathematics, reducing the time for learning a concept and increasing the learning outcome in the given time, and by enabling the teacher to follow the maxims of teaching like 'concrete to abstract', 'known to unknown' and 'learning by doing'.

Ground realities

Using Technology in Education is not an easy one step solution to making teaching easier. There are many obstacles that may still come in the way of introducing Technology Aided Education – these would be Resistance from school administrators; Resistance from teachers; Space; Time; Funds; Inertia (resistance to change in general) These can be overcome if the introduction is not sporadic, but planned thoroughly and process worked out right till the end.

The process that should be followed is Identification of problem as such Problem of lack of time for teaching of certain topics, students lose interest in certain topics, student result being affected, teacher frustration, and administrator dissatisfaction,

Solution; Means; Review; Modify; Educational technology cannot be implemented in isolation of the entire school system. It is a system with a number of interconnected and interdependent components.

Expanding Access

Education for All: Unattainable Reality?

Expanding access to education is a matter of both economic development and social justice. It is true that worldwide illiteracy rates have declined in the past 30 years, but it is also true that the demands on knowledge are much higher now than 30 years ago. In the past, an agrarian society could thrive economically even when more than half of its population was barely literate, but this is no longer possible in modern societies in the Information Age. To remain economically competitive and prosper in this global, knowledge-driven economy, countries cannot afford to have large sectors of their population excluded from education, or at the lower level of the educational process. Education is positively related to development—that is, a higher proportion of the population of the most developed countries has attained higher educational levels than the population of developing countries.

Reaching Large Audiences

For more than a century, education has used technology to expand beyond the physical limits of schools and university campuses and reach more and non-traditional groups of students. For instance, in the beginning of the last century, Australia and New Zealand used a system of itinerant teachers to educate children and youth living in sparsely inhabited territories. The teachers maintained contact with their students through postal correspondence. Radio, television, and computer-related technologies have expanded outreach potential further, and higher education institutions have been at the forefront of this expansion. In 1992, 41% of higher education students in Thailand and 38% in Turkey studied at a distance. The China TV University System



(Republic of China) and Anadolu University in Turkey each serves more than 500,000 students per year. The United Kingdom Open University has provided education to more than 2 million individuals since it was established about 30 years ago. Distance learning institutions generally use a mix of technologies that may include printed material, videos, videoconferencing, CD-ROMs, e-mail, and the Internet. Many of them start with less expensive technologies, such as printed materials, and move to faster and more powerful resources as the need for expansion increases.

Including the Excluded

Expanding access also means integrating populations that have been traditionally excluded from education for cultural and social reasons. In cultures with strict rules regarding interaction between genders, girls may be forced to leave school before puberty to avoid contact with male colleagues and teachers. For girls who remain in school, the rules regarding with whom they may or may not talk make it difficult to succeed. If a girl is having academic difficulties, she may rather fail than address the male teacher. Technology can promote alternatives for educating women that are more cost-effective than all-female schools without disrupting cultural traditions. Television and radio broadcasts or Internet-based technologies enable girls to continue their studies from home or small learning centers. Technology functions as a neutral mediator, without gender or cultural allegiances, thereby facilitating communication.

For persons with disabilities—who represent another significant and forgotten sector of the world population—technologies provide essential supports enabling them to participate in the educational system and the job market. VisualTek is a camera and monitor that enlarge print materials for people with visual disabilities. Voice synthesizers enable individuals with muscular dystrophies to communicate. Special computer software can be used to ameliorate learning disabilities or to enhance the memory of individuals with traumatic brain injury. Keyboard adaptations enable individuals with motor disabilities to write, and the Internet can connect homebound individuals to classrooms and workplaces. Lifelong learning and economic development for populations living outside mainstream cultures are two other venues for using ICTs.

Promoting Efficiency

The Traditional Paradigm

The internal efficiency of an educational system is measured by its ability to deliver quality education in cost-effective ways. The traditional model for providing primary through tertiary education, adopted across the world, relies on three basic principles.

Learners must congregate in a building where the teaching/learning process takes place.

There must be a predetermined path, divided into grades, that leads to a diploma, and students must follow this path, regardless of their interests, needs, or abilities.

There must be a hierarchic structure where the instructor is the provider of knowledge and the students are the recipients.

The traditional school is, therefore, a physical entity organized into classrooms where learners congregate according to a grade structure and constrained by the limits of space and time. If a school serves students from grades 1 through 12, it must have at least 12 classrooms to accommodate each grade separately. Each classroom must have one teacher. A certain number of teachers require a principal and, often, administrative and teaching support. If the number of students or grades increases, so must the number of needed classrooms, teachers, and support personnel. Generally, beginning in the seventh grade, another dimension is added to the classroom/grade framework: specialization. From then on, the number of teachers is related to both the number of classrooms and the number of specialties offered. Each school must have at least one mathematics teacher, a science teacher, a social studies teacher, and so on. As the educational level advances, classroom organizations will rely more on specialization than grades, but the framework is maintained. To be cost-effective within this structure, the learning place must have a critical number of students that justifies school construction and maintenance, particularly personnel costs. In areas of low population density, building and maintaining schools to serve the traditional paradigm is economically prohibitive. The requirement of one specialist per specialty makes secondary schools an even more expensive venture. Some countries sidestep the problem by leaving the solution to individual families, with catastrophic results. If the families choose to move to urban areas and ensure their children's education, they jeopardize their country's fragile economic balance and further deplete the economy of their native regions. If they decide to remain, they jeopardize their children's future. Areas of high population density but weak economy are not free of problems. In this case, the traditional model encourages administrators to accommodate as many students as possible in one classroom to control personnel costs, which leads to overcrowded and unsafe environments that are unfit for learning.

Learning Time vs. Classroom Time

The capacity of ICTs to reach students in any place and at any time has the potential to promote revolutionary changes in the traditional educational paradigm. First, it eliminates the premise that learning time equals

classroom time. To avoid overcrowded classrooms, a school may adopt a dual-shift system without reducing its students' actual study time. Students may attend school for half a day and spend the other half involved in educational activities at home, in a library, at work, or in another unconventional setting. They may be required to watch an educational radio/television program and complete related activities, or work on a computer-assisted lesson at the school technology lab or in a community learning center. For areas with low population density, multigrade schools become viable alternatives. While more advanced students listen to an educational program on the radio or watch a television broadcast, the teacher can attend to the students who are in less advanced level or vice versa.

Student-Centered Curricula

Traditional educational systems also tend to rely on curricula that were developed at the beginning of the Industrial Revolution and are now disconnected from the realities of the job market. For bright students, these systems offer little in the way of motivation. Eventually, a few extraordinary students will be able to skip a grade, but rushing through the system is not encouraged, and early graduates may find obstacles when they attempt to gain access to the next level. For low-income students, who have less academic support, the schools offer even less: the wealthier schools lure the best teachers, leaving the least prepared for schools in poor and remote areas. When the need to work conflicts with schools' requirements, the student sees no reason to stay in school. As a result, these systems perpetuate social inequalities, lose many excellent students to boredom, increase the costs of education through high dropout rates and grade retention, and pass on to employers or other systems the costs of retraining their graduates. ICTs have the potential to bring the products of the best teachers to classrooms anywhere in the world. For self-motivated, disciplined students, ICTs can speed the path toward a degree and expand their learning options through selfstudy. Students can "shop" courses on the Internet and choose their own program of study and schedules. Students in virtual schools can take extra online courses to graduate earlier or fulfil specific interests and curiosity. For those who need to balance studies with work and family obligations—full- or part-time workers, parents of small children, homebound individuals—this flexibility may be most cost-effective for them.

Improving the quality of learning

Learning about Learning

ICTs diversify the systems of representation through the use of various types of stimuli (images, sound, and movement) and address the needs of diverse types of learning (visual, psychomotor, and affective). In addition,

ICTs have the potential to enhance educational quality by increasing motivation, facilitating acquisition of basic skills, promoting inquiry and exploration, and preparing individuals for the technology-driven world.

Motivating to Learn

An effective teaching/learning process must stimulate intellectual curiosity and offer a sense of enjoyment that will move the students from the passive role of recipients of information to the active role of builders of knowledge. Yet, engaging the learner in this process can be the most challenging task for teachers. ICTs are effective instructional aides to engage students in the learning process. Videos, television, and computer multimedia software provide information that can be authentic and challenging in addition to stimulating students' sensorial apparatus through images, color, sound, and movement.

Facilitating the Acquisition of Basic Skills

Transmission of accumulated knowledge to new generations is an essential component of the educational process. This includes basic skills and information that are at the foundation of more complex knowledge. It would be inefficient to use a time-consuming process, such as inquiry and exploration, to transmit basic information. In addition, non-structural learning environments based solely on inquiry and exploration may be confusing and overwhelming for some children and youth. These students will do better in well structured classrooms, where the information is broken into less complex units, thus making it easier to understand. Exposition and practice strategies help to structure the classroom, enhance retention and recall, and cut learning time.

Computers also can be used as auxiliary tools in mathematics and science classes to free teachers' and students' time. While computers work on repetitive tasks (such as long calculations and statistical computations), teachers and students can concentrate on analytical activities that require higher-order thinking skills. Research indicates that elementary and secondary school students who use calculators have higher test scores and better attitudes toward mathematics than their peers who do not use calculators. Elementary school children who use computers and calculators in the classroom were found to understand mathematical concepts much earlier than expected. (debatable).

Fostering Inquiry and Exploration

Although basic skills and information are essential components of the teaching/learning process, learning is more than information transfer. Learning requires the ability to analyze and synthesize information, use it in diverse circumstances, and propose new lines of inquiry that foster knowledge. Inquiry and exploration are essential strategies to attain those abilities. Astronomer Carl Sagan used to say that all children start out as



scientists, full of curiosity and questions about the world, but schools eventually destroy their curiosity. ICTs have the potential to restore curiosity to education. ICTs can take students on exciting journeys through time and space. Movies, videos, audio technology, and computer animations bring sound and movement to static textbook lessons and enliven children's reading classes. They also provide social studies and foreign language students with vicarious experiences of distant societies and bygone times. Spreadsheets can store and analyze large amounts of data necessary for complex math and science studies. Computer simulations transform risky and expensive experiments into safe and cost-effective procedures. The Internet offers virtual reality settings where students can manipulate parameters, contexts, and scenarios. Computer simulations are a good example of the power of technology to improve the learning process. The flight simulator has been used for decades as the initial step in training airplane pilots. A flight simulator offers trainees the opportunity to practice the proper skills to control the plane and deal with emergency situations without risking lives or property loss. Although flight simulators can be complex and expensive machines, no pilot training program would question their utility. Simulators also are becoming essential tools in medical training. Through their use, medical students and residents are introduced to risky and invasive procedures without endangering patients' lives or exposing them to unnecessary pain and discomfort. Simulations are particularly helpful in situations that are too risky, expensive, or time-consuming to allow real-life experiments. For instance, welding simulators have proved to be a cost-effective method to train future welders. Without simulators, this training requires long hours of practice and burning expensive electrodes. Simulations also enable students to test explosive materials virtually without running the risk of real explosions, and to "experiment" on animals without the ethical implications of real-life procedures. For elementary and secondary school students—and sometimes even for adults even for adults—exploring the Internet can be a fun and enriching experience, or a frustrating adventure in trivia. Teachers and instructors play an important role as guides and facilitators by providing background material and guidelines for the search. They also need to monitor the process, particularly for younger students, who tend to browse the Web, rather than follow structured search plans. Teachers and instructors also are instrumental in helping students to separate unreliable sources from reliable ones and make sense of the large amount of information that may overwhelm them.

Enhancing the quality of teaching

Teacher Training

Learning is only one component of the educational process, and quality learning cannot be attained without good teaching. For developing countries, in rural areas and in some specialties such as math and science, the teacher shortage has become critical. Simply hiring a teacher does not ensure quality education. To be effective, teachers must keep abreast of new perspectives on learning theories and their area of specialization, a task that becomes impossible when teachers work in distant, isolated areas. The mentoring process that has been used traditionally to prepare new cadres is an extra burden on experienced teachers, particularly in places where they are already in short supply. Some schools of education are using videotaped sessions to prepare new teachers to enter the classroom without relying solely on mentors. The process frequently involves videotaping experienced teachers during regular classroom time. Student teachers observe their experienced peers in action, analyzing in detail the strategies used to present the material and interact with the students.

The trainees then practice mock lessons with a group of peers or volunteer students while being videotaped. Peers and instructors review the tapes, highlighting weaknesses and strengths and making suggestions for improvement. Only after completing this process is the student teacher sent into actual classrooms. Videos can also be used to analyze teaching styles and idiosyncrasies and help educational systems to change their approaches. A research project related to the Third International Mathematics and Science Study (TIMSS) videotaped mathematics and science teachers in Japan, Germany, and the United States. The study analyzed variations in teaching style and lesson content among the three countries, looking for correlations between those dimensions and students' performance. ICTs can be used as tools for training and support of teachers, regardless of their geographical dispersion. Scripted lessons in conjunction with educational programs via radio and television, ensure that all students receive quality, updated information, while imparting to inexperienced and generalist teachers the appropriate content knowledge and new pedagogical strategies. The use of technology for teacher training has at least three major advantages: it reduces travel costs, avoids disrupting classroom routines, and familiarizes the teachers with the technology.

Teacher Support

The Internet has myriad Websites to help teachers develop or improve lesson plans, exchange ideas, obtain information, and find free animations and simulations to enliven their lessons. Most Internet-based collaborative learning projects include teacher support and training, and conference proceedings are published regularly on the Web. Chat rooms or forums may become a laboratory for new ideas.

Teacher Empowerment

More important still, research indicates that the introduction of ICTs for educational purposes has the potential to bring positive changes to teaching practices. In a survey of more than 2,000 teachers and school principals across the United States, the teachers stated that the technology helped them to become more effective (92% of respondents) and creative (88%). Both teachers and administrators agreed that technology had reinforced instruction, and functioned as a motivator for the students, who were more prone to ask questions and participate in the lessons. Despite this potential for training and support, ICTs have not been accepted easily among teachers. Some complain that scripted lessons take away their ability to address students' individual differences and improve their own teaching strategies. Others fear that technologies will reduce the role of teachers in defining curriculum and educational strategies, or totally replace them. This theme is discussed further in chapter 4.

Improving Management Systems

Education policy development is an intricate process that requires reliable, timely, user-friendly data. ICTs can be valuable for storing and analyzing data on education indicators; student assessments; educational, physical, and human infrastructure; and cost and finance. The use of computer-related technology is particularly helpful in this field. For instance, administrators and policy makers can construct virtual scenarios around different policy options to determine needs and analyze potential consequences. Each scenario can be analyzed and evaluated systematically, not only in terms of its educational desirability, but also in terms of financial affordability, feasibility, and sustainability over a sufficient period of time to show results. The same elements of computing and telecommunications equipment and service that have made businesses more efficient and cost-effective can be applied to schools and educational systems. ICTs can help administrators and school principals to streamline operations, monitor performance, and improve use of physical and human resources.

Conclusion

Social, economic, and technological changes of the past decades are making education and training for all more crucial than ever. Transmission of accumulated knowledge to new generations is an essential component of the educational process. One goal of education is the preparation of the young not only for this changed world, but also with the willingness and ability to face new and changing situations. Educational systems required to prepare citizens for lifelong learning. Expanding access to education is a matter of both economic development and social justice. Education is positively related to development. To meet these

challenges, countries have to focus on promoting the quality of teaching. Mathematics continues to be an important component in the formation of the educated person. Some countries and institutions have turned to information and communication technologies (ICTs). Teachers having access to laptops, data projectors and the Internet, and most also having the use of Interactive White Boards (IWB) and Virtual Learning Environment platforms (VLE) are more enabled. *Distance learning institutions generally use a mix of technologies that may include printed material, videos, videoconferencing, CD-ROMs, e-mail, and the Internet.* Technology can promote alternatives for educating women. Technology functions as a neutral mediator, without gender or cultural allegiances, thereby facilitating communication. ICTs have the potential to bring the products of the best teachers to classrooms anywhere in the world. For self-motivated, disciplined students, ICTs can speed the path toward a degree and expand their learning options through self-study. ICTs can be used as tools for training and support of teachers, regardless of their geographical dispersion. Despite this potential for training and support, ICTs have not been accepted easily among teachers. Some complain that scripted lessons take away their ability to address students'.

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PROTECTING BIOTECH INVENTIONS: ARE WE READY?

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Abstract

Biotechnology has been used in agriculture, food production and medicine since the dawn of our civilization. Biotechnology is a popular term for the generic technology of the 21st century. With the advancement in science and research, modern biotechnological inventions have brought a revolution in our lives. These inventions are protected under the Patent Law. The World Trade Organization's TRIPS agreement sets down the minimum standards for intellectual property regulation for its member countries. India being one of the members of WTO has fulfilled the TRIPS commitments by amending the patent regime, the latest of which is the amendment of 2005. India has a large pool of scientific talent, world-class information-technology industry, and vibrant pharmaceutical sector. India has a rich human capital, which is the strongest asset for the knowledge based industry. India is also well positioned to emerge as a significant player in the global biotech arena. Though the Indian Patents Law has been very successful in promoting the progress of science but still the patent system is not as stronger as it is in other developed countries. So far as biotechnology is concerned there are no internationally accepted guidelines for the grant of patents and wide range of opinions exists regarding patenting of biotechnological inventions. The protection afforded to these inventions is sensitive and complex and has given rise to several technical and ethical issues. The general aim of this paper is to canvass those issues in the Indian context.

Keywords: *biotechnology, invention, patents*

Human life has touched new horizons with the progress of science and technology and biotechnology is a revolution that has influenced the progress of mankind tremendously. The word bio is taken from Greek word 'bios' which means life. Technology means application of scientific knowledge for practical purposes to get desired results¹. Biotechnology means the scientific knowledge that uses life or living entities like micro-organisms, plants and animals for practical and commercial purposes to get the desired results.

Biotechnology is one of the oldest technologies and is in use for thousands of years. It has been utilized for centuries in traditional production processes. For eg. the production of wine or beer which involves processes using living organisms², Microorganisms are also used to turn milk into cheese and yogurt³, yeast is used in bread to make it rise⁴. All these techniques have been known for a long time and all of these can be considered biotechnology because it utilizes living organisms. Likewise, the selective breeding of plants and animals has an equally long history. What may be described as modern biotechnology is distinct from classical fermentation technology. Modern biotechnology is only about 50 years old, and in the last decades it has witnessed tremendous developments⁵ like rDNA techniques, hybridoma technology, Polymerase Chain Reaction and cloning methods. Further advances in biotechnology are interdisciplinary techniques like information technology and nano-technology etc. which is considered as the foundation of modern biotechnology⁶.

Today biotechnology has applications in four major industrial areas, health care (medical and cosmetics), crop production and agriculture, non food (industrial) uses of crops and other products (e.g. biodegradable plastics, vegetable oil, bio fuels), environmental uses (bioremediation).

As in other fields of technology, there is also a need for legal protection in respect of biotechnological inventions. Such inventions are creations of the human mind just as much as other inventions, and are generally the result of substantial research, inventive effort and investment in sophisticated laboratories. Typically, enterprises engaged in research only make investments if legal protection is available for the results of their research. As with other inventions, there is an obvious need for the protection of biotechnological inventions, not only in the interest of inventors and their employers, but also in the public interest in order to promote technological progress. A biotechnological invention is dealt with patent laws under intellectual property rights.

Indian Law on Patents

The Patents Act, 1970, is a landmark in the industrial development of India. The basic philosophy of the Act is that patents are granted to encourage inventions and to secure that these inventions are worked on a commercial scale without undue delay and not merely to enable patentee to enjoy a monopoly of the patented article.

The Agreement on Trade Related Aspects of Intellectual Property Rights popularly known as TRIPS is an international agreement administered by the World Trade

Organization (WTO) that sets down minimum standards for many forms of intellectual property regulation as applied to nationals of other WTO Members. It was negotiated in the year 1994. The TRIPS agreement introduced intellectual property law into the international trading system for the first time and remains the most comprehensive international agreement on intellectual property till date. TRIPS agreement under Article 27.1 provides that patents be available in all fields of technology, without discrimination, provided that they are new, involve an inventive step and are capable of industrial application. Article 27.2 enables a Member to exclude from patentability inventions whose commercial exploitation may be contrary to public order or morality. Further, Article 27.3 also allows Members to exclude from patentability certain subject matter, such as plants and animals.

India being a signatory to WTO's TRIPS agreement was put under the contractual obligation to amend its Patents Act in compliance with the provisions of TRIPS. Accordingly the Indian Patent Act, 1970 was amended in 1999, 2002 and 2005 to meet the requirements of TRIPS.

Issues in grant of patent in India

Indian biotechnology industry has lots of strengths like good human resource, academic resource, clinical capability, vast bio-diversity, large domestic market, large export potential and most importantly low cost research base for international companies in comparison with other countries but still the Patent law needs to be clearer on the criteria for the patentability of biotechnological inventions. Robust intellectual property rights framework is the need of the any nation⁷. Though India is already a member to various international treaties and agreements but still significant improvement remains in the areas of implementation and enforcement of patent laws.

Some of the issues concerning biotech patents are discussed as under:

Life forms: Discovery v. Invention

Discovery means merely making available what already exists in nature. A substance freely occurring in nature, if merely found or discovered, is not patentable. However, if the substance found in nature has first been isolated from its surroundings and a process for obtaining it, is developed, that process is considered invention and hence patentable⁸. Biotechnology invention also includes inventions relating to an organism or material such as living entities of natural or artificial origin (animals, plants, and microorganisms), biological material (plasmids, viruses and replicas, and parts of organs, tissues, cells, and organelles), and naturally occurring substances from living entities, biological material and parts⁹.

The first area of concern relates to the legal standards in respect of the scope of patent protection for inventions in the field of biotechnology. Since Intellectual Property

Right protection is granted only for invention and not for discoveries, in case of biotechnology innovations, it is difficult to say whether the new life form in the form of gene, DNA, cell, microorganism etc. is a scientific discovery or a technological invention. Hence a most critical problem faced by the biotechnological inventions is the interpretation as to what constitutes an invention in contrast to a discovery¹⁰.

Secondly, several Non-Governmental Organizations argue that naturally occurring organisms are God's gift and therefore are common property of the mankind and therefore cannot be appropriated by any person(s) or organizations or entities by just modifying it or tinkering with it. In case of modern biotechnology, these objectors do not see much innovation being done, and therefore argue that any life form innovations must not be granted patent.

Thirdly, there are several ethical issues related to patenting of life forms, the most important being extent of private ownership that could be extended to life forms. It is argued that that nature has provided equal rights to all living beings. Human beings do not have rights over other living beings and therefore rights of none of the human beings are higher than each other¹¹. Hence human beings cannot take other living beings for granted and they cannot play with dignity and integrity of such living beings by manipulating them.

In spite of various issues involved in patenting biotechnology, it has brought enormous benefits to the society. The application of biotechnological inventions has extended to biomedical technologies like recombinant drugs, recombinant diagnostic kits and vaccines; to the agricultural sector in producing GM crops which are pest resistant and have high nutritional qualities; marine biotechnology which includes fish farming; environmental biotechnology including treatment of air pollution; forestry for tissue culture and production of wood for paper manufacture. Hence the benefits of biotechnology cannot be sidelined in the modern world as it is capable to cater the needs of the society.

Deposition requirements

Whether the claimed invention is a new microorganism itself or a new product obtained from it, the patent will be invalid unless it gives a disclosure of the invention that is sufficient to enable it to be reproduced. It is practically impossible to give a written description of a strain of a microorganism. In order to meet this problem the Budapest Treaty of 1977, which came into force in 1980 establishes a list of International Depository Authorities and provides that a single deposit made at any of these depositories will suffice for all signatory states. A serious problem arises is that most countries now have early publication of patent applications (18 months from the priority date) and consider that as a part of publication

the deposited strain must be made available from this time. This means that the applicant has to make his invention available to public, including his competitors, before there is any assurance that he will actually obtain patent protection. The traditional concept of patent protection as exchange for disclosure has thereby been distorted so as to require, before any protection exists. This has been aptly described as a 'pocket factory handed over to the imitator on a silver plate'.¹²

Liberal stand taken by other countries

Two of the Sections 3(c) and 3(j) are important in the context of patentability of biotechnological inventions. Section 3 (c) states that "The mere discovery of a scientific principle or the formulation of an abstract theory or discovery of any living thing or nonliving substances occurring in nature will not be considered as patentable invention". This provision of non-patentability is common to patent laws of other countries. The Clause 3(j) states that "Plants and animals in whole or any part thereof other than microorganisms including seeds, varieties and species and essential biological processes for production or propagation of plants and animals as non-patentable invention". This provision differs from the patent laws of countries like the US, the European Union, and Japan, who follow liberal patent standards and where patents are also granted to genetically modified animals and plant varieties¹³.

Small and marginal farmers' rights

Article 27 (3)(b) of TRIPs agreement allows members to exclude from patent protection, plants and animals other than micro-organisms; and biological processes for the production of plants or animals other than microbiological processes. TRIPs provide option to member states protecting new plant variety by means of patent or sui generis system or both. India opted for sui generis protection and has legislated "Protection of Plant Varieties and Farmers Right Act, 2000" that enables the farmer to save, use, sow, re-sow, exchange, or share the seeds of protected variety, besides offering protection on farmers' variety, extant variety and essentially derived variety. Whereas plant variety protection could boost research in the area of plant biotechnology by both public and private bodies, it could also result in higher prices for seeds, thus naturally excluding the small and marginal farmers from accessing such new technologies¹⁴. Farmers accustomed to harvesting and replanting their seeds are not willing to pay for GM seeds year after year. These debates draw attention to the controversial TRIPs Article 27.3(b), which exempts certain life forms from patentability but requires countries to establish some form of protection for plant varieties.

Apart from the above issue there have been claims of genetically-modified seeds being responsible for the farmer suicides¹⁵ as the farmers using genetically-modified

seeds led to rising debts which forced them to commit suicide when they do not get the returns after the seeds are cultivated. The decade of experience has shown that though biotechnology has benefited the seed industry but not the poorest of farmers which has resulted in agrarian distress and farmer suicides¹⁶.

Health and environment issues

The principal cause of the debate surrounding products of biotechnology is the uncertainty of the long-term health and environmental effects of genetically modified living materials. Though many scientists believe genetically-modified foods to be safe, a small but influential group of researchers believe uncertainty about their effects on human health. Transfer of genes from genetically-modified to wild plants could create health problems in humans, anti-biotic resistance in plants and associated insects, long-term damage to ecosystems, loss of biodiversity and lack of consumer choice¹⁷.

Other relevant issues, such as the conservation and preservation of the environment (including the protection of biodiversity) and moral and ethical dimensions of the protection and commercialization of biotechnological inventions have been discussed in many fora. Advocates of sustainable development also wary of the long term effects that genetically-modified crops could exert on the environment.

Genetically-Modified Food and Hunger

Producers of genetically-modified crops argue that biotechnology could be the world's cure for hunger. They cite that the technology has the ability to produce high yields, resist natural disasters such as drought and certain viruses and be enriched with vital nutrients that starving people are likely to lack¹⁸. However, aid agencies and anti-GM countries argue that in many countries where hunger is a major problem, adequate amounts of food to feed their population has to be produced. Hunger, they argue, is not only a function of agricultural yield; it is also a function of mismanaged government and a series of other factors, which technology cannot resolve.

Defenders of biotechnology often argue that genetic manipulation holds the key to eliminating hunger and suffering across the world. One commonly cited example is 'Golden rice' which scientists have engineered to produce extra Vitamin A. The rice has been hailed as a godsend for malnourished people in the developing world because Vitamin A helps prevent blindness. Critics take two different stances on these wonder-foods. Some refer to recent studies and statements by doctors that Golden rice is not a sufficient source of Vitamin A. Specifically, people with diarrheal diseases are incapable of absorbing Vitamin A from the rice, and thus people in developing countries who commonly suffer from diarrheal disease and Vitamin A deficiency remain afflicted by both. Other critics reply that 'Franken foods' are the wrong answer to

the problems of hunger and malnutrition, which they claim are the outcomes of distributional problems. Instead of posing a viable long-term solution, genetically-modified foods distract from and exacerbate the real issues involved¹⁹.

Criteria for patenting

In addition to the question of patentable subject matter, the patentability requirements, i.e. novelty, industrial applicability (utility), non-obviousness and disclosure requirements has been subject to an intense debate²⁰. The consideration of industrial application is an obstacle for securing patents for inventions in biotechnology. Standards of novelty and non-obviousness are difficult to set for living organisms. Most developed countries now recognize that novelty is met if the claimed biotechnological product or process does not exist in the prior art. Sufficiency of disclosure is met for microorganisms by depositing microorganisms in any of the internationally recognized depository under the Budapest Treaty²¹. Hence an inventor apart from proving that his invention is a subject matter of patent has to comply with the above requirements which make it difficult for him to get the grant of patent.

Inventive Step

With the rapid progress in the field of biotechnology, something called as a 'revolutionary practice' quickly turns into 'standard practice'. The state of the art changes so dramatically within the time during which a patent application is pending and this makes it difficult to judge the invention in the light of what was the state of art at the filing date²².

Problem of Bio piracy

Farmers and indigenous peoples in developing countries such as India are facing serious problems as plants that they developed and conserved are being 'appropriated' by private entities leading to bio piracy and exploitation of traditional knowledge claiming the exclusive right to produce and sell many 'modified' plants and animals. This is a great matter of concern today that knowledge, innovation and efforts of these communities are not acknowledged when the legal 'intellectual property rights' systems grant patents on genetic and biological materials and on living organisms to private corporations.

Moreover due to difficulties in obtaining patents in India, CSIR in 2000, found that almost 80 per cent of the 4,896 references to individual plant based medicinal patents in the United States Patents Office that year related to just seven medicinal plants of Indian origin. Three years later, there were almost 15,000 patents on such medicines spread over the United States, UK and other registers of patent offices. In 2005 this number had grown to 35,000, which clearly demonstrates the interest of developed world in the knowledge of the developing

countries²³. Whilst the corporations stand to make huge revenues from this process, the local communities are unrewarded and they in fact face the threat in future of having to buy the products of these companies at high prices. Hence such system of IPR only benefits the private industries or multi-national corporations of industrially developed countries at the expense of the developing countries. There is need to define guidelines and policies for the implementation of IPR in India so that the people like farmers get recognition for their efforts and contributions prevent bio-piracy. World Intellectual Property Organization is now developing guidelines to protect traditional and indigenous knowledge systems²⁴.

Conclusion

India is a country where ethics and morality are respected and adhered to at par with law. Indian tradition is well known for worshipping animals and plants. For an Indian, patenting plant, animals and other living beings would be like patenting and owing God. The Patents Act addresses ethics in patenting invention in general by saying that inventions which are against ethical and moral standards are not patentable. The amended Patents Act states that any invention, the exploitation of which is against public order and morality and that may cause serious prejudice to the health of human beings, animals or to the environments cannot be patented.

Biotech industry is one of the fastest growing industries in the world, including in India. India is a storehouse of biological resources and is one of the world's richest biodiversity countries. In recent years, there has been a rise in the investment in the biotech oriented industries²⁵. The importance of India in the field of Biotechnology is manifold. In addition to generating trained manpower and a knowledge base, India is proving to be an ideal setting for manufacturing activities and high-level biotechnology research programmes. With the initiatives taken by the government, Indian Biotechnology is poised for a tremendous growth.

Strong intellectual property rights in biotechnology are of critical importance for the continuous growth of the biotechnology industry. In either case, India companies, inventors and investors venturing into the biotech sector must be well informed and well aware of India laws, as well as the laws of other countries as they seek to join the biotechnology headlines. Also India is rich in traditional knowledge associated with biological resources.

In light of the increasing research in human genetics, the Indian Council for Medical Research issued guidelines²⁶ to evaluate the ethics involved in human genetics. As the effect of ethical issues raised by research in human genetics is acute, these guidelines admit that ethical considerations in human genetic research are desirous compared to research in plants and animals. The

guidelines intend to guarantee human rights and dignity vis-a-vis genetic research where human beings, human tissues, cells and genetic material are being used as subjects. The guidelines acknowledge International Conventions on human rights and fundamental freedoms.

Biotechnology has faced problems in achieving equal protection in the patent system in different countries. Each and every application on biotechnology patent has to be rethought and interpreted anew in biotechnology. Due to this reason, many leading patent law decisions of the last decade have resulted from biotech cases.

The increase in research activities in the field of biotechnology has resulted in the optimum utilization of biotech resources, flow of investments and increased number of patents in the field of biopharmaceuticals. The evolutionary trends in patenting of biotech inventions are creating complexities and are becoming challenging tasks for the authorities in granting patents.

Today, biotechnological inventions face many critical issues, but still biotechnology has invented countless number of non-natural living beings or inventions involving life by manipulation of existing living beings, which have served and are serving the society. With its potential to manipulate living beings in a way as would benefit the society, biotechnology is promising to be capable of catering to the needs of the society.

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WOMEN AND HUMAN RESOURCE DEVELOPMENT AT EMA MARKET: A CASE STUDY

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Abstract

The present investigation aims to study the contribution of the areas related to the Women and Human Resource Development at Ema Market. This paper attempts to make a thorough, comprehensive and analytical study by exploring the impact of educated women vendors and uneducated women vendors how far they manage their business and economic status, self – sufficient, education of their children and social role. The research outcomes may improve the condition of the women vendors of Ema Market i.e., their problems, their day-to-day obstacles, their financial shortage and inconveniences of their children's education.

Keywords: Women, Human Resource Development, Women Market, Manipuri Women

Human Resource Development is an important committant of economic development. Human resource is the adjunct of capital investment. Human capital formation is acknowledged in the economic development of a nation than the physical development. Human Resource Development constitute both gender; male and female of a country. Man cannot alone take the role of socio-economic development of a country without women. Women is an important ingredient put in the social-economic development of the country. Nearly half of the world population is constituted by women and woman is part and parcel of Human Resource Development. The international, national and state scenario of women status proved that women are also an important factor of the development of a country and their role is remarkable. Development is incomplete without women's participation and contribution.

Role of the Women in Manipur

Manipuri women though take a crucial role in families' economy, they participate in trade and commerce, taking the major initiation in the market. The 'Khwaairamband Keithel', the only unique women market on the globe examples the role of Manipuri women in socio-economic life in the state. Khwaairamband Keithel is the place where women from different part of Manipur come and share their ideas, socio-economic life. It is not only serves as a market place but also a place where the women shared their views when state is under socio-economic turmoil with the negative movement of the political affairs. They play crucial roles exerting their voices against the pessimistic nature of the state affairs and helps in bringing a constructive result for the welfare of the collective involvement of women in bringing peace with socio-economic prosperity in the state.

Women Vendors of Ema Market

The women vendors of Ema Market are equally found to be active in socio-economic role of the state. In family, they manage their household activities and maintain the harmonious relationship among the family members. The

women vendors assist in establishing moral values and behaviour among their family members and render financial support in the maintenance of their families. They possess the sense of discipline, regularity and systematic management of their domestic affairs as well as trade and business in the market. A unique feature of the women in Manipur is that they take the central role in the business of marketing of almost all goods-the products of agriculture, handloom and handicrafts. The women in the 'Ema Market' which is also known as Sana Keithel of the capital town is constituted both the women of the town, rural and hilly areas. In the rural areas also there are market after the model of Sana Keithel run by women. It is these women who are coming from different villages of Manipur represents the mobility of women in the region.

Self-Help Programme

The new trend in the economic participation of women is the emergence of Self-Help-Groups that is gendered under the principal of 'thrift' that the Manipuri's traditionally termed it as 'Marup'. With the advent of the Self-Help-Group in the State, the Manipuri women are able to produce substitute goods and became more effective in creating economic efficiency of the State by pulling down the rate of import of goods into the State.

Contribution in Education

The Vendors of Ema Market also work hard and encourage their children education. They were aware of the benefit and necessity of education in this 21st Century. They manage their family quite efficiently and also finance the education of their children when their husband were lying negligence from their responsibilities in bringing up their children. There are many examples of Ema Market's women who made their son I.A.S officers, engineers, doctors and scholars, singly without their husband helping hand. The status of Manipuri women is really high in our state. The days of gender discrimination are over and the concept of women participation in the socio-economic and educational perspectives in the new

era. Manipuri women survives independently and courageously face every challenges of living.

R. Brown, the political agent of British give description of women vendor as, "Many of them (women) walk in miles in the morning, buy things from distant villages and sell it in the capital market (Sana Keithel) in the evening. In the evening, the women were hurrying along their wares on their heads and little baby slung on their backs". This statement on Meitei Women of Ema Market gives a beautiful picture of their bravery, hard working and love of their children. Hence, the present research aims to study the women and Human Resource Development at Ema Market on the educated women vendors and uneducated women vendors how far they manage their business and economic status, self-sufficient, education of their children and social role.

Objectives

To study the economic status of the women vendors of the Khwairamband Market of Imphal.

To find out the educated women vendors and uneducated women vendors how far they manage their business.

To assess how far they are self-sufficient.

To examine their effect on their children's education.

To examine their social role.

Methodology

The present study was conducted through survey method on the random sample of 100 women vendors, 50 educated women vendors and 50 uneducated women vendors selected from five sectors of Imphal West Ema Market. The sample comprised of 20 vendors of Punsiba Bazar, 20 vendors of Laxmi Market, 20 vendors of Purana Bazar, 20 vendors of new Market and 20 vendors of Cheirap Mamang. The tools for the study were used an Interview schedule which was developed by investigator himself. The data are interpreted in term of percentage.

Results and Discussion

Table 1 – Number of Women Vendors of Ema Market in Relation to Age Group and Working Experience.

Age Group	Numbers	Percentage	Working experience	Numbers	Percentage
30 – 39	10	10 %	0 - 10 yrs	20	20 %
40 – 49	12	12%	11-20 yrs	37	37 %
50 – 59	28	28 %	21-30 yrs	30	30 %
60 – 69	34	34 %	31-40 yrs	10	10 %
70 – above	16	16 %	41-50yrs	3	3 %
Total	100	100 %	Total	100	100 %

The above table shows that the age group of 60 – 69, 34 % of women vendors occupied the market. The next percentage is 28 % that is 50 – 59 age group of women are engaged in vending / trade business.

The vendors of Ema Market have the trade experience of highest in the group 11 – 20 yrs which is 37 % and the second highest trade experience of women vendors falls on 21 – 30 yrs which is 30 %.

Table 2 – How many children do you have?

Responses No. of Children	No. of Women Vendors	Percentage
0 – 3	17	17 %
3 – 5	48	48 %
5 – 7	29	29 %
Above	6	6 %
Total	100	100 %

From the above table, it is quite char that the women vendors lack awareness of family welfare about small family. The maximum number of vendors has children of 3 – 5 and 5 -7 i.e, 48 % and 29%. This may be due to lack of education and poverty.

Objective 1 : To Study the Economic Status of the Women Vendors of the Khwairamband Market Imphal

Table 3 – How Much Profit do You Get in a Day?

Responses	Numbers	Percentage
Rs. 0 – 100	32	32 %
Rs. 100 – 200	36	36 %
Rs. 200 – 300	20	20 %
Rs. 300 – 400	10	10 %
Above	2	2 %
Total	100	100 %

It was found that 36 i.e., 36 % of the women vendors got profit of Rs. 100 – 200 per days. And 32 i.e, 32 % of the women vendors profit of Rs. 0 – 100 per day. Therefore, it can be interpreted that this low profit is the marketing business of the women vendors.

Table 4 – Do You Get Business Loan for the Improvement of Your Business?

If Yes, From Where Did You Get the Loan?

Responses	Numbers	Percentage	Response	Numbers	Percentage
Yes	67	67 %	Private finance body	98	98 %
No	33	33 %	Government	2	2 %
Total	100	100 %	Total	100	100

Out of the sample size of 100, 67 respondents i.e., 67 % of women vendors take business loan and 33 % do not take business loan. So, it can be stated that most of the women vendors take business loan for the improvement of their business.

It was found that 98 i.e., 98 % take loan from the private finance body in high interest and only 2 % of the women vendors take loan from government in low interest. It shows that the government is lacking in providing aids to the women vendors of Ema Market.

Table 5 – Can You Save Some Money From Your Earning?

Responses	Numbers	Percentage
Yes	60	60 %
No	40	40 %
Total	100	100 %

The above table indicates that 60 % of the women vendors can save money though they does not have saving account. They save it in the form of thrift (marup i.e., a type of Self – Help-Group) in low amount but they are in dept though they save money.

Objective 2 : To Find Out the Educated Women Vendors and Uneducated Women Vendors How Far They Manage Their Business.

Table 6 – Are You Aware in Investment and Planning of Your Budget?

Responses of educated women vendors	Numbers	Percentage	Responses of uneducated women vendors	Numbers	Percentage
Yes	46	92 %	Yes	9	18 %
No	4	8 %	No	41	82 %
Total	50	100 %	Total	50	100

92 % of the educated women vendors are aware in investment and planning of their budget and only 18 % of the uneducated women vendors are aware in investment and planning of their budget. Therefore, it can be interpreted that education is must in their business, investment and planning budget.

Table 7 – Could You Able to Communicate with Different Type of Customers?

Responses of educated women vendors	Numbers	Percentage	Responses of uneducated women vendors	Numbers	Percentage
Yes	47	94 %	Yes	5	10 %
No	3	6 %	No	45	90 %
Total	50	100 %	Total	50	100

The above table indicates that 94 % of the educated women vendors are able to communicate with different type of customers and only 10 % of the uneducated women vendors are able to communicate with different type of customers. So, it is interpreted that to become a successful vendor, communication with the customers is very needed. For this, we can say that education is must.

Table 8 – Do You Establish Relation with Other Vendors by Sharing and Cooperation of Your Business?

Responses of educated women vendors	Numbers	Percentage	Responses of uneducated women vendors	Numbers	Percentage
Yes	42	84 %	Yes	33	66 %
No	8	16 %	No	17	34 %
Total	50	100 %	Total	50	100

84 % of the educated women vendors are establish relation with other vendors by sharing and cooperation of their business. However, 66 % of the uneducated women vendors are establish relation with other vendors by sharing and cooperation of their business. It is quite clear that educated women vendors can make good relationship with others by discussing and solving their problems and also in every field of life.

Objective 3: To Assess How Far They are Self-Sufficient.

Table 9 – Is Your Occupation Satisfied or Not?

Responses	Numbers	Percentage
Yes	43	43 %
No	57	57 %
Total	100	100 %

The above table indicates that 43 % of the women vendors are satisfied with their occupation and 57 % of the women vendors of Ema Market are not satisfied with their occupation but still they are continuing their business due to family responsibilities.

Table 10 – Is it Sufficient with Your Income to Run the Family?

Responses	Numbers	Percentage
Yes	30	30 %
No	70	70 %
Total	100	100 %

From the above data it is quite clear that the women vendors are not sufficient for the needs and demands of their family as 70 % of them responses ‘No’ and 30 % can only sufficient their family needs and demands.

Table 11 – Are You Spending More Time and Energy Compared to Your Profit?

Responses	Numbers	Percentage
Yes	60	60 %
No	40	40 %
Total	100	100 %

It was found that 40 % of the women vendors are profitable in their business. However, 60 % of the women vendors are spending more time and energy regardless of their profit in order to fulfill their family needs.

Objective 4: To Examine Their Effect on Their Children’s Education.

Table 12 – Do You Like Your Children to Get the Light of Education ?

Responses	Numbers	Percentage
Yes	100	100 %
No	0	0 %
Total	100	100 %

100 % of the women vendors like their children to get the light of education. This clearly indicates that the women vendors are aware of the importance of education as a basic in life.

Table 13 – How Far Your Children are Educated?

Responses	Numbers	Percentage
Under class X	17	17 %
XI and XII	31	31 %
B.A.	23	23 %
M. A.	20	20 %
Others (professional and technical)	9	9 %
Total	100	100 %

The above table shows that 23 % of the children of women vendors get education upto B.A. standard and 20 % upto M.A. standard but the maximum children's education falls on XI – XII. And only 9 % of the children of women vendors get professional and technical education. Therefore, it can be interpreted that women vendors understand the significance of education in leading a good life for their children.

Table 14 – How Much You Spend in Your Children's Education in a Month?

Responses	Numbers	Percentage
Under Rs. 1000	3	3 %
Rs. 1000 – 2000	28	28 %
Rs. 2000 – 3000	61	61 %
Above	8	8 %
Total	100	100 %

61 % of the women vendors spend Rs. 2000 – 3000 in their children's education. 28 % spend Rs. 1000 – 2000 and only 8 % spend above Rs. 3000 in their children's education. The expenditure on their children's education is high in comparison to their income but low in comparison with the present trend of expenditure in education.

Objective 5: To Examine Their Social Role.

Table 15 – Are You a Member of Women Voluntary Organisation (Meira Paibi)?

Responses	Numbers	Percentage
Yes	97	97 %
No	3	3
Total	100	100 %

Out of the 100 women vendors, 97 % of women vendors response that they are members of Women Voluntary Organization (Meira Paibi) inspite of their tight schedules of working.

Table 16 – What are the Objectives of Meira Paibi According to You?

Responses	Numbers	Percentage
To settle family disputes	15	15
To control drug problems	64	64 %
To bring well being for the society	21	21 %
Total	100	100 %

64 % of women vendors claimed that the objectives of Meira Paibi is to control drug problems. 15% and 21% of

women vendors response that the objectives of the Meira Paibi is to settle family disputes and to bring well being for the society.

Table 17 – Do You Participate in any Social Activities?

Responses	Numbers	Percentage
Procession, Hunger Strikes and Sit-in- Protest	100	100 %
None	0	0 %
Total	100	100 %

100 % of the women vendors response that they participate in procession, hunger strikes and sit in protest. Thus, it can be said that the women vendors are actively participate in social activities.

Conclusions and Suggestions

On the basis of the foregoing discussions, the following findings can be discerned:

There are women vendors of different ages in the Ema Market mostly starting from 30 to above 70 years of age. These above 70 years old women can also actively manage their business. Majority of the women vendors have trade experience of 20/30 years.

The women vendors have low profit in their vending business. They are mostly doom in debt. They have no idea of saving account because of their low profit of their business and it is hard for them to save. They save money in the form of thrift (Marup) but that also in low amount.

Most of the women vendors take loan from the private sector and a few from the government. And those who are taking loan from private sector have to pay high interest. Most of the women vendors are poor and if they pay high interest there will be no improvement in the business.

Educated women vendors can invest and plan their vending business properly than the uneducated women vendors. The educated women vendors can easily communicate different type of customers and can also convince to buy their commodities. They also discuss and solve the problems of others by making a good relationship. So, education is essential in every field of life.

The women vendors are not satisfied with their business because of the low profit. The income they got from the business is not sufficient to fulfill the needs and demands of their family. But still they have to continue as there is no other option.

All the women vendors of Ema Market desire to give

education to their children. They said that education is must and its part and parcel of happy life. Without education it will be not fit to survive. They are deeply concerned about their children's education.

Most of the children of women vendors are studying in the private schools inspite of their low income. Because they want to give the best of education to their children. The women vendors of Ema Market are active in social activities. The women vendors, as a collective body always act as a force on issues concerning the social, economic and political life of the people of Manipur. They try to protect not only the interest of their families but also the interest of the state at large.

All the women vendors of Ema Market pay tax for their seat. Even those who are selling things on street are also pay tax equally with those who are sitting at shed. In this government policy, the street vendors feel injustice.

Based on the above situations, it is suggested to improve the condition of the women vendors of Ema Market.

Most of the women vendors take loan from the private sector in high interest. If the government take initiative in financing the women vendors their economical status will improve to a large extent.

Majority of the women vendors do not have saving account and may be they are not aware of it. If they were made to open the saving account then at least they can save some money.

Self-Help-Programme like the insurance are needed to be organized by the government as well as the private sector. If such programmes are given then their condition will be improved.

Majority of the women vendors are not fully aware of the marketing system and trading. They are needed to give proper awareness programme in order to improve trading and marketing.

Women vendors who are sitting at the roadside are also giving tax same as those who are sitting at the shed. If the

government made proper policy and programme for this roadside women vendors the day-to-day problem that are facing by both the women vendors and public will be reduced to a large extent.

Government agencies need to take initiatives in their role for the development of women vendors and if there is co-operation among the women vendors, and women vendors with government agencies their condition will improve obviously.

As women plays a very important role in the society there need an improvement in the knowledge of women in every field of life. The women vendors are needed to aware socially, politically and most important is educationally.

Most of the women vendors are not aware of the family planning. They are needed to give family planning awareness in order to improve their status and control population explosion.

Though some women of the Ema Market are literate but majority of them are illiterate. The government need special programme for education like adult education for these illiterate women vendors.

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ROLE OF TRAINING IN PROMOTING WORK LIFE BALANCE (WLB)

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Abstract

Work and life are two sides of a coin. They are interwoven in nature and overlap. An emotionally intelligent employee well knows how to strike balance between work and life, still lot of support is needed from top management/employers. Business organizations in India still have a long way to go so far as the espousal of WLB practices is concerned. In India, the private sector organizations have an edge over public sector organizations in name of WLB. Organizations, which attach adequate value to organizational learning, deliberately devise a well meditated training strategy. Some of the organizations resort to training exercise in a less formal manner. Training can modify the attitude of employers as well as employees towards WLB. As it is an established fact that employer and employees both are equally responsible for promoting the WLB initiatives in an organization, training can encourage both of them to be WLB conscious.

Keywords: *Work Life Balance, Training, Interplay, Stress, Parenting*

“Training is everything. The peach was once a bitter almond; cauliflower is nothing but cabbage with a college education.” - Mark Twain

Prologue

Work and life are two sides of a coin. They are interwoven in nature and overlap. An emotionally intelligent employee very well knows how to strike balance between work and life, still lot of support is needed from the top management/employers. A professionally sound organization can pledge to strike balance between work and life and keep its employees smiling. Indian business organizations as compared to their foreign counterparts have lesser concern for WLB. Business organizations in India still have a long way to go so far as the espousal of WLB practices is concerned. It is an established fact that the private sector organizations are doing better as compared to the public sector organizations in name of WLB.

Some of the Indian business organizations particularly in the public sector are yet to be identified with the term WLB. One of the reasons responsible for this may be that there is very less scope for WLB in such organizations. Either many of the people are hardly working or they are not properly engaged. The weak work culture appears to be a reason for overlooking the need for WLB. Majority of the organizations are not acquainted with the newer WLB practices. There is a lack of systematic viewpoint/approach towards WLB. Besides, Indian business organizations confront with several problems including the problem of indifferent attitude of employers and employees towards training that work as hurdles for them in becoming WLB savvy.

Question crops up in mind, why training is at all required? The apt answer to the question is training enables organizations adapt to the shifting conditions and be ensuring its survival as well as success in the market. Training is an effective tool that facilitates the organizations in accomplishing their objectives in a meaningful manner. The term training, development and

education are relative in nature. Training concerns with the acquisition of KSAs (Knowledge, Skills and Abilities) to perform the task at hand in an effective and efficacious manner. Development focusses on the attainment of KSAs needed to occupy the higher position. Education puts stress upon the acquisition of KSAs general in nature. Training and development are often used interchangeably.

Training is a process including several steps. The success of training activity entirely depends upon how effectually all these steps are dealt with. There may be the following stages in the conduct of a training program: Step-1: What are the training needs to be identified? Step-2: What are the training objectives to be accomplished? Step-3: What training methods need to be deployed? Step-4: What paraphernalia needs to be arranged to conduction the training program? Step-5: How the effectiveness of the training program will be measured?

Many of the related works were reviewed. Most of them by and large focus on significance of training in improving upon the abilities/attitudes, skills and knowledge of the employees. Besides, some of them revolve around role of training in augmenting the individual as well as organizational effectiveness and efficacy. The author could not come across an article/paper solely talking about significance of training in promoting a balanced work life.

Some of the pieces of literature reviewed are as follows: The work of Aguinis, Herman, and Kurt Kraiger (2009) contains a wide-ranging review of training and development literature from 1999 to 2009 with an emphasis on the benefits that training offers across multiple levels of analysis.

The work offers a comprehensive meta-analysis of the relationships among training design and evaluation features and various training effectiveness outcomes (reaction, learning, behavior, and results). Arthur, Winfred A., Jr., Winston Bennett Jr., Pamela S. Edens, and Suzanne T. Bell (2003).

The work is a comprehensive review of training and development in work organizations with an emphasis on the processes necessary for training to be effective for improving individual and team performance. Brown, Kenneth G., and Traci Sitzmann (2011).

How do you draw the line between work duties and home life? Sociologist Nippert-Eng, C. E. (1996) explores the answer to this question in her research. She finds that persons set several symbolic and practical boundaries to make these two crucial roles distinctive in life.

This piece of literature presents a typology summarizing elements of training and work environments that foster transfer of training. Russ-Eft, Darlene (2002).

How does training help in striking balance between work and life?

Training is an off shoot of HRD. HRD is an integral part of HR. Training is regarded to be a critical activity to the growth and development by many of the organizations. However, some of the organizations still treat it as a cosmetic exercise. Many of the organizations show a proactive approach towards training whereas; some still have an indifferent attitude towards training and possess a reactive approach towards it. The organizations, which attach lot of value to organizational learning, deliberately devise a well meditated training strategy. Some of the organizations resort to training exercise in a less formal manner. They get motivated to conduct training because the successful organizations conduct it. Figure-1 depicts the role of training in WLB vividly.

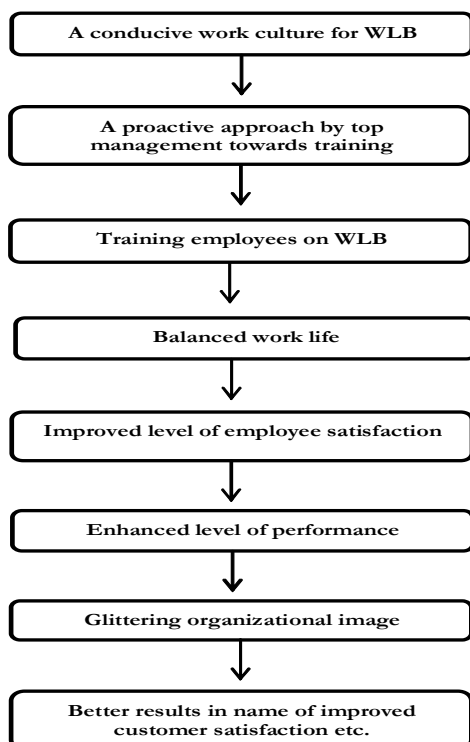


Figure 1 – Training and WLB Interplay

Training is an investment not wastage of resources. In the light of the statement, it can be conveniently argued that training guarantees return on investment provided it is conducted in an effective manner. Returns on training can be delayed but not at all denied. Training can also play a pivotal role in boosting up the concept and practice of WLB in an organization. The following points highlight the training and WLB interplay:

Training needs to be regularly rendered so as to help employees in addressing work and personal responsibilities.

The employer can outsource trainers of WLB so as to provide the employees with the latest trends and practices to its employees.

The managers must possess the proper tools and receive appropriate training skills that are necessary for an effective implementation of organizational work-life balance policies.

Employees should actively participate in the training sessions on WLB related issues conducted by the organization.

Designing a WLB Training Program

A well contemplated training program on WLB can do miracles in making the trainees learn about the criticality of need for WLB training program, connect between WLB and Law, benchmarking WLB initiatives, time and stress management and so on. The description of training program is as follows:

WLB Training Program

Purpose

A training program on WLB entitled, “Resolving Work Life/Life Work Conflict Meaningfully” has been evolved with a view to render training to the employees working in Indian business organizations so that they can be enabled to strike balance in their work and life.

Learning Objectives

On the completion of the training program the participants will be able to:

Figure out and define the term WLB;

Understand the purpose and implications of WLB initiatives;

Examine the work-family family-work conflict;

Learn the benefits of WLB;

Be familiar with the antecedents and consequences of WLB;

Know the relationship between WLB and Law;

Comprehend WLB and stress interplay;

Realize the role of stakeholders;

Learn the role of time management in striking balance



between work and life; and
Transfer the learning to job.

Methodology

The training program will be conducted through an experiential method so as to encourage the participants to be ready to change. A variety of instructional strategies as lectures, case studies, class discussions/interactions, assignments and presentations (Individual/Group), management/business games, exercises (behavioral aspects) and role plays will be used. The use of ICT enabled instructional aids as multimedia presentations, slides, audios and videos, flip chart etc. will be made so as to make the program lively.

The program can be of two to three days. The program can be attended by practicing managers, employees, consultants, faculty members of business schools, researchers and students. The fee for the training program can be as per the prevailing norms and specifications:

Modules

The training program includes the following modules:

Module-1: Introduction

Objective: The basic purpose of the module is to orient the participants about the topic, purpose and schema of the training program and to make them familiar with one another and arouse their interest in the program.

Contents: Welcome and introduction; Ice breaker; Why training program on WLB?; Relating the expectations of trainees with training agenda; Objectives of the training program; The relevance of WLB in today's work environment

Review Questions

Module-2: How Do I Perceive WLB?

Objective: The elementary objective of the module is to persuade the participants to exchange their perceptions and experiences regarding WLB with one another. The information generated through the exercise can assist in sketching probable problems/challenges in striking WLB and their solutions.

Contents: Exchange of views among participants regarding WLB in general and their own organizations in specific; Understanding Work-family and family-work conflict; Measures they took/take in resolving the work-family and family-work conflict

Review Questions

Module-3: Criticality of WLB Need

Objective: The prime purpose of the module is to underscore the significance of WLB in wake of the employee performance and organizational effectiveness. The employees can be made aware about the recompenses

of balanced engagement in work and family roles.

Contents:

In case there is balance between work and life there will be: Sound wellbeing; Improved morale, motivation and commitment; Augmented performance, productivity and profits; Glittering organizational image

In case there is imbalance between work and life there will be: Stress and burnout; Health related risks; Poor performance, productivity and profits; Bleak organizational image

Review Questions

Module-4: WLB and Law

Objective: The basic objective of this module is to make the participants known to the legal implications related to WLB. Participants will also be made aware about the privileges available to the employees relating to WLB.

Contents: Acts/laws related to WLB; Legal aspects of WLB; Employee privileges relating to WLB as maternity leave, paternity leave, child care, time off for dependents,

Review Questions

Module-5: WLB and Stress Interplay

Objective: The purpose of this module is to make the participants able enough to understand the WLB and Stress relationship.

Contents: Understanding psychological perspective of stress; Learning organizational standpoint of stress; Reasons related to poor work life balance responsible for stress at work and home; Implications of stress generated through imbalanced work and life; Strategies to cope up/mitigate stress in life in general and at work in specific.

Review Questions

Module-6: Analytical study of the current state of affairs with regard to WLB in respective organization

Objective: The analysis of the current situation in relation to WLB within the own organization will serve as a source so as to plan, pledge and put to practice the future courses of action in name of development of work-life-balance.

Contents: Organizational profile; Need for WLB; Promotion and implementation of WLB measures; Evolving an effective feedback and follow up mechanism

Review Questions

Module-7: Benchmarking WLB practices

Objective: This module will help in arousing and sustaining the motivation of the participants to encourage them to transfer their learning to job. They will be able to apply WLB related initiatives in their professional life. For this the certain best practices from other reputed organizations will be offered and deliberated.



Contents:

WLB practices prevailing in various known organizations:
Flexi work hours; Compressed work week; Job sharing;
Part time working; Telecommuting/work from home; Part
time work; Job share; Flexible starting and finishing times;
Flexi time; Rostered days off (Phased retirement); Use
flex days or rostered day off as half days; Work from
home on an ad-hoc basis; Telecommuting; Compressed
work week; Study leave; Career break; Paid parental leave;
48/52 working week per year; Paid leave for religious
holiday; Shift working; Annualized hours

Benchmarking WLB practices

Review Questions

Module-8: Examining role of stakeholders in promoting
the concept and practice of WLB

Objective: The module will assist in convincing the stake
holders as employers, employees, government, NGOs and
social activists about their roles in striking the work life
balance in organizations.

Contents: WLB and its stakeholders; Role of employers;
Role of employees; Role of government; Role of NGOs
and social groups/activists; How to work in unison

Review Questions

Module-9: Managing time importantly at work and home

Objective: The module will serve the purpose of the
participants of learning the art of time management.
They will be able to hone their time management skills so
as to be adequately capable to accentuate the value of
time in managing WLB.

Contents:

Time management and its significance in life in general
and in WLB in specific

Time management skills: Cost/benefit analysis of time;
To prioritize; Time logging; Chalking out action plans;
Designing time tables; To do lists; Managing time at
home.

Time management and WLB interlaces

Review Questions

Module-10: Parenting Skills and WLB

Objective: The main objective of the module is to assist
the dual career couples in proving to be good parents.

Contents: Parenting and its implication in the wake of
WLB; Understanding elementary needs of children;
Knowing implications if these need remain unfulfilled;
Rearing out children as champions by inculcating sound
personality traits in them without compromising with
organizational commitments.

Review Questions

Epilogue

Training as and activity is an integral part of an
organizational functioning. Training recompenses
organizations in a variety of ways as improved employee
morale, enhanced performance level, increased
productivity, improved employee retention, glittering
organizational image and so on so forth. Training can also
facilitate in modifying the attitude of employers as well as
employees towards WLB. As it is an established fact that
employer and employees both are equally responsible for
promoting the WLB initiatives in an organization, training
can facilitate/motivate both of them to be WLB
conscious.

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WORK LIFE BALANCE OF WOMEN AND LEADERSHIP

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“Because man and woman are the complement of one another,
we need woman’s thought in national affairs to make a safe and stable government”.

Elizabeth Cady Stanton

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Abstract

For the past years the conversation about women and leadership has revolved around challenges of Work-Life-Balance which most of the time actually means “Work-Family-Balance”. Women hardly make it to the top of the companies not because of their personal choice but because of the fact that lots of ambitious women make them off the path of leadership. Women are also gently but firmly avoided while deciding about future leaders, this is mainly because their work and family invariably clash. By this the Government as well as the corporate is not using the talent deck upto it’s full potential. This research paper tries to address the varied dimensions which needs deep insight into the reasons of absenteeism of women leader & suggestions for their work life balance for the purpose of cultural, structural & organisational growth.

Key words: Women in leadership, Work life balance, ambitious, talent deck

Any countries customs, traditions, culture & social etiquette creates a great impact on the entrepreneurship of the people of that region. The current scenario however has changed to some extent. Now a days people have started taking interest in their own opinion. If they wish to do some thing then they are moving forward. Their innovativeness, imagination & vision plays a great role in their decision. As we know new ideas & out of box application of this can create wonders these days but very sadly we have to say that women’s talent deck has not been used to it’s full potential in this respect. We can see several kinds of professions being adopted in our surroundings. Some are very big, some big & also small. There is some difference between small scale business & entrepreneurship. Small business owners run their business to earn for their expenses to live but bigger firms & entrepreneurs use more & more innovations to explore more opportunities in the global market. The larger firms give more employment also. Now a days the number of female employees are increasing but they are facing trouble in balancing their family life along with work.

Women Entrepreneurship in India

Times have changed now. From the time the husband was earning, and the wife stayed at home. To the time now when the husband earns and the wife is earning too. But the wife still cooks and washes and runs the house. In this busy schedule how does she balance her work with life at home?

There is no simple answer to this question. Many of the issues are common to women throughout the global corporate 24x7x365 work world of today: long working hours, challenging schedules, need for childcare, household responsibilities, career path demands vs. family demands, stress-related health problems, and societal attitudes towards women and work.

Work-Life Balance

Work-Life Balance does not mean an equal balance. Trying to schedule an equal number of hours for each of your various work and personal activities is usually unrewarding and unrealistic. Life is and should be more than that. Your best individual work-life balance will vary over time, often on a daily basis. The right balance for you today will probably be different for you tomorrow. The right balances for you when you are single will be different when you marry, or if

you have children; when you start a new career versus when you are nearing retirement. There is no perfect, one-size fits all, balance you should be striving for. The best work- life balance is different for each of us because we all have different priorities and different lives. However, at the core of an effective work-life balance definition are two key everyday concepts that are relevant to each of us. They are daily achievement and enjoyment, ideas almost deceptive in their simplicity. Engraining a fuller meaning of these two concepts takes us most of the way to defining a positive Work-Life Balance. Change in the pattern of work and the concept of the workplace after the industrial revolution in the second half of the 18th century gave a new dimension to the concept of WLB. As time progressed, nuclear families increased.

Working women drop out of the work force when they are doing well, simply because they wanted to stay at home with their children, or care for an ageing parent. There are women who have children later in life because they want to work for reasons of personal satisfaction or for the money. So, can a woman have it all? The working woman should refuse to take on too much. She should adopt a sense of belongingness. If she has children, she should teach them to share responsibilities. What about the husband? Has he changed at all anywhere in the world? Surprisingly, a survey in the UK revealed that a majority of men want a 50/50 partnership with their wives both at work and home. They no longer see themselves as macho men. They want to spend more time with their children. Has the Indian man change with the time? Can women achieve a work-life balance?

Why Work Life Balance is Important to Women?

Today’s career women are continually challenged by the demands of full-time work and when the day is done at the office, they carry more of the responsibilities and commitments to home. The majority of women are working 40-45 hours per week and 53% are struggling to achieve work/life balance. Women reported that their lives were a juggling act that included multiple responsibilities at work, heavy meeting schedules, business trips, on top of managing the daily routine responsibilities of life and home. “Successfully achieving work/life balance will ultimately satisfy more women who will contribute to productivity and

success in the workplace.” Employers can facilitate WLB with many schemes that can attract women employees and satisfy their needs as such Facilities for child care, Flexi-timings, Work sharing, Part time employment, Leave plans-both paid and unpaid-to suit employee’s needs, Subsidized food plans, Insurance plans, Rest rooms, food preparation services, Jobs with autonomy and flexibility, Realistic work loads, Review of work processes to see if the burden on employees can be lightened, and Maintaining dialogue with the employees and considering their suggestions on a continuous basis

Framework for successful Work-Life Balance in organizations

Identify the key need or reason for introducing Work-Life Balance policies; Build the commitment to Work-Life Balance Policies into the organization ‘s vision or value statement; Set up a Work-Life Balance Task Force to examine current practices in the organization; Hold joint discussions with employees to evolve policies, while also identifying possible barriers; Communicate policies through handbooks, newsletters, Intranet and other forms of communication; Hold workshops to help Managers implement and manage policies; and Monitor implementation and put feedback systems into place In India, there is a starting point in that organizations have recognized the need for and value of Work-Life Balance policies. An integral part of our lives is our profession. Just as there is responsibility and opportunity in life, our careers are also guided by opportunities and responsibilities. We must ensure that these two factors don’t work at cross purposes. Quality of life is something we all covet, every profession affects life in general and every profession has a duty towards life.

Top 5 Strategies to Strike a Balance

Budget your time both in and out of the office - Schedule your time efficiently at work. Put yourself on your calendar and take some time for you and your family / friends. Leave work on time at least three days per week - There are times when working late just can’t be helped, but schedule your time to leave on time three days per week.

Control interruptions and distractions - Stay focused while in the office, and budget your time effectively. Try to schedule a block of time during the day without meetings when you can focus on your tasks with minimal interruptions.

Explore the availability of flex-time - Research or flex-time options within your organization. If available, it may be a helpful solution. Take break at the weekend - Plan your time off as you plan your work week.

Schedule activities with family and friends, a weekend trip, or just something fun.

Examples of some Women Leaders in India & their work life balance

Chanda Kochhar

How difficult can it be for the managing director and CEO of India’s largest private sector bank to manage a work life balance? While other female employees at her office leave at 5:30 pm sharp, Chanda is workaholic but is constantly in touch with family. She rarely manages time to sleep & that’s how she maintains her job & family life together. She has learnt to be a mother on the job. She returned to work just after delivering her second child. She manages to meet the official annual target in less than half of the year. She usually has 7-8000 likes in all happenings in social networking sites, so she is

active in that also. She meets the women who keep the scrap book of all the articles written on her. It is some times difficult for her children to believe that she runs a company with 60,000 employees, for them she is only “The Mother”.

Indira Nooyi

This year NDTV India selected 25 people from all over India for award & Indira Nooyi was one among them. Worked as a receptionist from midnight to sunrise and struggled to put together to earn money worth US\$50 to buy herself a western suit for her first job interview out of Yale, where she had just completed her masters. Incidentally, she wasn’t comfortable trying out a formal western outfit and ended up buying trousers that reached down only till her ankles. Rejected at the interview, she turned to her professor at the school who asked her what she would wear if she were to be in India. To her reply that it would be a sari, the professor advised her to stick what she was comfortable with.

She says sleep is a gift that God has given to you & it’s a gift God has never given me.

she still considers herself her household’s primary caregiver. Nooyi has two daughters, 14 and 23 and in her words, “a supportive husband.”

she’s smart enough to know she has to work harder than a man and earn her stripes everyday. When asked what lessons she wants to teach her daughters, her answer was “be humble.”

“This position can be gone tomorrow, but if the person in you is always the same, you can survive good and bad,” she said.

Suggestions & Recommendations

Always make separation between family life & office life; Set goal according to your objectives; Show resilience to work where ever possible; Eat well & sleep well, find time for exercise also; Never say no to help others & enjoy work; Find out difference between urgency & important; Always make list of works; Give yourself a deadline to each work; Keep yourself free from work at weekends; Flexibility in work is a very good advantage at work place; and Work to live don’t live to work

Conclusion

Conclusion for working women is that getting caught in the work/life balance trap will continue to be an ongoing challenge. Careful & practically effective planning and personal effort is the advice from those who have found balance in both career and home life. As one respondent summarized, “Plan, prioritize and schedule as efficiently as possible... and don’t be afraid of hard work!” Work-life balance is a person’s control over the conditions in their workplace. It is accomplished when an individual feels dually satisfied about their personal life and their paid occupation. It mutually benefits the individual, business and society when a person ‘s personal life is balanced with his or her own job. The work-life balance strategy offers a variety of means to reduce stress levels and increase job satisfaction in the employee while enhancing business benefits for the employer. In our increasingly hectic world, the work-life strategy seeks to find a balance between work and play. A sentence that brings the idea of work life balance to the point is: “Work to live. Don’t live to work.”

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EMOTIONAL AND FAMILY INFLUENCES IN SUCCESSION PLANNING OF FAMILY OWNED BUSINESSES WITH RESPECT TO SMES

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Abstract

Succession planning is an integral part of every business but how many houses actually realize this questionable. In India, even the big business houses are comfortable in discussing these matters in board meetings. Business in India is more like a property where one individual owns and further passed on to family member only. In recent past there has been tremendous change in our patterns of succession planning. Thus this article throws some light on these issues of succession planning in family owned businesses in India. The data have been collected from different Small and Medium Enterprises in automotive component Industry. The samples have been chosen out of family owned businesses (FOBs) only. The data have been collected from Delhi and National capital region of India. The data was collected from Chairman, Managing Director, Executive Director and Board members of the enterprises. The data is collected in two forms through Face to face interview with four basic questions. Further the data has been represented by content analysis of the respondents.

Keywords: Emotions, Succession planning, Family and Stress.

Succession Planning has been an issue of concern for most of the business houses in India and abroad. Succession planning has been used to describe a wide variety of activities involving the planning for key transitions in leadership within organizations. The practice has been around since at least the beginning of recorded history in one form or another; its strongest (or, at least, its best documented) roots are in situations where power transitions routinely took place within family networks—for example, royal families and family-owned business empires. In more recent years, succession planning has been practiced more routinely and systematically in a large number of larger organizations (Rioux & Bernthal, 1999) and at levels far below the senior leadership. As in any organizational situation in which jobs or promotions are at stake, succession planning often becomes a highly politicized process, and the use of outside consultants is often sought. Beyond the value of having an objective third party involved, consultants can provide a systematic approach to succession planning, which will hopefully make the process more efficient and effective for the client organizations. There are a host of psychological and social considerations in developing a succession plan. Among them are what to do with the newfound time afforded after the implementation of a succession plan that brings retirement. Another is that how you will feel about the possible loss of status and whether you will miss the rewards of accomplishments. (Russ Jones, 2003). Except for a few cases of failures, many Indian family businesses have seen more than two or three generations and more so in the case of Coimbatore region (K Dr. R Nandagopal, Ms.V.Thilakam Nagaraj, 2008). Family as a social institution is one of the oldest surviving (Goode, 1982), but only in recent years family business, an important arm of it started receiving academic attention. After a detailed review of the existing literature, Zahra

and Sharma (2004) concluded that family business research has a long way to go from the present fragmented and descriptive state. The country has a rich history and tradition of strong family ties and family businesses have long been a part of the Indian culture. Indian family businesses, thus, provide an interesting setting to understand the impact of management succession on firm value. However, it is only in recent years that efforts have been made to undertake serious empirical research in this emerging young discipline. The relationship between family businesses and various aspects of succession has not been investigated much. Researchers have argued that determinants of a successful succession can range from the subsequent financial performance of the firm after succession, the satisfaction of various stakeholders with the succession performance, to the ultimate viability or the survival of the firm (Miller, Steier and Miller, 2003).

Although with latest trends seen in succession planning, a lot of FOBs are going of non family member as successor. But in a report by Bain & Co., almost 70% of top management hesitate to discuss issue related to succession planning in any board meeting. Thus a need arises, to understand the process of succession planning in reference of Industrial/ Organisation Psychology (I/O) way.

Literature Review

There are a number of researches, surveys and studies conducted in this topic. The studies have been conducted in varied dimensions and also across various sectors of the industry. Here are some of the studies that were conducted by researchers across the globe on “Succession Planning”. Literature review is basically collection of literature or past records on a particular topic. It serves as the foundation for further studies. This is basically a preamble of any thesis. Thus it includes a through effort

to capture or collect the entire related document or researches done in past. The Literature is collected with the intention of having a holistic as well as integrated approach towards Succession Planning.

On the basis of various papers it is evident that succession planning is most of the times not very well planned by the companies. Despite of the fact the top management understands the importance of the succession planning; they don't make a technical procedure of going through. Most of the papers also reveal that succession planning is basically a part of human resource management. Thus the company should identify a suitable talent, develop, retain and then position at right place. Most of the paper collected also explains one or other succession model, which may be followed by companies. But one common point among all the papers is that succession planning is only possible with the support and commitment of top management. Most of the researches in this topic are still very confidential and critical. Thus most of the researchers have done it qualitative, because planners avoid themselves from converting it into black and white. On the basis of papers read, we can very well identify that succession planning is not a comfortable zone of top management to discuss and put it into documents.

From various literatures, it is evident that succession planning is a strategic issue for organisation's success and survival. Although the papers had a widespread range of various issues like complexity of company, size of the company, interim CEO, environment to outside/inside approach. But out of all the papers one commonality is that an organization's succession can be calculated from its financial performance. It is also visible that despite of understanding the criticality of the issue, the companies don't plan it. Second most important finding is that, even today companies prefer insider or in-house successor rather than outsider.

On the basis of data available, it is visible that succession planning is an important concern for most of the companies across the world. One of the common factors is almost all the paper is that the researchers have connected succession planning with financial performance. Although many studies have proven it also that it is not the real indicator; yet it is treated. The researchers across the globe are doing research on this topic but none of the companies really declare their succession plan. With the data, it is evident that companies do prepare a contingency plan but a strategic one. Moreover, a more point is that females are treated as an option as successors. Many factors like leadership, diversity, planning, successor's characteristics and company's size were also considered.

We can very well identify that India too is focusing on Succession Planning. It is there but neither in right forms nor in rights same. Indian firm seems to be more reactive

towards succession plans than proactive. In fact most of the studies reveal lack of focus in leadership. Also most of the paper discusses a lot of challenges of in Family owned business due to Family factor coming in business. Also it is visible that the studies are more for large companies unlike other countries. Thus there is shortage of data of succession planning in SMEs. Succession Planning requires a lot of exercise but Indian companies are still not prepared, in fact most of them think it as natural process passing the charge to their son/ heir apparent. In fact in India very rare researches have been done on SMEs especially in Automotive component Industry.

Most of the paper represents the practices followed by best of the companies. In fact a lot of papers have connected succession planning with leadership. But one of the most important aspects which were highlighted in few papers is the emotion. There are evidences which prove that emotional quotient holds due weight age in succession planning. These papers have created a lot of question as to how emotions are linked with selecting the right candidate and to extend they are correct.

After almost referring to 150 paper including surveys, research paper, articles etc. It is been observed that most of the Family businesses do have an emotional inclination towards their business but this area is neither documented nor researched. A family business floats between two important eco systems of family and business, thus to strike out a balance is quite difficult in most of the cases.

Research Problem

With the Literature review, the gap between planning and execution is clearly reflected. It is also seen that most of the family businesses face interference from family members. Thus there seems to some psychological and emotional side of succession planning. Most of the studies are focusing on patterns and practices of succession planning in Family owned business. But none of them is capturing the dynamics with which it is planned or floats. This leads to a research problem of understanding few key issues or research questions like:

Why do family businesses prefer family members over non family members?

Is selection of family members is an outcome of emotional and psychological stress?

Does the family and social value system of India, hits the decision making of next successors?

Why do companies in India, still hesitate to discuss Succession Planning in Board rooms and Family?

Research Objective

The objective of the study is to identify the existence of

Emotional Influence (EI) and Family Interference (FI) in Succession Planning with special reference to Family Owned Small and Medium Enterprises of India.

Research Methodology

The research design is exploratory. The data collected is primary in nature. The information is collected through face to face interview with structured questions. The sample is judgmental. The information is from 15 Director, Managing Director and CEOs of SMEs. Out of the total sample, 50% of them are from small enterprise and rest 50% from medium enterprise. The scope of study is extended to Auto Component Manufacturing units in Delhi & National Capital Region (NCR) of India. The data collected is qualitative in nature. Thus it is further analysed through content analysis. In content Analysis, relational analysis approach has been applied with semantic mode of finding similar words or texts or responses. Semantic mode is created with coding and structuring linguistic units presented by each respondent.

Information about Respondents

The Government of India has enacted the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 in terms of which the definition of micro, small and medium enterprises are - (a) Enterprises engaged in the manufacture or production, processing or preservation of goods and (b) Enterprises engaged in providing or rendering of services.

But for the above mentioned objective only category (a) applies and hence as specified below:

A micro enterprise is an enterprise where investment in plant and machinery does not exceed Rs. 25 lakh;

A small enterprise is an enterprise where the investment in plant and machinery is more than Rs. 25 lakh but does not exceed Rs. 5 crore; and

A medium enterprise is an enterprise where the investment in plant and machinery is more than Rs.5 crore but does not exceed Rs.10 crore.

Family	Family Configuration	Which family member was interviewed? N=15	Type of Business	How many successions have been done?	Family Influence over addressing succession issues.
1	3 adult Children 4 grand children	Father, Son	Shafts and gears	Two	Extensive
2	2 adult children 1 grand child	Father, HR head	Tubular parts & accessories	Two	Limited
3	3 adult children 5 grand children	Father, Son	Fabricated tubular parts	None	Extensive
4	2 adult children 1 grand child	Father, HR head	Frame body & stocket	Two	Limited
5	1 adult child 1 grand child	Son	Fabricated tubular parts	One	Moderate
6	2 adult children 2 grand children	Father, Son	Aluminium die casting	None	Extensive
7	2 adult children 1 grand child	Father	Brakeshoe	None	Limited
8	1 adult child	Father	CED coating	None	Limited
9	2 adult child	Father, Son	CED solution	None	Limited
10	1 adult child	Father	Machine tools	None	Moderate

The interview tool included several questions categories: 1) Background Information; 2) Presence of HRM function; 3) Succession planning decision; 4) Succession planning process; 5) General information about Family response post succession. The interview lasting from 60-90 minutes, were recorded.

Data Collection

The data is collected through face to face interview from various respondents. The questions were asked in a snowball effect. Hence the comfort level of the respondent was kept in mind as the issue of succession Planning is quite critical to the owners. The data analysis approach involved working inductively from specific points in the data (eg there response to family influence in decision making of successors) while simultaneously working deductively from larger body of contextualizing the study. The recorded data is analysed line by line and compared to draw conclusions. Once the initial analysis was complete, all important lines were coded, categorised and collapsed into major themes that reflect various influences present in the succession planning of family owned business. For each primary theme, data excerpted to provide examples of Emotional influence in the succession planning issues of the Family Businesses.

Findings

The themes in this section were identified as key factors related to family dynamics and emotions that influence the succession planning in small and medium FOB.

Formal policies for succession planning

Most of the respondents feel that the business will naturally be transferred to their heir. In case of siblings, elder one will get the right first and then to younger. Only one respondent felt that there is a need to put policies of succession planning to assure the continuity of leadership even in crisis and also seems to be working towards the same. The following comments were made by the head of the organisation, which are generally passive and indirect, most of them.

One has to be futuristic in approach towards running a business. So rather than taking abrupt decision at eleventh hour, it should be well planned.

Sooner or later any business which survives more than one generation, has to go ahead with planning more efficiently. And succession is one of the major decisions.

We are in this age of unpredictability in terms of social, business, political and economic changes. Thus at least in-houses planning can be done appropriately to behave proactively towards change.

We still hesitate to discuss it in board rooms due to simple reason that succession planning is a very critical and

confidential issue. Moreover, ours is a very closed and small business.

Succession planning is a mere formality in FOBs and thus there is no such requirement of raising a discussion in board rooms or writing policies. They are only addressed when successors is decided, only to orient people with upcoming change.

Interference of family members in decision

Most of the Family businesses struggle between two ecosystems namely Family and Society. Thus both the ecosystems interfere with each other constantly. Practically it is very difficult to separate these two ecosystems. Most of them stay in tune to Family as well as Social value with the business. Most of them agreed that there is interference from family members in decision of successor, probably because family is a stakeholder in such businesses.

Preference of family member as successor over non family member

Head of the organisation generally feel that it is a natural transfer of control and ownership to their children. Almost all of them prefer Family members over Non family member due to multiple reasons like trust, risk, sustainability, goodwill etc. Few comments referring to same

It minimises the risk, since you know your family and moreover in case of contingency a family members will always favour the organisation not his self interest unlike non family members.

Since I have got this business naturally from my father, my son will continue the tradition.

Any family business has a lot of stake holding from the family members and thus even though one may prefer non family members but due to unwanted influence, you have to choose family member.

We don't discuss these issues in board room with the simple logic that succession is applicable to family members only then why unnecessary create a confusion.

Emotional influence in selecting successor

Most of the respondent realise that choosing successor among family is naturally a sign of emotional influence. Although they also confessed that it restricts their choice at times. The response of few respondents is

A family business is an amalgamation of two big components namely family and business. Thus one needs to maintain balance between the two. Hence the selection of successor is an outcome of emotional influence.

In any family business, family holds maximum stake and so it becomes essential to adjust and accommodate the

emotion and psychological pressure/ stress which comes from family.

Selection of the successor is purely on the basis of potential and competency of the individual, because if it is not done wisely then the turnaround in negative direction can also come.

Family and social values hit the decision

In India, family and social values dominate most of the decision and succession planning is no different. The responses were a mix of agreement and disagreement on the issue. But certainly it was visible that in India businesses are more emotionally run instead of professionally. Most of the decisions in Indian context are individual driven rather than process driven. The comments of the respondents

A SME is always leadership centric and thus the decision making tends to be more inclined towards the thinking of the leader. If leader is balanced, everything else will fall in its own place otherwise it will be disastrous. So are we.

In FOBs, everything is not in black and white. There are so many grey shades within the organisation. The system of succession planning is purely on the basis of certain influences.

Most of the FOBs realise the importance of having proper policies and procedure for succession planning but because of undue interference from family members, they generally don't do. In fact most of them also feel that it should be planned only when the family is huge with large numbers of siblings. Otherwise in case of small family, this process is so natural to be carried forward to the next one.

Discussion

There is a lot of difference in succession planning of Small and Medium Enterprises. Small enterprises are generally in first generation and hence they feel secure by passing succession to their family members. Almost all the enterprises revealed that all SMEs are focusing on sustainability in first generation, they expand in second generation and they diversify in third generation.

The family has complex structure then the business should be divided amongst all. And if the family is simple then let it be handled by professionals. There is a huge difference between small and medium enterprise. Medium enterprises are generally in second and third generation. Hence they are open to experiment and pass succession to non family members/professionals also. Small Enterprises are still struggling to find their space and balance between two eco systems namely family and business. Medium Enterprises are relatively stable and settled. Most of the Small enterprises feel that by passing their succession to



family members minimizes risk in future. Since they have limited finances also. Thus they emphasize on selecting a family member as successor.

Most of the SMEs understand the importance of succession planning and also feels that there should be formal policy. But unfortunately almost none of them have it. Although with the changing times they started formalizing it and will put it on paper soon, before they face real trouble. Both Small as well as Medium enterprises identify succession planning as an integral part of strategic management but in reality there is no formal policy for this.

Accordingly, emotions are integral part of one personality and thus they agreed that nevertheless emotions are there but the decision have to be balance of all. Although almost every organization stated different reasons for succession planning but majority of them expressed expansion, sustainability, talent management and owner's age as few dominant reasons.

Research limitations and Implication for future research

There are two limitations to the study reported here. First, due to small group, the findings cannot be generalised to a large population with the measurable confidence. Second, the interview method used in the study provided respondents' data on few issues only. Although the findings provide an insight into groups of similar characteristics on succession planning. But it can be further studied with diverse groups.

Further study can be done on major issues like sibling rivalry, communication, financial matters and many more as an antecedent in succession planning.

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ONE STEP TOWARDS SUSTAINABLE ENTREPRENEURSHIP - AN EXPERIENCE IN RURAL MANAGEMENT EDUCATION

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Abstract

Gandhiji always favoured the education system based on personal life experiences. It has been observed if some live demonstration, real experiences and worth examples are included in academic programmes of management studies; it can definitely be proved fruitful. This can develop spirit of entrepreneurship and the attributes and attitude as future entrepreneurs in students, who are going to be responsible citizens of India. Here, an attempt has been done to show the outcomes and to explain the possibilities of motivating the youth towards sustainable entrepreneurship, which can be proved as an effective step towards the sustainable rural development of India.

Keywords: Sustainable Entrepreneurship, Udyog, Nai Talim, Life Skill Development, Rural Management

Growth...Development...Progress...- These seem very attractive and rosy words, which attract us a lot. India has started progressing by leaps and bounds. With the massive change in the economic policy of Liberalization, Privatization and Globalization in 1991, India has moved on the path towards modernization, urbanization, industrialization and great technical and professional advancement. Youth of India today is found crazy behind fulfilling their dreams and desires through this path. Tremendous growth of private sector enterprises is observed in our country. A number of educated youth are employed in these sectors. Physical growth, material prosperity, luxurious life style and urban habitation are considered only as a synonym of success. And hence our education system has become exam oriented and competition oriented only. Will it lead our nation towards the true 'Swaraj' dreamed by Mahatma Gandhi? Obviously not. According to Gandhi "Education should be so revolutionized as to answer the wants of the poorest villager, instead of answering those of an imperial exploiter. India's way is not Europe's, and India lives in seven hundred thousand villages."

The dilemma of rural management education is between explicit value orientation towards the betterment of the poor and the value neutral optimization approach of conventional management education. In most of the cases, the situation of the students of rural management is very strange and full of dilemma. In their education, theories of rural development are discussed but the reality is quite different. Management education is provided through the books and case studies keeping in view the management principles and theories developed in foreign countries. They are given examples of corporate world and large scale industries. Sometimes practical application of such knowledge into real rural life is not possible. Thus, the students feel gap between the knowledge they gain and their practical life. Gradually, the direction of their thinking starts changing.

This may be one of the most important but neglected causes of rural-urban migration in our country. Unfortunately rural management student is not found so much curious about the development of village as he/she does not have any experience based knowledge. Most of the rural students aim at getting a good job in any of the reputed NGOs, co-operatives or companies. But the ideal situation is that - *Our education system should make the students employment generators and not mere employment seekers.*

In such circumstances, if any economic activity and practical experience are associated with the course curriculum, entrepreneurial attributes will automatically develop in the students. They themselves start learning management theories and principles relating the same to any of the interesting Udyog activity. New dimensions of thought are open up and many students can save their traditional and inherent art by giving it a modern touch suitable to the recent era. This article is based on an experimental experience with rural management students (girls) of the Centre for Studies in Rural Management of Gujarat Vidyapith.

Gandhiji and 'Udyog'

Gandhiji always favoured the education based on personal life experiences. Gujarat Vidyapith has still continued implementing successfully the thought of Gandhi by introducing 'Udyog activities' as an integral part of the curriculum. Adopting such structured skill development activities can pave the way for development of entrepreneurship. Such programmes can train, motivate and assist the upcoming entrepreneurs in achieving their ultimate goals.

The rural youth is having basic indigenous knowledge, skill, potential and resources to establish and manage enterprises. They only require proper guidance, motivation and encouragement to start any enterprise. If they are given knowledge regarding production process, marketing efforts, financial planning, technological

advancement, etc. they can prove their abilities as entrepreneurs.

Udyog is not a subject to be thrust upon the students; it is related to life till death. Mahatma Gandhi observed that the so called literate class of people became idle instead of becoming industrious. This means that education makes man dead instead of living. It was found necessary to reestablish the value of Udyog in education. Hence, Gandhiji gave that new stream of education in which academic education of subjects is to be given only after accepting community living, Chhatralay and Udyog. These three thoughts are life centered. They are inevitable for living life. To live life in community befitting to it, to live self-reliant life and to become industrious are the basis of success of life. He named such a method of education as the Nai Talim. Gandhiji gave Udyog that much importance as one Jeevan Rasayan or Medium of Education. According to Mahatma Gandhi, “The principal idea is to impart the whole education of the body, mind and soul through the handicraft that is taught to the children.”

Udyog is ઉદ્યોગ + યોગ – Higher Yoga. Yog-sadhana is very necessary for stability, health, peace and power of mind, body and soul. Udyog should not be considered as mere hard physical labour. Udyog should be integrated and introduced in education as an inevitable aid or medium of education-process. It is very true in all the disciplines of life. Being free from mere bookish knowledge, a student should resort to manual work and practical experience. Gandhiji put emphasis on vocational and functional education. “Earning while learning” was the motto of this education. This will increase the creativity in a student. As Gandhi wanted to make Indian village’s self-sufficient units, he emphasised that vocational education should increase the efficiency within the students who will make the village as self-sufficient units. In other words, Gandhi’s educational philosophy was born out of his intense need to better the condition of rural India. As Kumarappa puts it, “Gandhiji saw that the only way of saving the nation at that juncture was to revive village economic life and to relate education to it. Education ... was to be based on village occupations. The child was to be trained to be a producer” (“Editor’s Note” to *Basic Education*: iii).

Entrepreneurship Development in Rural Management Students

Gujarat Vidyapith is based on the principles of Basic Education (Buniyadi Shikshan or Nai Talim). Hence, Udyog is considered as a foundation of education. According to Gandhiji, education brings out the talents hidden in the body, heart and soul of the students. Education teaches the true art of living. It includes acquiring entrepreneurial skills, maturity of thoughts and

treasure of virtues. Udyog make the students capable to understand the value of labour and to be economically free. Udyog can help the students in developing confident and self-reliant personality.

At Randheja campus of Gujarat Vidyapith, the task of life skill development in students is being done very effectively through various Udyog activities. Each and every student as well as teacher takes part in such activities with great enthusiasm, spirit, concentration and devotion. The period of one hour is appropriated to such Udyog daily. All the students of different faculties are assigned various Udyog activities such as agriculture, sewing and knitting, spinning, soap making, file making, handicraft, etc.

I have become inspired to write something about my experience of Udyog activities with the students of Masters of Rural Management (M.R.M.). The experience was quite inspiring and unique. In the Centre for Studies in Rural Management, the experience of coordinating the practical experience with the curriculum is felt quite successful. The group of 14 girls was divided into three sub groups according to their interest, skills and talents. After the discussion with each group, they were assigned the following Udyog activities. (Table:1)

Table 1 – Description of Udyog Activities

Team No.	No. Of Students	Udyog	Description
1	4	Hand bags	<ul style="list-style-type: none"> Hand bags with lining inside were made of pure Khadi. There were varieties in pattern and designs such as belt size, pockets, colour and print of material, etc. Bags were decorated with mirror, beads, lace, hand embroidery, Kodies, Tikies, etc.
2	5	Ornaments	<ul style="list-style-type: none"> Mainly bracelets and ear-rings were produced. To take the advantage of Rakhi-day and Friendship day, some Rakhi and Friendship Bands were also produced and sold Bracelets were made of paper beads and plastic beads Earrings were made using waste plastic bags.
3	5	Paper Flowers With Vase	<ul style="list-style-type: none"> Whole product was 100% eco friendly and made of paper only. Vase were made of waste news papers and painted artistically. Flowers were made of florescent coloured papers by using various cutting and folding techniques. Origami (A Japanese art of folding paper) was also used to make some flowers.

Udyog is not merely a physical exercise done regularly but is a birth place of new thoughts, self confidence and concentration. The students planned the designs and targets to be accomplished in three months and after the completion of the period decided the target was almost achieved. From August to mid of October 2012, they worked for at least one hour on every working day. They had a very good experience of designing the product, production, marketing & selling, basic accounting and working in a team as if they were running a micro enterprise. On eighteenth of October at the convocation ceremony of Gujarat Vidyapith, these teams were given opportunity to exhibit and sell their products and to earn profit from the same. It was really a challenging opportunity and thrilling experience for them to plan and prepare themselves for such selling ground.

For fixing the prices of these products, cost plus pricing method and penetration pricing policy was adopted, as they were new players in the market. However, on-going price prevailing in the current market was also kept in mind while deciding prices for ornaments. The price tags were attached with all the products. And special discount was offered to the customers depending on the quantity purchased.

The students were given chance to have a real market experience to study the behavior, attitude, expectation and demands of the customers and consumers. On the occasion of the convocation ceremony, one stall was provided to the students to exhibit their products. Here, they realize the importance of personal selling, communication, demonstration, etc.

Before having this experience of exhibition, they carried on a 'Test Marketing' effort to know the taste and trend of the market. For that, samples of products were made and they were shown and sold in the hostel of the college and their own villages. They received the views and suggestions from them and finalized the designs, quality, targets, etc. The whole process, starting prior to production and continuing after the sale, gave them the overall idea about marketing.

Outcomes and Observations

Generally, management students are taught subjects such as marketing management, production management, finance management, human resource development, NGO management, project management, computer management, research methodology and statistics, etc. During my research study, it is observed that the following topics can be well correlated with the Udyog activities as such Principles of Management; Production Planning and Targeting; Lay Out of Unit, Managing Mass Production; Standardization and Quality Control;

Division of Labour, Time Study, Motion Study, etc.; Test Marketing Experience; New Product Development Process; Pricing Methods and Policies; Selling Strategies, Personal Selling Experience and Salesman Ship; Branding, Labeling, Marking, Packaging and Packing; Advertising & Publicity Methods and Effectiveness; Applying Sales Promotion Tools such as Offering Discount, etc.; Consumer Behavior and Purchase Decisions; Communication and Human Psychology; Maintaining Stock Register and Calculation of Stock; Methods of Price Determination; and Basic Accounting and Record Keeping, etc.

The above practical knowledge is very much essential to be developed in management students, as they are going to be future entrepreneurs of our nation. Besides, the following life skills have also be developed in students as such Team Management and Cohesiveness; Work Involvement and Sense of Cooperation; Creative & Logical Thinking and Practicability; Thrift, Honesty and Devotion towards Work and Life; Time Management and Value of Time; Self Confidence and Decision Making Power; Ability of Taking Initiatives and Bearing Risk; Communication Skill and Art Of Expressing Self; Enthusiasm and Discipline; Concentration and Will Power; and Quality Consciousness

Thus, Indian education policy must be reviewed and Rural Management courses must be designed in such a way to inspire students not to leave the village but to contribute for the development of the same. The youth is misguided and get confused between two choices: i) Whether to live in village or ii) to leave the village!!! Today the fact is that rural management students study their curriculum with a view to getting a good job in some of the NGOs or some corporate bodies. They feel proud to leave the native place or own village. Why is it so? And who forces them to feel so? It is a debatable issue. Sometimes leaving the village is considered as a Certificate of Success. This perception must be changed as early as possible. The Rural management courses must be designed in such a way that they can be able to awake the spirit of responsibility and critical thinking among the student to reshape the newer India comprising of wealthy villages and prosperous cultural heritage. This can be partially done possible to relate the practical experiences of life with the course structure so that rural youth can have entrepreneurial attributes and power to initiate own enterprise.

Research Methodology

The purpose of this case study is to observe the applicability and relevance of principles of education

shown by Mahatma Gandhi in today's education system by correlating Udyog activities with academic curriculum of rural management students. The study is based on a case study, where questionnaire, feedback, observation and personal interviews are used to come to the conclusion. The data has been collected from the 14 respondents (girls), students of MRM from CSRM, Gujarat Vidyapith to fulfill the purpose of the paper. The primary as well as secondary data sources have been used for the fulfillment of the purpose. The respondents shared their experience and findings related with the Udyog activities done from Aug to October 2012. Here, the data were analyzed by manual methods as the experimental research approach has been utilized to know the results of the Udyog activities carried out for the period of three months along with their formal study schedule. Though all the students of each semester used to do some type of Udyog activity, this study has been done keeping in consideration only one team consisting of 14 girls.

Conclusion

As we all understand that the real identity of India resides in the prosperity of human talents, rural resources and Indian heritage. But the scenario is quite surprising. Educated youth of rural India is very eager to leave the village. Even the rural management students don't seem to be much concerned with rural development. The rural youth struggle to grab an employment opportunity in well-developed city, which causes burden on urban India and this situation is responsible for rural-urban imbalance and unemployment situation in India. With the expansion of educational opportunities rural-urban migration rate is also observed high. Students are degree/career oriented having dreams and desires of luxurious urbanized lifestyle. They are lacking long term sight and rushing blindly towards illusionary so called development. Indian rural women are naturally blessed with traditional art, mental courage, physical and mental strength and cultured attitude. Yet they are deprived of economical and social benefits due to lack of proper knowledge about utilizing such talents in a productive manner. If such attitude and flow of migration continues, the prosperity of Indian traditional rural art and skill will perish and disappear. If such strengths are appreciated, nurtured and taken care of seriously, they can do wonders. It is in the hand of youth to revive and reshape the dying Indian originality. They need proper guidance and direction only.

One of the very strong root causes behind such situation is the absence of correlation of academic curriculum

with practical life experiences. If some live demonstration, real experiences and worth examples are included in academic programmes, it will definitely be proved fruitful. This can develop spirit of entrepreneurship and the attributes and attitude as future entrepreneurs in students, who are going to be responsible citizens of India.

Instead of using the talents to make rich richer (working for the benefit of big industrialists of corporate houses) our youth must utilize their time, efforts, skill and knowledge to become a master of their own independent enterprises, which can provide employment to many needy. This grass root level efforts are required to be done for the development of our country. Keeping in view the level of adaption, applicability, requirements and urge of students, various 'Udyog' activities can be designed, adopted and included in the main stream of formal education. By sharing my personal experience as a case study, here I want to show the outcomes and to explain the possibilities of motivating the youth towards sustainable entrepreneurship, which can be proved as an effective step toward the sustainable rural development of India.

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MICRO ENTREPRISES IN HARYANA: AN ANALYSIS

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Abstract

The objective of this paper is to understand, analyze and interpret the role of micro enterprises in the rapid growth of the Haryana economy as one of the fastest among 28 States and 7 Union Territories (UTs) of India. It would be no exaggeration to say that the industrial development lying within the ambit of micro enterprises especially those based on agriculture can go a long way in ensuring the overall economic well being of the people and thereby raising the quality of their life substantially. The sector has undergone several changes in terms of its nomenclature. Small Scale Industries (SSIs) have been reclassified as Micro and Small with the introduction of Micro and Small and Medium Enterprises (MSMEs) Act, 2006. MSMEs have been playing significant role in the overall economic development. MSMEs have been termed as 'engine of growth' for all the developing economies including Haryana. Annual Compound Growth Rates (ACGRs) have been used as the major statistical tool to analyze the functioning of micro enterprises in Haryana during pre and post reform period. Four economic parameters namely no. of units, investment, employment and production have been used as yardsticks to gauge or evaluate the contribution of the micro-enterprises in improving the financial health and economic scenario of the state. The major problems being encountered by micro enterprises have also been discussed. To ensure implementation of the policies and programmes for micro enterprises, we need good governance which means SMART (SIMPLE, Moral, Action Oriented, Responsive and Transparent) administration. The present study has been divided into five sections. Section I deals with the introduction and related concepts. Section II is devoted to Review of Literature. Section III highlights the research methodology. Section IV describes the growth of number, employment, total investment and total production of micro enterprises in Haryana. Section V discusses the problems of micro enterprises in Haryana and last section VI, conclusion and policy implications.

Keywords: Micro, MSME Act 2006, Subsidy, Jugad Technology

Micro enterprises have only been recognized in last few years as an important subclass of the enterprise sector. But the evidence shows that one third of the population in developing countries derive their income from the micro enterprises sector, the very small, non-framing income generating units, including artisanal operations, family business, cottage industries and other prizes in the informal sector. The micro businesses include a wide spectrum of activities from rural traditional crafts handed down through generating to first steps in entrepreneurship taken by the impoverished unemployed. Micro enterprises embody an impressive array of initiatives, skill and talents which, if effective forms of assistance can be developed, have the potential to make enormous contribution to economic growth.

Industrialization is the main hope of most of the poor countries who are trying to increase their level of income and it is reckoned as a tested tool of development. Even Lt. Jawaharlal Nehru felt that the real development of a country depends upon industrialization. To quote him "We are bound to be industrialized, we must be industrialized, as progress ultimately depends upon industrialization". In the broader sense, industrialization not only encompasses the entire gamut of economic activity but also has its impact on the social organization relations and attitude.

Historical Evolution of the Definition of Micro Enterprises

As per industries (Development and Regulation) Act 1951, a small scale industrial undertaking w.e.f. 21.12.1999, means an industrial undertaking in which the investment in fixed assets in plant and machinery whether held on ownership

terms or lease or on hire purchase does not exceed. Rs. 10 million. (Subject to the condition that the unit is not owned, controlled or a subsidiary or any other industrial undertaking). The earliest definition of small scale industries was made in 1950. At that time, in addition to a limit on investment in fixed assets, there was also an employment stipulation. The employment condition was deleted in 1960. The limit on investment in fixed assets was changed to a limit on investment in plant and machinery (original value) only in 1966. Table I indicates the historical evolution of definition of MEs (SSIs).

Table 1- Micro Enterprises ceiling in India over the years

Year of Revision of MEs (SSIs) Ceiling	Amount (Rupees in Lakh)	Criteria for definition MEs (SSIs) investment in
1955	Rs. 5.00	Fixed Assets and Employment less these 50/100 workers/ with/ without power
1960	Rs. 5.00	Fixed Assets
1966	Rs. 7.50	Plant and Machinery
1975	Rs. 7.50	Plant and Machinery
1980	Rs. 20.00	Plant and Machinery
1985	Rs. 35.00	Plant and Machinery
1991	Rs. 60.00	Plant and Machinery
1997	Rs. 300.00	Plant and Machinery
1999	Rs. 100.00	Plant and Machinery
2006	Rs. 25 Lakh to 5 Crore	Plant and Machinery

Sources:- www.smallindustryIndia.com

The present definition of a maximum of Rs. 1 Crore of investment plant and machinery (and Rs. 25 Lakh for tiny or micro units.), excluding equipment for environmental control and research and development, has had a tortuous history. In the immediate post-reform (post-1991) period, the prevailing definition was an investment limit of Rs. 60 Lakh for SSIs and Rs. 75 Lakh for ancillaries, with no formal definition of tiny or micro units. The then Govt. tried to enhance the SSIs investment limit to Rs. 1 Crore or 3 Crore but ultimately left the matter undisturbed, apparently to avoid antagonising on section or another. The succeeding Government raised the limit sharply to Rs. 3 Crore from Rs. 60 Lakh/ Rs. 75 Lakh towards the end of its tenure, without a modicum of debate and later reduced the limit to Rs. 1 crore in 1999.

Micro, Small and Medium Enterprises Development (MSMED) Act, 2006

According to Micro, Small and Medium Enterprises Development (MSMED) Act 2006 – it provides the first ever legal framework for recognition of the concept of ‘enterprises’ (comprising both manufacturing and services) and integrating the three-tiers of these enterprises, viz, micro, small and medium.

Manufacturing Enterprises : based on investment in plant and machinery.

Micro Enterprises – Investment upto Rs. 25 lakh

Small Enterprises – Investment above Rs. 25 lakh and upto Rs. 5 crore.

Medium Enterprises – Investment above Rs. 5 crore and upto Rs. 10 crore.

Service Enterprises : based on investment in equipments

Micro Enterprises – Investment upto Rs. 10 lakh.

Small Enterprises – Investment above Rs. 10 lakh and upto Rs. 2 crore.

Medium Enterprises – Investment above Rs. 2 crore and upto Rs. 5 crore.

The ceilings on investment for the micro, small and medium enterprises both in manufacturing sector and service sector can be summarized in the following table 2

Table 2 – Classification of MSMEs based on investment slabs

Manufacturing Enterprises	
Enterprises	Investment in Plant and Machinery
Micro	Upto Rs. 25 Lakhs
Small	More than Rs. 25 Lakhs and upto Rs. 5 crores
Medium	More than Rs. 5 crores and upto Rs. 10 crores
Service Enterprises	
Enterprises	Investment in Equipments
Micro	Upto Rs. 10 Lakhs
Small	More than Rs. 10 lakhs and upto Rs. 2 crores
Medium	More than Rs. 2 crores and upto Rs. 5 crores.

Source: Micro, Small and Medium Enterprises Development Act, 2006.

Review of Literature

To justify the need of the study, there is a strong case for review of the literature in the field of research. The literature demonstrates that the micro enterprises are necessary for economic growth and development of any economy including Haryana. The review includes the following studies:

Ganguly (1988) studies the performance, policies, problems and prospects of the small scale industrial sector. Study reveals that the sector suffers from various problems such as inadequacy of raw materials and financial assistance, lack of effective marketing and encroachment on the areas reserved for SSIs by large and medium sectors, conscious efforts of the govt. to promote the small sector not with standing. But the author maintains the view that the faster growth of the medium and large scale sectors considerably.

Balu (1991) examined the overall financing of small scale industries and also the contribution of the financial institutions and banks in financing small scale units. The study is mainly based on primary data and covering a sample of 150 small scale entrepreneurs spread over Madras city. It has been found that the entrepreneur with non business background relied heavily on external sources like banks and other financial institutions. They face problems like delay in sanction and disbursement, inadequacy of loan, insistence for collateral security, impersonal and non cooperative attitude of the officials. A single agency approach has been recommended as a solution to these problems in the study.

Subramanian and Pillai (1994) in their article reported a survey of small industries in Kerala and compared their performance with the small industries in other major states and with all India average. The poor performance of small industries in Kerala is attributable to low capacity utilization, low factor productivity, unfavourable usage-productivity relationship and industrial ‘sickness’ following severe financial and marketing problems. The performance of the small sector in Kerala could be improved by changing growth strategies which may enable them to reap economies of scale and lead to sectoral linkages and agglomeration.

Chattopadhyay (1995) with the help of primary and secondary data discusses the causes and solutions of industrial sickness in India. By using various mathematical and statistical tools like financial ratios and multiple regression, it has been observed that sick industrial units have been suffering from managerial inefficiency, demand recession, obsolete plant and machinery and labour problems. Sufficient financial aid from financial institutions is not forthcoming. Policies framed by the govt. need to be implemented strictly to bring about improvement in the situations.

Abid Hussain Committee (1997) reiterated the recommendations of Nayak Committee in general and recommended introduction of innovative finance and made a case for higher earmarking of credit for tiny sector units among small scale units.

Mali (1998) in his study has observed that small and medium enterprises (SMEs) and micro enterprises have to face increasing competition in the present scenario of globalization, they have to specifically improve themselves in the fields of management, marketing, product diversification, infrastructural development, technological up gradation. Moreover, new small and medium enterprises may have to move from slow growth area to the high growth area and they have to form strategic alliance with entrepreneurs of neighboring countries.

Neelamegam and Inigo (1999) in their study discussed the financial aspects of the SSIs. Three districts of Tamil Nadu, SSIs are contributing in providing employment opportunities, increase in production. It has been found that managerial inefficiency is the most serious problem. The study made empirical analysis especially for textile & engineering goods industries and observed that mere recommendations and enactment of policies are not enough unless proper implementation is ensured. Therefore, Government should take necessary steps as it is highly desirable to tackle the problem.

Goel (2002) has diagnosed the problems of SSIs and talked about excellence models for management of SSIs in India. The products of the SSIs would be popular only if they satisfy the essential need of the customer (foreign as well as domestic) and is utilitarian. Glamour alone can not be a substitute for the basic requirements of Need, Affordability and Worth (NAW approach) of the product. To adopt and accept the normative approach to HRD in SSIs, it is essential to understand SIMPLE model of HRD consisting of six human development activities such as Spiritual development, Intuition development, Mental level development, Physical Development, Love-yourself attitude development and Emotional quotient (EQ) development. Bala Subrahmanya (2004) highlights the impact of globalization and domestic reforms on small-scale industries sector. The study states that small industry has suffered in terms of growth of units, employment, output and exports. The Researcher highlights that the policy changes have also thrown open new opportunities and markets for the small-scale industries sector. He suggests that the focus must be turned to technology development and strengthening of financial infrastructure in order to make Indian small industry internationally competitive and contribute to national income and employment.

Sonia and Kansai Rajeev (2009) studied the effects of globalization on Micro, Small and Medium Enterprises (MSMEs) during pre and post liberalization from 1973-74 to 2008-09. They used four economic parameters namely number of units, production, employment and export and interpreted study results based on Annual Average Growth Rate (AAGR) calculation. AAGR in pre liberalization period (1973-74 to 1989-90) was higher in all selected parameters

than that of post liberalization period (1991-92 to 2007-08). They concluded that MSMEs failed to put up an impressive performance in post reform era.

Sanchita (2010) observed that management problems and constraints experienced by women entrepreneurs in Small Scale industry of Haryana including lack of confidence, problems of finance, working capital, Socio-cultural barriers, production problems and inefficient marketing arrangements. To solve the management problems of for women entrepreneurs in Haryana specially in Small Scale sectors, there is a strong case for simple and systematic procedures at all administrative levels for ensuring the planned benefits to the needy women entrepreneurs for optimal utilization without underutilization and wastage of scarce financial resources.

Singh et al, (2012) analyzed the performance of Small scale industry in India and focused on policy changes which have opened new opportunities for this sector. Their study concluded that SSI sector has made good progress in terms of number of SSI units, production & employment levels. The study recommended the emergence of technology development and strengthening of financial infrastructure to boost SSI and to achieve growth target.

Research Methodology

The present study analyses the growth, performance and problems of micro enterprises in Haryana. The data structure for the study is based on official publications of the directorate of industries, Haryana Chandigarh. The study covers a period from 1966-67 to 2011-12. Four parameters namely No. of Units, Employment, Investment and Total Production have been used for the analysis of micro enterprises in Haryana inclusive of both pre and post-reform periods. In this paper we have used Annual Compound Growth Rate (ACGR) for analysis of data.

Annual Compound Growth Rates

The ACGRs have been calculated by using the semi-log model as explained below:

$$Y_t = ab_1^t$$

(i) Taking log, we have

$$\text{Log } Y_t = \text{Log } a + t \text{ Log } b_1$$

(ii)

$$G = [\text{Anti Log } (\text{Log } b_1) - 1] \times 100$$

Y_t = t^{th} observation on the variable Y

T = t^{th} variable taking n values 1,2,3, ...n

G = Annual compound Growth Rate in percentage (ACGR)

The test of significance has been applied to find out whether the estimated growth rate is significant or not and for this purpose, we have used 't' statistics.

Analysis the growth of micro enterprises regarding number of units, employment, total investment and total production.

**Table 3 – Growth of the number of Micro Enterprises
A Decomposit Analysis**

Period	B ₀	B ₁	ACGR (T-Values)	R ²
1966-67 - 1976-77	8.271	0.127	34* (16.3729)	0.970959
1977-78 - 1986-87	9.289	0.184	52.8* (27.0957)	0.989174
1987-88 - 1996-97	11.167	0.065	16.1* (37.9706)	0.994616
1997-98 - 2006-07	11.544	-0.047	-10.26* (-2.6463)	0.466324
2007-08 - 2012	11.149	0.033	7.9* (9.7429)	0.961867
1966-67 - 2012	9.607	0.051	12.5* (5.7692)	0.430654

Sources : Directorate of Industry, Haryana Chandigarh

Note : i) Figures in parentheses denote T-Values

ii) *T-values are significant at 1 percent level significant.

It is evident from the table 3 that annual compound growth rate of the number of micro enterprises in Haryana for various time periods is significant, except the period 1997-98 to 2006-07 for which ACGR is negative. It is not worthy here that for the years 1977-78 to 1986-87, the ACGR of micro enterprises is highest that is 52.8 percent followed by the ACGR 34% during 1966-67 to 1976-77. However for the whole period from 1966-67 to 2012. the ACGR is 12.5 percent which is low in comparison of the growth of micro enterprises in the earlier years.

Besides, regression coefficient (B₁) is found to be significant for all models. Similarly, coefficient of determination (R²) is extremely high (0.99 percent) in case of regression models for the period 1987-88 to 1996-97 and 1977-78 to 1986-87. Whereas value of R² is poor for the regression models associated with period 1997-98 to 2006-07 & 1966-67 to 2012.

**Table 4 – Growth of Employment of Micro Enterprises
A Decomposit Analysis**

Period	B ₀	B ₁	ACGR (T-Values)	R ²
1966-67 - 1976-77	11.249	0.058	14.3* (13.2996)	0.957317
1977-78 - 1986-87	11.670	0.122	32.4* (14.7102)	0.964388
1987-88 - 1996-97	12.939	0.065	16.1* (11.3642)	0.942807
1997-98 - 2006-07	13.288	-0.033	-7.32* (-1.6850)	0.261736
2007-08 - 2012	13.088	0.066	16.4* (20.5613)	0.991696
1966-67 - 2012	12.135	0.022	5.2* (5.0016)	0.362470

Sources : Directorate of Industry, Haryana Chandigarh

Note : i) Figures in parentheses denote T-Values

ii) *T-values are significant at 1 percent level significant.

The above table 4 clearly reveals that the growth rate of employment in micro enterprises in Haryana for different

time periods (except 1997-98 to 2006-07) is positive and considerable. During 1977/78 - 1986/87, it is 32.4 percent which is highest. If whole time spans from 1966-67 to 2012 is considered. then ACGR is 5.2 percent, only.

The regression coefficient (B₁) in all cases, except in case of 1997/98 - 2006/07 is statistically significant at 1 percent level of significance. The value of R² for all cases excluding 1997/98 - 2006/07 and 1966/67 - 2012, is quite high and showing goodnesses of fit of the selected models.

**Table 5 – Growth of Total Investment of Micro Enterprises
A Decomposit Analysis**

Period	B ₀	B ₁	ACGR (T-Values)	R ²
1966-67 - 1976-77	11.249	0.058	14.3* (13.2996)	0.957317
1977-78 - 1986-87	11.670	0.122	32.4* (14.7102)	0.964388
1987-88 - 1996-97	12.939	0.065	16.1* (11.3642)	0.942807
1997-98 - 2006-07	13.288	-0.033	-7.32* (-1.6850)	0.261736
2007-08 - 2012	13.088	0.066	16.4* (20.5613)	0.991696
1966-67 - 2012	12.135	0.022	5.2* (5.0016)	0.362470

Sources : Directorate of Industry, Haryana Chandigarh

Note : i) Figures in parentheses denote T-Values

ii) *T-values are significant at 1 percent level significant.

The above table 5 highlights the annual compound growth rate of total investment in micro enterprises for various time spans. ACGR is highest (93.6 percent) for the time periods 2007-08 to 2012, followed by 64.1 percent during 1977-78 to 1986-87. However, during 1997-98 to 2006-07 the growth of investment in micro enterprises is found to be negative. It may be due to the negative growth of number of units of micro enterprises in Haryana.

Moreover, regression coefficients for all models, except for 1997-98 to 2006-07, are statistically significant at 1 percent level of significance. The value of R² is also appreciable in all regression models except for 1887-98 to 2006-07 and 1966-67 to 2012.

Table 6 – Growth of Total Production of Micro Enterprises

Period	B ₀	B ₁	ACGR (T-Values)	R ²
1966-67 - 1976-77	7.797	0.208	61.4* (26.9585)	0.989097
1977-78 - 1986-87	9.662	0.215	64.1* (21.3044)	0.982664
1987-88 - 1996-97	11.728	0.064	15.9* (40.7098)	0.994575
1997-98 - 2006-07	12.006	-0.015	-3.39* (-0.7054)	0.058559
2007-08 - 2012	12.022	0.287	93.6* (10.7240)	0.966336
1966-67 - 2012	10.132	0.044	10.7* (5.0717)	0.368923

Sources : Directorate of Industry, Haryana Chandigarh

Note : i) Figures in parentheses denote T-Values

ii) *T-values are significant at 1 percent level significant.

The above table 6 reveals that the ACGR of the production of micro enterprises is positive and considerable in all time periods. During 2007-08 to 2012, ACGR is highest and stood at 87.9 percent while for the years 1997-98 to 2006-07, it is 8.4 percent, as the total number of micro enterprises declined during 1997-98 to 2006-07 despite that the production of these enterprises have grown. However the regression coefficient for all time spans except 1997-98 to 2006-07 are statistically significant at 1 percent level of significance. Similarly, R^2 is appreciable in all modals except for 1997-98 to 2006-07 and 1966-67 to 2012.

It is clear from the above table no. (3), (4), (5) and (6) that the growth rate of the number of units, employment, investment and total production has increased before the post reforms periods. After 1991, there has been a sharp decline in the number of units, the number of persons employed, investment and total production. An analysis of pre and post reform period, reveal that new economic policy has adversely affected the micro enterprises (SSIs) in Haryana.

Problems of Micro Enterprises in Haryana

The development of micro enterprises has been hampered due to diversity of problems. Micro Enterprises have suffered with many problems. Though, there are many problems connected with micro enterprises, some of them are as under:

Competition (both healthy as well as unhealthy) with other categories of industries: Micro enterprises have to compete with medium and large scale industries which outstrip the former in terms of competent entrepreneurs, abundant and superior raw material modern and sophisticated equipment, development of latest modern technology, immense financial sinews and latest marketing strategies. With their primitive methods of production and limited financial resources and illiterate incompetent and ignorant entrepreneurs and non-standardized nature of their product, micro enterprises are out performed by large scale industries in a big way. They find it almost impossible to compete with them in terms of price and quality of goods. Unless micro enterprises are incentivized and subsidized by the government their survival is under threat and it would be disastrous for Indian economy if these labour intensive and employment generating units are forced to close down due to their un-viability in the face of mounting competition from large scale industries.

Lack of raw material: The raw material is the basic pre-requisite of an industrial enterprise and industrial

sector of an economy, without adequate and timely supply of required raw material, is not likely to make much progress. Different types of micro enterprises require different types of raw material. For some industries local raw material is used and the same is abundantly available. But in other industries raw material is required from other states and for some even from other countries too which creates the problem of non-availability of good quality raw material at low prices.

Lack of labour : The labour is an essential and active factor of production besides raw material, power and capital. It is manifestly different from other factors of production. Empirical study of Eresi (2001) concludes that labour related problems constitute one of the important reasons for the failure of micro enterprises. Labour is a living thing that makes all the difference. So well planned recruitment and training facilities are basic requirement for an industry. Proper manpower planning is the basic requirement for the recruitment of an effective working force in any enterprise.

Lack of power shortage : In modern times, power is the most important ingredient of production. The entire movement of the machinery depends upon power. If there is a short supply of power or electricity, there is an interruption in production stream and the entrepreneur has to suffer heavy losses. The state should therefore, pay special attention to the problem of power shortage/crisis in micro enterprises.

Financial problems: Every problem of small producer concerning production, raw material quality or marketing is in the ultimate analysis, a financial one. The producers in the small scale industries have small means and require short, medium and long-term loans to meet their obligations. The internal sources of micro enterprises mainly consist of ploughed-back profits. Since absolute size of profit is small for the finance facility, they have to depend upon central and state governments, commercial banks, SFCs and other private financiers.

Marketing problems: Micro enterprises in the region are plagued by certain problems on marketing front. In the present competitive world, the sale of a product can be improved with a suitable marketing strategy. The concept of marketing signifies much more than the traditional act of selling rather it is an integrated effort. Since most of the units in the region are very small in size and financially not very strong, so individual units have limited production capacity, limited sustaining power and competitive strength. Micro enterprises suffer from marketing difficulties.

Policy Implications: The following policy implications are flowing from the analysis of micro enterprises in the state of Haryana for their survival & progress : The problems of the entrepreneurs need to be addressed by the government by devising suitable policies and strategies to surmount them. The survival of the micro is under grave threat in the face of stiff competition triggered by the commencement of the globalised era. Upgradation of technology (juggad technology), innovations, liberal credit facilities, marketing devices and proper and intensive advertising to capture national and international markets-all these steps need to be taken on priority basis to save our overpopulated economy from being swallowed by the monster of unemployment and poverty. These micro enterprises must be enabled to withstand the ever growing pressure of global competition by introducing competitiveness in terms of quality and price of their products otherwise not only will the progress of the economy be decelerated but it will fall into a shambles. Micro enterprises will help in the development of Indian economy by generating additional employment opportunities, reducing poverty and regional inequalities. It is the need of the hour that govt. should be adopt certain policies and strategies which will boost micro enterprises to increase the number of units, employment, investment and production. To ensure implementation of the policies and programmes for micro enterprises, we need good governance which means SMART (SIMPLE, Moral, Action Oriented, Responsive and Transparent) administration.

These above given recommendations flowing from the study need to be implemented seriously and sincerely with honesty of purpose. Only then the micro enterprises in the state Haryana will survive, exist and thrive.

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LIJJAT PAPAD: A CASE STUDY OF INCLUSIVE RESPONSIBLE LEADERSHIP

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Abstract

Shri Mahila Griha Udyog, the makers of the famous Shri Mahila Griha Udyog Lijjat Papad Papad, is an organisation, which symbolises the strength of a woman. Only women can become the members of the organisation. All members are also the owners of the organisation and are fondly referred to as 'sisters'. There is a central managing committee of 21 members to manage the affairs of the organisation. To aid the management, there are also Sanchalikas to look after the day-to-day affairs of the individual centers and also of that of the Udyog as a whole. The organisation functions on the basis of consensus and each member has 'veto' powers.

Keywords: Lijjat Papad, leadership, Inclusive Responsible Leadership

It all began on 15th march. 1959, A majority of the women inhabitants of an old residential building in Girgaum (a thickly populated area of South Bombay), were busy attending their usual domestic chores. A few of them, seven to be exact, gathered on the terrace of the building and started a small inconspicuous function. The function ended shortly, the result - production of 4 packets of Papads and a firm resolves to continue production. This pioneer batch of 7 ladies had set the ball rolling. As the days went by, the additions to this initial group of 7 was ever-increasing. The institution began to grow. The early days were not easy. The institution had its trials and tribulation. The faith and patience of the members were put to test on several occasions - they had no money and started on a borrowed sum of Rs. 80/-. Self-reliance was the policy and no monetary help was to be sought (not even voluntarily offered donations). So work started on commercial footing

The Success Formula

The vision and principles of *Sri Mahila Griha Udyog Lijjat Papad* (SMGULP) are based on the ideals of trusteeship. The basic principles underlying the philosophy of the organization are;

SMGULP is a voluntary organization.

SMGULP never accepts charity or grants.

SMGULP believes in running the business wisely.

SMGULP is like a family and the sisters run it as if they all belonged to the same family.

SMGULP is like a revered place of worship.

SMGULP is a combination of three concepts, the business concept, the family concept and the devotion concept.

Today, Lijjat is more than just a household name for 'papad' (India's most popular crispy bread). Started with a modest loan of Rs 80, these women took its turnover from Rs 6,196 in the first year to Rs 300 crore in the next few decades, involving over 40,000 women on its

revolutionary march. This story fanciful at any rate. But to say so would be undermining the contribution of a well thought-out Gandhian business strategy, equally well executed by his followers, late Chhaganlal Karamshi Parekh and Damodar Dattani, who worked tirelessly from behind the scene. Their vision was clear – an exclusive women's organisation run and managed by them, a quality product that these women had the expertise to make, and, finally, a work environment which is not competition-driven and mechanised but based on pure labour and love for the organisation and its people. Lijjat is today guided by separate divisions of advertising, marketing, sales promotion and exports. There is greater coordination between branch offices (different production and marketing units) and centralised marketing, advertising and exports departments. the cooperative now has annual sales exceeding Rs 301 crore (Rs 3.1 billion). What's more stunning than its stupendous success is its striking simplicity. With quality consciousness as the principle that guided production, Shri Mahila Griha Udyog Lijjat Papad grew to be the flourishing and successful organisation that it is today.

The model of Responsible Leadership

Every morning a group of women goes to the Lijjat branch to knead dough, which is then collected by other women who roll it into papads. When these women come in to collect the dough, they also give in the previous day's production, which is tested for quality. Yet another team packs the tested papads. Every member gets her share of *vanai* (rolling charge) every day for the work she does and this is possible only because the rest of the system is geared to support it.

Every branch is headed by a sanchalika (branch head) who is chosen from among the sister-members by consensus. Similarly, allotment of different works like dough-making, distribution of dough, weighing and collection of papad, packaging, etc. are all decided by the sister-members by consensus. The wage pattern is such that the same amount of work fetches almost the same wages. In any case, it is the collective responsibility of the sister-members to

manage all branch activities efficiently and profitably. Apart from production, the branch is also responsible for marketing its products in the area allotted to it.

Decentralization

All sister members of the institution are the owners. The committee of 21 members manages the affairs of the institution. There are also Sanchalikas, or supervisors, for each centre to look after the daily affairs of a centre. But the work of the institution is such that each and every member can take any initiative or any decision.

At the same time, each and every member has the veto power. All decisions, major or minor, are based on consensus among members. Any single member's objection can nullify a decision. To maintain the high quality and standard of Lijjat products and uniformity in taste for the same product from different branches, the central office supplies the raw material – mung and urad flour — to all its branches. This remains the only involvement of the central office in the entire production and marketing exercise of the branch office.

Distributing profits

There are accountants in every branch and every centre to maintain daily accounts. Profit (or loss, if any) is shared equally among all the members of that branch., irrespective of seniority or responsibility.

Delivering quality

Lijjat papad members proudly claim 'consistently good quality' to be their USP (Unique Selling Proposition). From the moment a new member joins, she is repeatedly told to make quality her mantra. At the training session, *sister members* are taught to make the 'perfect' Lijjat papad. Quality work is strictly expected from each member.

Shri Mahila Griha Udyog Lijjat Papad is synthesis of three different concepts, namely – The concept of business, The concept of family, and The concept of Devotion

All these concept are completely and uniformly followed in this institution. As a result of this synthesis, a peculiar Lijjat way of thinking has developed therein. The institution has adopted the concept of business from the very beginning. All its dealings are carried out on a sound, pragmatic and commercial footing - Production of quality goods and at reasonable prices. It has never and nor will it in the future, accept any charity, donation, gift or grant from any quarter. On the contrary, the member sisters donate collectively for good causes from time to time according to their capacity.

Besides the concept of business, the institution along with all it's member sisters have adopted the concept of mutual family affection, concern and trust. All affairs of the

institution are dealt in a manner similar to that of a family carrying out its own daily household chores. But the most important concept adopted by the institution is the concept of devotion. For the member sisters, employees and well wishers, the institution is never merely a place to earn one's livelihood - It is a place of worship to devote one's energy not for his or her own benefits but for the benefit of all. In this institution work is worship. The institution is open for everybody who has faith in its basis concepts.

Market Positioning

As a business enterprise, the declining sales figure for three consecutive years – Rs 298 crore (1999-2000), Rs 288 crore (2000-2001) and Rs 281 crore (2001-2002) – is a matter of concern for Lijjat management. Some of its home turf in Maharashtra and Gujarat has been captured by a growing competitive local market. But Lijjat has also expanded to the North – Delhi, Punjab, Himachal Pradesh and, with the latest branch in Jammu, to the Kashmir market as well.

Though each branch is responsible for the marketing of its products in the areas allotted to it, the new centralised marketing offices now procure surplus production from different branches and market it at an all-India level. This coupled with a healthy upward trend in the export of Lijjat papad positions Lijjat as the strongest brand in the papad industry. The other big brands in the papad market are Bikaner, MDH and Saktibhog, but none seem to be able to make any dent in Lijjat's share of the industry as their core business is not papad. Lijjat markets its products through a wide network of dealers and distributors all across the country, and has never chosen to sell or push its products directly through the vast network of its offices and sister-members even during the initial years. Rather, over the years, Lijjat has developed cordial and mutually beneficial relationships with its dealers. Sisters (employees) claim they believe in doing the business wisely and on sound business ethics. Dealers are given a set commission of seven per cent and retailers' earnings are fixed between Rs 25 and Rs 26 on the investment of Rs 14 for 200 grams and Rs 150 for 2.5 kilogram packs respectively.

Management: The management involves President – Jyoti J. Naik; Vice - President Smt.Kamal D.Dhandore; Treasurer. Smt.Sharda S.Landge; and Kum. Pratibha H. Trilokkar; Secretary Smt.Malti M. Pawar and Smt. Sunanda R.Belnekar

Diversifications:

Shri Mahila Griha Udyog has diversified its various activities. Besides it's world famous papads, it also currently has a Flour division at Vashi (Mumbai) where flour is milled from Udad Dal and Moong Dal, a Masala



Division at cotton Green(along with a Quality Control Laboratory) at the same place where different kinds of spice powders like Turmeric, Chillies, Coriander and ready mix masala and like Garam masala, Tea masala, Pav-Bhaji masala, Punjabi Chole Masala etc. are prepared and packed in consumer packs; Printing Division also at the same place; Lijjat Advertising Services at Girgaum (Mumbai); Khakra Division at Buhari (Dist-Valod). Export division at Wadala; Chapati divisions at Mumbai; Polypropylene set-up at Kashi-Mira Road; A Vadi producing factory at Valod; Bakery division at Valod; and Detergent Powder and Cakes manufacturing unit at Dahisar and office at Borivali (Bombay).

Marketing Activities

Products- Papads, Khakras, Masalas, Lijjat ATTA, Swadeshi ATTA, Detergents

Pricing

Shri Mahila Griha Udyog Lijjat Papad adopts a Cost Plus Pricing Strategy for all their products. The Lijjat products are targeted at the middle and lower segments of society. These segments are highly price sensitive and hence this method of pricing allows them to market their products extensively.

While calculating the price the expenses taken into consideration are Cost of Raw material, Rolling Charges, Packaging Costs, Transport, Selling Expenses, and Administrative expenses.

The manufacturing process for making papad starts at 5:00 a.m. everyday. All the sisters or 'bhaginis' are fetched from their homes at brought to their respective production centers in institutional vehicles. These sisters who arrive at 5:00 a.m. are responsible for kneading the papad dough. After 7:00 a.m. the rest of the sisters come in and dough is distributed to each one of them in 'dabbas'. These sisters take the flour to their respective houses, roll out papads and place them in the sun for drying. It is extremely essential that the papad once rolled gets a sufficient number of hours per day to dry in the sun and that is the reason that the entire process is initiated at 5:00 a.m.

Every morning when the sisters come to work, they bring with them the rolled out papad of the previous day. Only on giving this in do they receive dough for the next day. Most of the centers carry up to 15 days* inventory. The 'sanchalika' of each center ensures that there is no wastage or pilferage by counting the papads that are bought in each day.

From 8:00 to 9:00 a.m., the packing process takes place. The packing bags are manufactured by Lijjat itself, so as to maintain high standards and quality. This is also done

to prevent duplication of their product, which could occur if this process was outsourced. Quality of the product is of utmost importance. If a slight defect is identified in a day's production, then the entire production will be destroyed. To maintain standard and assured quality, the purchase of raw materials is carried out by a central authority. The main raw material, Udad dal, is bought and processed in Nashik and Vashi. This is then transported to the Mumbai Head Quarters and then channelised to various centers across the country as per their requirements.

Distribution

In Mumbai, Shri Mahila Griha Udyog Lijjat Papad has 18 branches. The daily production is collected at the 6 depots. From here the various products are distributed to the authorized Distributors who in turn deliver it to the retail outlets all over the city, such that every resident of Mumbai is a hop, skip and jump away from the nearest shop selling Apart from production, the branch is also responsible for marketing its products in the area allotted to it. The wide network of dealers and the goodwill that Lijjat products enjoy with customers make the marketing relatively easy. To maintain the high quality and standard of Lijjat products and uniformity in taste for the same product from different branches, the central office supplies the raw material – mung and urad flour — to all its branches. This remains the only involvement of the central office in the entire production and marketing exercise of the branch office.

The distributors pick up the quantity of papad they require and pay cash on delivery because Lijjat pays their bens (members are called bens, or sisters) every day. Since they have an estimate of the quantity each distributor takes, they produce accordingly. This ensures that they neither stock inventory nor pay heavily for storage.

They have about 32 distributors in Mumbai. Each distributor picks up an average of 100 boxes per day from the depot. This is where their job ends. They are not involved in how and where a distributor delivers as long as he stays within the area they have marked for him. Generally each distributor has his three-wheeler and about eight to ten salesmen to deliver to retail outlets within his territory. To select a distributor, they first give an advertisement in newspapers for the areas they have marked. Members from their marketing division personally go and check the godown facilities and only on their approval do they appoint distributors.

A distributor pays us Rs150000 as deposit. They make it clear to them that they must pay on delivery if they want their distributorship. This system is followed all over India

and it works well for them. When they discover that there is demand in a particular place, they open a new branch, like they recently opened one in Jammu and Kashmir. Whether or not they have a centre in an area, their goods reach there.

For example, they do not have any centre in Goa, but they have appointed a distributor for that area to ensure that Lijjat papads reach Goa. Their communication with distributors is regular through monthly meetings where they discuss their problems and also the issues that they may have about quality, price, reach, etc.

Lijjat's Ranchi branch was established in November 1997 bifurcating it from the only branch in Bihar at Muzaffarpur. It pays Rs 11,000 per month as rent for the building that houses its office and workshop. A "trekker" (thirteen-seater passenger vehicle) has also been purchased for the conveyance of sister-members from home to the Lijjat office and back. This branch has 165 sister-members and sold papad worth Rs 0.65 million in November 2002. Vanai charge is Rs 14 per kilogram of papad and each sister was paid Rs 250 as extra vanai charge on Dipawali. The Muzaffarpur branch, according to Lijjat sources, paid Rs 2,500 as extra vanai charge to its sister-members. Similarly, the Mumbai and Thane branch distributed gold coins of five grams to each of the 4,056 sister-members a couple of months ago. The branch averages around four rupees as gross profit and one rupee as net profit from per kilogram of papad.

"As an experiment, Lijjat has insulated its sister-members from joblessness. These women also work from their homes, where help from other family members not only adds up to the income but also makes the work more enjoyable. At the workplace they are self-respecting, hard-working and sisterly to one another. More importantly, besides the strength of womanhood, Lijjat is also an experiment in the restoration of the essence of womanhood. The Lijjat women offer an alternative to the highly competitive and stressful work environment defined and dominated by men in which a woman competes with a man more as a man than a woman," says an elderly Gandhian, TK Sumaiya, of Bombay Sarvodaya Mandal.

They do not have individual door-to-door salesmen or women selling from homes — only the appointed distributor for the area. The same system is followed for other products, but they may have different distributors and depots for different products. Shri Mahila Griha Udyog Lijjat Papad has a policy of not allowing any sales to be made on credit terms. All sales are made on cash-at-delivery or advance payment basis.

A close check is kept on the distributors to make sure that the products reach every nook and corner of the cities. They make sure that every retailer, no matter what size, stocks their brand of products if they are stocking any other brands of the same product.

Promotions

At Shri Mahila Griha Udyog Lijjat Papad, they believe that the best promotion they could possibly receive is by word of mouth. Therefore they concentrate more on cost effectiveness and quality rather than on more expensive modes of promotion like advertisements. Therefore their annual expense on advertisements and promotions amounts to Rs. 60 Lakhs, a mere 0.2% of total turnover. The extremely famous 'Bunny rabbit' campaign continues to be aired on specific regional channels. For e.g. Alpha Gujarati, Alpha Bengali, Sun etc. They also advertise in English and regional newspapers. The distributors also need to be motivated properly, so that they in turn make a greater effort to sell large volumes of the products to the retailers. Targets are set quarterly for the distributors. Should they exceed this target, the distributor will receive a further 1% discount.

Exports

Their exports alone account for Rs 10 crore (Rs 100 million). Shri Mahila Griha Udyog Lijjat Papad started exporting in 1980. At that time they, directly exported the products themselves. However, this endeavor was short-lived and they stopped direct export in 1982. Today they export through Merchant Exporters, as they do not have the required skilled manpower. All export sales are made on advance payment basis. The merchant exporters provide the cartons with the delivery addresses printed on them. The papads are packed in these and returned to the merchant exporters. When the papads are exported to countries where languages other than English are used, then inserts are added in the packets with all the details given in that local language.

They export to United Kingdom, United States of America, Middle East, Thailand, and Other European Countries

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DESIGN & ANALYSIS OF CRANKSHAFT OF DIE STATION OF VACUUM FORMING MACHINE

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Abstract:

The objective of this work is to design and analyze the performance of crankshaft, through a simple experimental model of Forming and Cutting Die Station of Vacuum Forming Machine. A crankshaft is basically designed for bending failure of the crank pin. A parametric mathematical model of crankshaft is modeled using Pro-E Wildfire 4.0 Software and its Static Structural Analysis is carried on Ansys v-11.0 Workbench. FEA of crankshaft is done to determine its von-Misses stress, Max shear Stress, von-Misses strain and Alternating stress to cycles graph.

Keywords: crankshaft, bending, FEA, stress, forming, vacuum, machine, ProE, model, failure, static, structural.

In its simplest form the Vacuum forming process consists essentially of inserting a thermoplastic sheet in a cold state into the forming clamp area, heating it to the desired temperature either with just a surface heater or with twin heaters and then raising a mould from below. The trapped air is evacuated with the assistance of a vacuum system and once cooled a reverse air supply is activated to release the plastic part from the mould. [3]. The crank shaft is used to convert rotary motion into reciprocation motion of Die plates.

Experimental Setup

Forming and Cutting Die Pillar Station

Thermoforming machine is used to form the plastic parts to desired shape. In this Figure 1 there is a top and bottom plate within which the forming cum cutting die is placed between the two plates. The Vacuum System is used to form the plastic by means of high vacuum pressure as well as high pressure air from top also for equal distribution of wall thickness of plastic. Before this station there is heating station to preheat the sheet which is to be formed and after heating station this forming cum cutting station is placed. Figure 1 shows the Experimental setup of forming cum cutting die pillar station. The various parts of the Die pillar stations are as follows: 1) Top plate, 2) Bottom plate, 3) Shaft, 4) Crankshaft, 5) Connecting rod, 6) Bearings, 7) Die Pillars, 8) Gear box and 9) Motor. Out of all these parts we are designing the Crankshaft which is an important part in transmitting motion

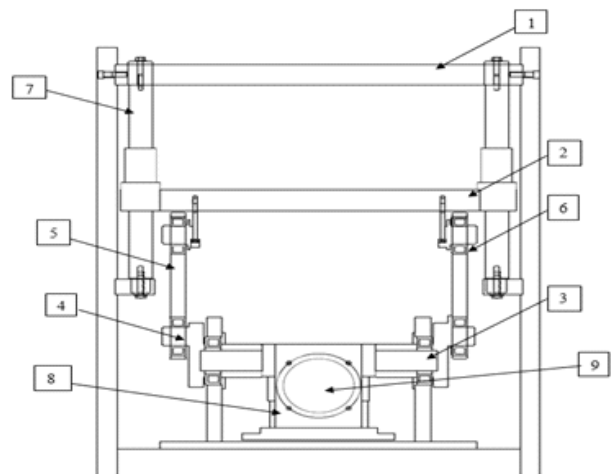


Figure 1 – Forming & Cutting Die pillar station of Vacuum forming Machine.

Table 1: Vacuum forming Machine Specifications

Machine Specifications	
Die Size	1010 mm x 300 mm
Cutting Force	50 tons = 490.5 KN
No: of cycles	40 cycles/min
Forming Process	Vacuum forming
Heaters capacity	55 KW
Material to be Formed & Cut	PVC,PET,HIPS,ABS
Thickness Range	0.1 – 4 mm

Design of Crankshaft

Crankshaft is connected to shaft and connecting rod.

It is used to transmit power and torque.

The design of Crankshaft involves design of crank pin and thickness of crank web. [1]

Let,

M= Bending Moment, N.mm

W = Load applied

l_c = Length of crankpin,mm

l = Length of connecting rod, mm

r = Radius of crank = 82 mm

t_c = thickness of crankweb,mm

σ_b = Bending Stress, N/mm²

Z= Section modulus, mm³

w = width of crankweb, mm

d_c = Diameter of crank pin, mm

P_b = Bearing pressure (Generally 9.8 – 12.6 N/mm²)

1)Design of crank Pin

$$W = d_c \times l_c \times P_b$$

$$245.25 \times 10^3 = d_c \times 0.8 d_c \times 12.6$$

$$d_c = 160 \text{ mm approx}$$

$$l_c = 124 \text{ mm}$$

Bending Moment at Crank pin,

$$M = \frac{3}{4} W \times l_c$$

$$= 22.808 \times 10^6 \text{ N.mm}$$

$$Z = \frac{\pi}{32} \times d_c^3$$

$$= 402.12 \times 10^3 \text{ mm}^3$$

$$\sigma_b = M/Z$$

$$= 56.71 \text{ N/mm}^2 < 212.5 \text{ N/mm}^2$$

Therefore the design of crank pin is safe

2) Design of Crank Web Thickness of crank web (t_c)

$$t_c = 0.6 d_c$$

$$= 0.6 \times 160$$

$$= 96 \text{ mm}$$

The Bending moment

$$M = W (0.75 l_c + 0.5 l)$$

$$= 245.25 \times 10^3 ((0.75 \times 108) + (0.5 \times 108))$$

$$= 34.58 \times 10^6 \text{ N.mm}$$

Section modulus

$$Z = \frac{w t_c^2}{6}$$

$$= \frac{w \times 96^2}{6}$$

$$= 1536 w \text{ mm}^3$$

Bending stress

$$\sigma_b = M/Z$$

$$212.5 = \frac{34.58 \times 10^6}{1536 w}$$

$$w = 106 \text{ mm}$$

But, d_c is attached to crank web so w is increased to about $w = 180 \text{ mm}$

Table 2 – Parameters Values

Parameters	Values
Diameter of Crank pin	160 mm
Length of Crank pin	124 mm
Crank web thickness	96 mm
Width of Crank web	106 mm
Diameter of small shaft	112 mm
Length of small shaft	100 mm

Methodology

Modeling of Crankshaft

Crankshaft is modeled on Pro-E Wildfire 4.0 software. The Mathematical Model is imported to ansys software is shown in Fig

Steps to Model Crankshaft

Open Pro-E Wildfire 4.0 software enter into sketching plane section draw the sketch of Connecting rod with help of various sketching commands and 3D modeling commands in modeling the connecting rod. Once the Mathematical model is prepared and exported to iges format and imported to Ansys v 11.0 software for analysis purpose.

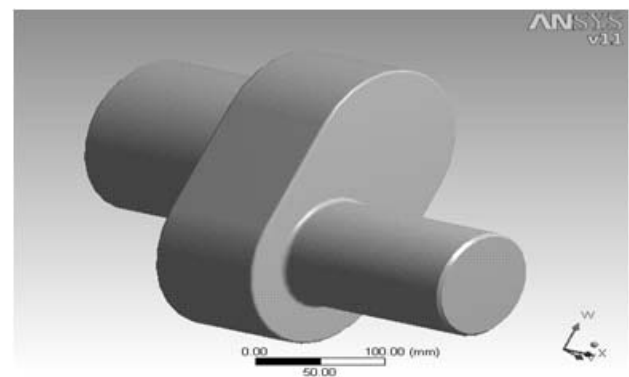


Figure 2 – Mathematical model of Crankshaft

Finite Element Analysis (FEA)

In this study, the crankshaft is designed for bending strength of crank pin. In this study of FEA of crankshaft the calculated bending stress value is compared with Ansys Von-Mises stress. Basically the analysis is in Static Structural Analysis module.

Steps Involved in FEA

Following steps are used for making Finite element analysis of crankshaft in Ansys v 11.0 software.

Meshing

Basically in Ansys v 11.0 software it automatically selects the type of mesh .In this case Tetrahedral meshing of element size 3 mm is selected for its analysis. For analysis the element size selected is 3mm with fine mesh.

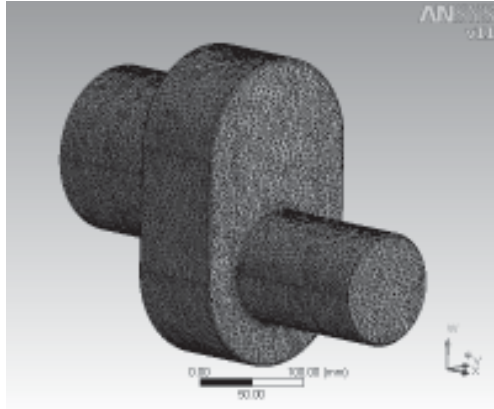


Figure 3 – Meshed Mathematical model of Crankshaft

Table 3 – Number of Nodes and Elements

Statistics	
Nodes	244866
Elements	156881

Properties

The material properties given in below table are entered in Engineering Data with name as Structural Steel.

Table 4 – Material Properties [4]

Material Properties	
Young's Modulus	2.1e+005 MPa
Poisson's Ratio	0.3
Density	7.85e-006 kg/mm ³
Yield Strength	600. MPa
Tensile Ultimate Strength	850 MPa

Constraints

Crankshaft is a constraint with bearings .The bearings are press fit to the crankshaft and does not allow the crankshaft to have any motion other than rotation about its main axis. Since only 180 degrees of bearing surface facing the load direction constraint the motion of crankshaft, this direction is defined as fixed semicircular surface as wide as bearing width. [2].The load applied on crank pin is 245.25 KN.

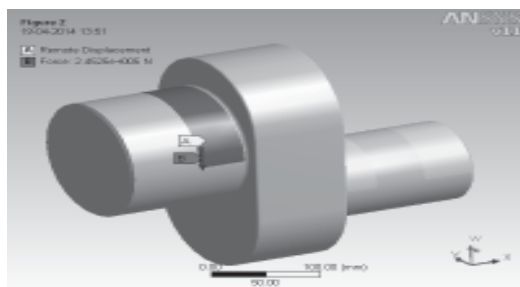


Figure 4 – Boundary Conditions of Crankshaft

Structural Analysis

When all loads and displacement are applied analysis would be last step. Select the option called Solve .The software starts analyzing automatically and finally solves the problem.

Result

Once the individual attachment is done for viewing different results select each attachment for viewing individual results.

Results and Discussion

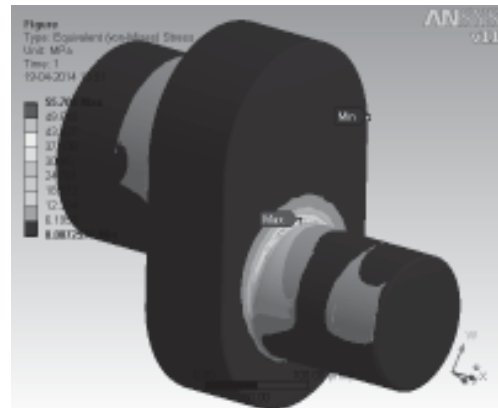


Figure 5: Von-mises Stress for Crankshaft

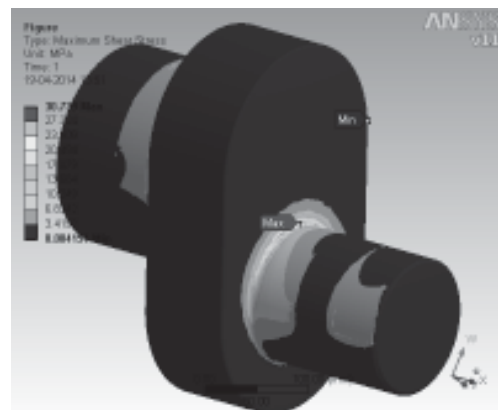


Figure 6: Maximum Shear Stress for Crankshaft

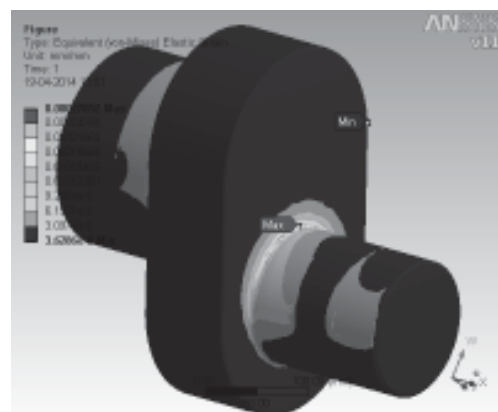


Figure 7: Von-mises Strain for Crankshaft

Table 5 – Results

Theoretical Stress Value	Ansys Von misses Stress Value
56.71 N/mm ²	55.70 N/mm ²

The theoretical design of crank pin seemed to be safe. The theoretical stress value is 56.71N/mm² which is less than the prescribed value. In addition to theoretical design, analysis was made on Ansys v 11.0 workbench in order to conform the theoretical results and it was found that results are almost nearer to each other. The Figure 5. Indicates that maximum stress value occurs at the smaller shaft end which indicates as the weaker section.

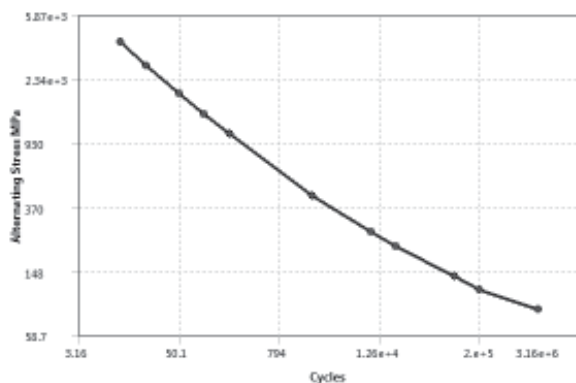


Figure 8: Alternating Stress v/s Cycles Graph

Table 6: Alternating stress Values for given cycles

Cycles	Alternating Stress MPa
10.	3999.
20.	2827.
50.	1896.
100.	1413.
200.	1069.
2000.	441.
10000	262.
20000	214.
1.e+005	138.
2.e+005	114.
1.e+006	86.2

Table 6: shows the graph of Alternating Stress values for given cycles indicate the life of crankshaft. It shows that crankshaft will have a life span of about 3.16 e+6 cycles.

Conclusion

The theoretical stress and Ansys v 11.0 workbench stress values were compared in order to confirm the accuracy and reliability of the design. Crankshaft will have a life span of about 3.16 e+6 cycles from Figure 8. In addition to that the maximum stress values is also estimated in ansys as 30.73 N/mm² and Von misses strain as 0.00027852 .

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SECULARISM: CONCEPT AND APPLICATION IN INDIA WITH SPECIAL REFERENCE TO CONSTITUENT ASSEMBLY DEBATES

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Abstract

The process of secularization has to be viewed in the context of separation of state from religion, but one has also to remember that secularization came to be an important handmaid of the entire process of modernization. Secularism has been thought of in various ways such as its antithesis to religion and its consistency with rationality, utilitarianism, materialism, individualism etc. The process and movement towards secularization has certain antecedents both in the world at large and in India. In India the movement towards secularization has its roots in the efforts to bridge the gulf between the Hindus and the Muslims so as to evolve a nation. It was felt that only through secularism could India evolve itself into a meaningful entity, particularly in terms of fighting against the British. In the Indian context, one has to remember that the content of secularism stems out of this major concern.

Keywords: secularism, constitution, constituent assembly debates

The process and movement towards secularization has certain antecedents both in the world at large and in India. Taking the overall development into account, one has to remember that secularism developed as a philosophy in reaction to the hold of religion on state. Secularism was equated with rationality, positivism, materialism, utilitarianism etc. George Jacob Holyoake is regarded as the father of secularism who started propagating the movement in 1846 and laid down its principles in his book *The Principles of Secularism*.¹ Even though secularism was regarded as materialistic and rationalistic at the same time it was an ethical system founded expressly to provide an alternative theory of life.

In India the movement towards secularization has its roots in the efforts to bridge the gulf between the Hindus and the Muslims so as to evolve a nation. It was felt that only through secularism could India evolve itself into a meaningful entity, particularly in terms of fighting against the British. In view of the communal riots which preceded and followed the partition of the country, secularism became an article of faith with our leaders who wanted to shape the destiny of India along secular lines. The leaders felt that it is only through secularism that the *two nation theory* which played such a havoc, and is playing even now, particularly in respect of Kashmir, could be finally put a stop to. In the Indian context, one has to remember that the content of secularism stems out of this major concern.

Meaning

The process of secularization has to be viewed in the context of separation of state from religion, but one has also to remember that secularization came to be an important handmaid of the entire process of modernization. Secularism has been thought of in

various ways such as its antithesis to religion and its consistency with rationality, utilitarianism, materialism, individualism etc. Secularism has been regarded as the *sine qua non* of economic development, industrialization and an overall development in favour of rationality. A breakthrough from traditional social structure is implicit in the process of secularization. Secularism is felt to be congenial to innovation and change. On the other hand, a society where religion predominates is not so congenial to innovation and change.²

The word 'secular' is among the richest of all words in its range of meaning. It is full of subtle shades which involve internal contradictions and of these contradictions the conventional dictionary meaning can hardly give a correct view. But even so it is instructive to note what the Concise Oxford Dictionary and the Encyclopedias state to be the meaning of the word 'secular'.

The Concise Oxford Dictionary states that the word 'secular' is concerned with the affairs of the world, worldly not sacred, not monastic, not ecclesiastical, temporal, profane, lay.

Encyclopedia Britannica says the word 'secular' means: non-spiritual, having no concern with religion or spiritual matters.

Structural Characteristics of Secularism

If secularism has to be a process of overall development, it will have to be something much more than mere economic and technological development. Some of the structural characteristics which would be an integral part of secularism would be Rationality and emphasis upon cognition; Scientific spirit; Individualization and individualism; Universalism and freedom pluralistic loyalty such as those of caste, kinship, region, religion etc. Rule of law; and Achievement of ethics. These characteristics constitute

an essential feature of modernization and secularism.³

Elements of Secularism

According to Donald Smith upon closer examination it will be seen that the conception of a secular state involves three distinct but inter-related sets of relationship concerning the state, religion and the individual. These three sets of relation are:-

Religion and the individual [freedom of religion];

The state and the individual [citizenship];

The state and religion [separation of state and religion].⁴

Having adopted this definition, it may be noticed that the concept of secularism involves several elements, they are:-

One is that, every person must have the same rights as a citizen and must be entitled to the same basic human rights irrespective of the religion he professes and practices;

There must be complete freedom of conscience, thought and belief and everyone should be entitled to profess and practice the religion of his own choice;

And lastly, the state should not identify itself with any particular religion nor should it promote or support or discriminate in favour of any particular religion.

Secularism and the Constituent Assembly Debates: Deliberate Omission

At the outset it must be pointed out that in the Constitution of India, as originally enacted, the word 'secular' did not appear in the Preamble to describe the character of the Sovereign Democratic Republic of India, nor was the word 'secular' used in the relevant provisions of the Constitution which guarantee freedom of religion. The omission to use the word 'secular' was not accidental but deliberate. The proceedings of the Constituent Assembly show that a member of the Constituent Assembly called Mr. KT Shah made some attempts to introduce the concept of secularism by using the word 'secular' or 'secularism' in a suitable place.

The first of these amendments related to Article 1 of the Draft Constitution which read: "*India shall be a union of states*" and the amendment sought to insert the words "secular, federal, socialist" after the words "shall be a" in the said Article so that as amended that Article would have read: "*India shall be a secular, federal, socialist union of states*".⁵ The other amendment what Mr. KT Shah wanted to introduce was in the form of a new Article and it read thus: "*The state in India being secular shall have no concern with any religion, creed or*

profession or faith; and shall observe an attitude of absolute neutrality in all matters relating to the religion of any class of its citizens or other persons in the Union....."⁶

Professor K.T. Shah tried to get the said words incorporated a third time through a third amendment and failed.⁷ All these amendments proposed by Mr. KT Shah were opposed by Dr. BR Ambedkar, the Chairman of the Drafting Committee of the Constituent Assembly and were ultimately rejected.⁸ A further proposal for incorporating the words "secularism" as part of the preamble was also rejected by the Constituent Assembly.⁹ Thus it is evident from the above paragraphs that the omission to include the word 'secular' was deliberate and not merely accidental.

Reason Behind such Deliberate Omission

It seems that perhaps, the Constitution framers were apprehensive that if the words 'secular' or 'secularism' were introduced in the Constitution, they might unnecessarily bring in, by implication, the anti-religious overtone associated with the doctrine of secularism as it had developed in Christian countries. The Constitution makers might perhaps had felt that it was not necessary to use the word 'secular' or 'secularism', particularly as it might give the impression of establishing a state structure inconsistent with the cultural ethos of Indian people.

The 42nd Amendment- Inclusion of the Word 'Secular' in the Preamble

During the Emergency imposed by the Government of Mrs. Indira Gandhi, the Preamble of the Indian Constitution was amended by the Constitution [Forty-Second Amendment] Act, 1976 so as to include the word 'secular' before the words "Democratic Republic". The Indian Republic at that time appeared to be undergoing communal strains and the word 'secular' was inserted to emphasize the secular character of the country.

Secularism and Judicial Observation

In *St. Xavier's College v. State of Gujarat*,¹⁰ explaining the secular character of the Indian Constitution the Supreme Court said:

"There is no mysticism in the secular character of the State. Secularism is neither anti-God nor pro-God; it treats alike the devout, the antagonistic and the atheist. It eliminates God from the matters of the State and ensures that no one shall be discriminated against on the ground of religion....."

In *S.R. Bommai v. Union of India*,¹¹ a nine-Judge Bench referred to the concept secularism in the Indian context. According to SAWANT, J.:



“.....religious tolerance and equal treatment of all religious groups and protection of their life and property and of the places of their worship are an essential part of secularism enshrined in our Constitution.....”

B.P. JEEVAN REDDY, J., observed:

“..... while the citizens of this country are free to profess, practice and propagate such religion, faith or belief as they choose, so far as the state is concerned, i.e. from the point of view of the state, the religion, faith or belief of a person is immaterial. To it all are equal and all are entitled to be treated equally”.

In *Ismail Faruqui v. Union of India*,¹² VERMA, J., observed:

“It is clear from the Constitutional scheme that it guarantees equality in the matter of religion to all individuals and groups irrespective of their faith emphasizing that there is no religion of the state itself. The Preamble of the Constitution read in particular with Articles 25-28 emphasizes this aspect and indicates that it is in this manner the concept of secularism embodied in the constitutional scheme.....”

Secularism as a Basic Feature

In *Kesavananda Bharati v. State of Kerala*,¹³ the Supreme Court *inter alia*, held that secularism is one of the basic features of the Constitution (as per SIKRI, C.J., as he was then). In *SR Bommai v. Union of India*,¹⁴ the SC held that secularism is a basic feature of the Constitution.

Provisions¹⁵ Relating to Freedom of Religion: Application of Secularism in India

In the discussions of the ‘secular’ provisions of the Indian Constitution from the drafting stage onwards, this point has been made repeatedly clear-

*When I say that a State should not identify itself with any particular religion, I do not mean to say that a State should be anti-religious or irreligious. We have certainly declared India to be a secular State. But to my mind, a secular State is neither a God-less State nor an irreligious State.*¹⁶

Meaning of Religion

Before we go on discussing freedom of religion in India or application of secularism in India, we need to know meaning of the term ‘religion’. The term ‘religion’ is not defined in the Constitution of India. According to *Christopher Marlowe*, “....religion is man’s one true way to salvation, to righteousness and even to manhood....”¹⁷

According to *Talcott Parsons*, religion is a matter of “concern of the innermost core of the individual personality for his own identity and commitments.”¹⁸

In *P.M.A. Metropolitan v. Moran Mar Marthoma*,¹⁹ the

Supreme Court observed:

“..... ‘religion is the belief which binds spiritual nature of men to super-natural being’. It includes worship, belief, faith, devotion etc. and extends to rituals. Religious right is the right of a person believing in a particular faith to practice it, preach it and profess it.”

Article 25: Freedom Of Conscience And Free Profession, Practice And Propagation Of Religion.-

(1) Subject to public order, morality and health and to the other provisions of this Part, all persons are equally entitled to freedom of conscience and the right freely to profess, practice and propagate religion.

(2) Nothing in this article shall affect the operation of any existing law or prevent the State from making any law-

(a) regulating or restricting any economic, financial, political or other secular activity which may be associated with religious practice;

(b) providing for social welfare and reform or the throwing open of Hindu religious institutions of a public character to all classes and sections of the Hindus.

Explanation 1.- The wearing and carrying of kirpans shall be deemed to be included in the profession of the Sikh religion.

Explanation 2.- In sub-clause(b) of clause (2), the reference to Hindus shall be construed as including a reference to persons professing the Sikh, Jaina or Buddhist religion and the reference to Hindu religious institutions shall be construed accordingly.

Article 26. Freedom To Manage Religious Affairs - Subject to public order, morality and health, every religious denomination or any section thereof shall have the right- to establish and maintain institutions for religious and charitable purposes;

to manage its own affairs in matters of religion;

to own and acquire movable and immovable property; and

to administer such property in accordance with law.

Article 27. Freedom As To Payment Of Taxes For Promotion Of Any Particular Religion- No person shall be compelled to pay any taxes, the proceeds of which are specifically appropriated in payment of expenses for the promotion or maintenance of any particular religion or any religious denomination.

Article 28. Freedom As To Attendance At Religious Instruction Or Religious Worship In Certain Educational Institutions-

(1) No religious instruction shall be provided in any religious institution wholly maintained out of State funds.

(2) Nothing in clause (1) shall apply to an educational institution which is administered by the State but has been established under any endowment or trust which requires that religious shall be imparted in such institution.

(3) No person attending any educational institution recognized by the State or receiving aid out of State funds shall be required to take part in any religious instruction that may be imparted in such institution or to attend any religious worship that may be conducted in such institution or in any premises attached thereto unless such person or, if such person is a minor, his guardian has given consent thereto.

Conclusion

In the light of the above discussion it can be concluded that secularism in India has assumed several forms or aspects and it has come to stand for all that tends to-

eliminate religion and caste as factors in political life; remove legal, economic or social inequalities based on religion or caste;

ensure equal treatment by the state to various religious or sub-religious groups in the multi-religious society of India; and

integrate various religious and caste groups into a single stream of national life.²⁰

In conclusion, the observation of the Supreme Court is worth mentioning, in *Aruna Roy v. Union of India*,²¹ the Supreme Court observed that the concept of secularism is not endangered if the basic tenets of all religions all over the world are studied and learnt. Value-based education will help the nation to fight against fanaticism, ill-will, violence, dishonesty and corruption. These values can be inculcated if the basic tenets of all religions are learnt.

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