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## EDITORIAL

*Sustainability in the dynamic environment of challenges and changes demands research attitude and initiate the research movement. To support this initiative and movement this issue enriches us with the day to day problems and its solution with ambitions, motivation, belief and action of the potential researchers.*

*To acknowledge well with psychology as well the status of the societal problems Manitombi reviews rehabilitation centres in the context of drug de-addiction; Sharma and Kaur analyse relationship of music on motivation, self-efficacy and performance; Muralikrishna and Shelvam tests the effect of aerobic training on obese men; Ashwini and Sony Kumari correlates yoga and attitude; Reddy and Sony Kumari further checks the effect of yoga with violence; whereas Venkatesh and Kochhar verifies the relationship of emotional intelligence, leadership and job enhancement.*

*To envisage the problems in education Geddam talks of eklavya model schools and tribal education; Chongtham cognizes academic performance of teacher trainees; Modi describes instruction and learning; Goel and Walia discuss the Indian higher education, Khaidem reviews the mass media in higher education; Nazarova, Saidkarimova and Obloqulova studies education development in Uzbekistan whereas Kaur talks of liberals and their role in politics to clarify the societal issues.*

*To expand the knowledge in the area of management and innovation Menon initiats with innovation, Ramakrishna relates ICT and banking; Agrawal studies relationship of service sector and tourism; Sharifkhodjaev enriches us with brand management; Nagendra Dwivedi and Rajesh Mehrotra focus on personality and consumer's colour preference; Nargiza stresses on the transfer pricing wheras Kalpande and Kesari presents the analytical design of REED*

*Research is deeply rooted in social science, humanities and technology. With inclusion of psychology, education, management, technology, innovation and the societal problems, 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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ASSESSMENT OF REHABILITATION CENTRES IN THE CONTEXT OF DRUG DE-ADDICTION

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Abstract

*Drug addiction is one of the phenomenons of human pollution in society, which is an alarming situation in the state of Manipur. Not only the young boys and girls, many matured and distinguish persons of social status groups in the adult members of the society had also been found addicted day by day. Due to drug addiction and alcoholism, many precious life of the young and adult have been killed during last three decades and also the victims of HIV/AIDS have increasing in an alarming rate in the state. Many wives, children and persons have been becoming living death. For controlling these situations many social activists, social reformers and ONGs have made various attempts to eradicate the problems. They also establish many de-addiction centers for drug addition in the state under the funding of central government. Here, the investigator tried to find out strong and weak points of the different de-addiction centers that how far these centers tried to normalize the lives of addicted persons. And also tried to find out some to the remedial measures to improve the functions of the said centers for the welfare of the state as well as nation.*

**Keywords :** Drug addiction, HIV/AIDS, Rehabilitation centers, Relapse and recovery.

Drug addiction or abuse is a global problem. No Country is free it Hundreds and Thousands of young men and girls are today victims of the evils and curs of drugs addiction. The worst form of drug addiction or abuse is "Heroin addiction". There are innumerable causes for drug addiction. Some of them are Socio-economic condition and environment, psycho physical behavior problem including frustration, indiscipline acts, personality disintegration, low mentality, handicapped, anxiety, tension, conflicts, psycho neuroses etc. Using of drugs after starts out of Curiosity or to have pleasant enjoyment. People are generally induced to drug addiction through their friends or peer groups. Often these are initially taken to over come boredom, depression and fatigue. Parental negligence, frustration in life, broken family unemployment may also lead to the initial use of drugs and thereafter its easy availability makes the user dependent on its. The world Health Organization Expert committee (1969) defines, "Drug addiction as a state of periodic or chronic intoxication produced by repeated consumption of a natural or synthetic drug."

justification of the study: In Manipur, drug use issues emerge out since early 1980. Mass arrest of drug users and incarcerate them as the best tool in the response to drug use prevention and intervention. Sate is very close to drug production site i.e. Golden Triangle. Not only Manipur become a major drug routes but also a transit point that are transported to the rest of the world. Drug route associated with wide roped spread drug use. No direct super vision to the NGOs who are running centers along with non availability of drug policy as well as lack of state monitoring as cited below to bring about an understanding while imitating different steps for streamlining drug use responses and develop effective and update approaches to treatment, uniformly and consistent use of standard of services.

Table: Sentinel Surveillance Reports-1986 to 2011:

Number of blood samples screened	Sero-Surveillance	Sentinel Surveillance	Total
	393006	80563	473569
Number of positives	31256	6760	38016
Number of Females	10109		10109
Number of HIV Positive Children	2578 (M-1378 & F-1200)		2578 (M-1378 & F-1200)
Number of AIDS cases	4724		4724
Number of deaths	658		658
Sero-positively rate per 100 samples	8.0	8.4	8.02

Source: Epidemiological analysis of HIV/AIDS in Manipur: September, 1986 to Jan, 2011

There are 20 Drug treatment centers in Manipur (Social Welfare Director) currently running drug treatment with the support from MOSJE. And many more NGOs are also implementing 100 programs in the state which is supported by Manipur state AIDS control society. After 19/20 years of service delivery to prevent and control drug use, still we experienced unsatisfactory results contrary to the expected outcome 13 Narcotics Anonymous meetings congregates about 250-300 manage users daily on an overage to manage drug free lives through staring personal experiences and caring among peers. Maximum number of the meeting attendees is the products from treatment centers. However, if we consider un-reach population and those drop out population, we presumably understand that there is a large gap not only in treatment slot and service provision but also the system itself.

But from 2001 onwards, Regional Resource Training Centre North East was given staffs of the NGOs who are working in the drug program. Most of the rehabilitation centres working efficiently and effectively in their respective field and at one time in these 20 centres about 400 clients are given



treatment. The recoveries rate of this client is 45% to 50% considering the range of 3 to 4 years period. At the same time there are various self help group formed which helps in sustaining physically mentally and financially.

There were lots of program taken up by the various NGOs relating to drugs till now. we have lots of challenges and gaps in the drug program. In order to run rehab centre, we have challenges under three heads:

Programmatic Perspective: We do not have health screening facility.; We do not have Emergency Aid like overdose medicine.; Electricity the Biggest hurdle.; In the rehabilitation centre, we have clients from different age groups ranging from 15 to 40 years and above. We also do not have the facility to keep separately the client according to their age group. There is no facility to separate the clients according to the choice of chemicals.; In the rehab centre, there are clients who come for treatment who are HIV positive. For them, there are no specific facilities like treatment for opportunistic infection and TB since we offer treatment only for drugs. It may also causes relapses.

Environmental Perspective: In the drug program, 3 components is required the client himself, the parents and those are delivering the services. So during the treatment, the parents cannot involve in the program because of stigma and discrimination by themselves and society. Even after treatment, the neighbors and communities do not allow them to reintegrate in society nowadays, the environment becomes drug friendly due to westernization e.g. in the small birthday celebration ritual funeral, there is a fashion of using drug and alcohol. Even in television, there advertisement of various brands of alcohol which are very attractive to the youth.

3. Administration Perspective: All the rehab centers are funded by central govt. but it was irregular.; In the state govt. there is no budget relating to rehab program.; The fund given by central govt. is low cost.; There is case of staff drop out of law salary.; In the annual budget only Rs. 1.4 crores is sanction in drug program whereas in TI Program, Rs. 8 crores is sanction.

**Methodology of the study:** As the proposed study is the investigation into the existing conditions of the drug de-addiction and rehabilitation centers, the method to be adopted in the study will be "Normative Survey Method". Under this method, the quantitative and qualitative data are also required to collect and dealt with for achieving the objectives of the study. Certain suitable tools and techniques have to be prepared for the study.

Tools Used : The required tools which were used in the study : Observation: The investigator will adopt observation as a tool for surveying the location that enable to asses them whether the centers are located at a proper places and conducive environment.

Interview: Interview will be conducted with the Committee members, Head of the Centers, Doctors, Counselors inmates, employees. As a supplementary tools, published and unpublished records, reports, documents and others relevant printed materials will be collected as a primary and secondary sources of data.

Sample Population: In the present study two drug de-addiction and rehabilitation centers were covered as sample of the study.

There are 20 (twenty) centers in Manipur state under the Ministry of Social Justice and Empowerment, Government of India, (centers for Mental Hygiene). The two Centers that is related with the study on the performance & flexibility.

**Case 1: New Life Drug Rehabilitation Center, Torbung Bangla, Churachandpur**

The new life rehabilitation centre, Churachandpur has been working successfully since 1993 under the sponsorship of Ministry of Social Justice & Empowerment, Government of India, New Delhi. The Centre is a multi-disciplinary comprehensive service to create a social awareness to fight against the evils of abuse of alcohol and chemical substances by giving health care. Detoxification, Individual counseling, Group Counseling, Input session, family re-integration, Group therapy etc. During rehabilitation period and followed by after care services for maintaining close contact with individuals and family so as to prevent from relapse by encouraging forming a Self Help Group under the principles of Narcotics Anonymous.

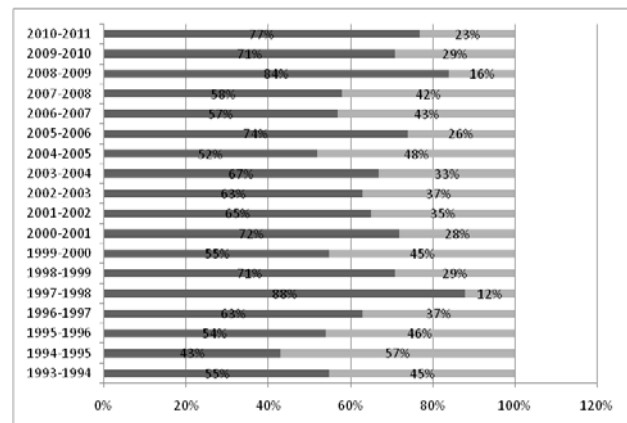
The staffs of New Life Rehabilitation Centre are all well trained in the field of drug abuse prevention and intervention. The categories of the staffs are counsellors, Doctor, Nurses and ward boy etc. This centre is a 20 bedded male residential facility for treatment and rehabilitation.

Table 3 – Year Wise Recovery and Relapse Rate

Year	Recovery rate	Relapse rate
April 1993 to March 1994	55%	45%
April 1994 to March 1995	43%	57%
April 1995 to March 1996	54%	46%
April 1996 to March 1997	63%	37%
April 1997 to March 1998	88%	12%
April 1998 to March 1999	71%	29%
April 1999 to March 2000	55%	45%
April 2000 to March 2001	72%	28%
April 2001 to March 2002	65%	35%
April 2002 to March 2003	63%	37%
April 2003 to March 2004	67%	33%
April 2004 to March 2005	52%	48%
April 2005 to March 2006	74%	26%
April 2006 to March 2007	57%	43%
April 2007 to March 2008	58%	42%
April 2008 to March 2009	84%	16%
April 2009 to March 2010	71%	29%
April 2010 to March 2011	77%	23%

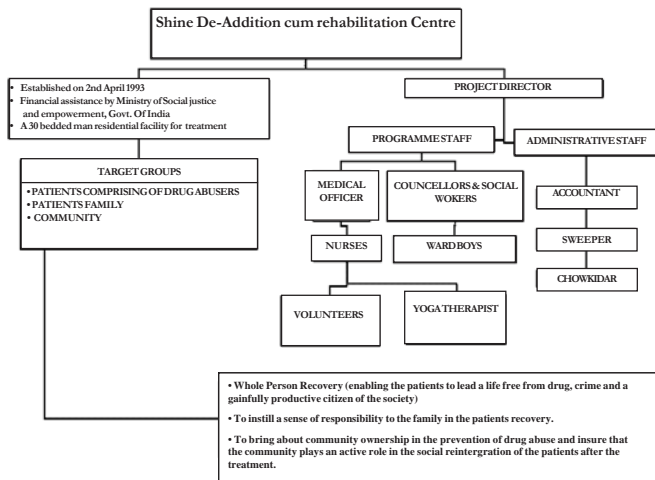
Source: Annual Reports of New Life Drug Rehabilitation Center, Churachandpur

Bar chart Showing Year wise Recovery and Relapse Rate (From April 1993 to March 2011)

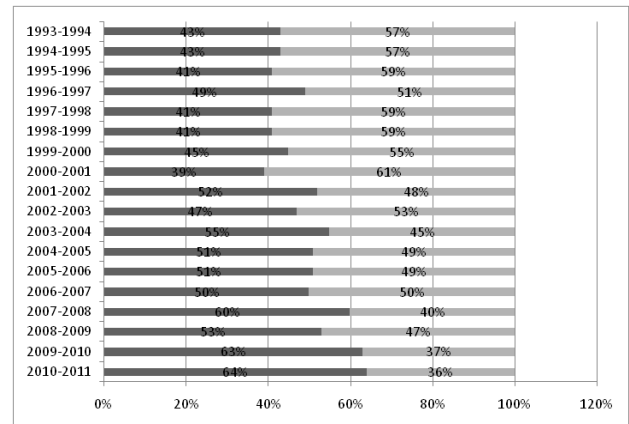




**Case 2: Shine De-Addition cum Rehabilitation Centre, Imphal.**  
**The Structure of Shine De-Addition cum Rehabilitation Centre**



**Bar chart Showing Year wise Recovery and Relapse Rate (From April 1993 to March 2011)**



**Year Wise Recovery and Relapse Rate Shine De-addiction cum Rehabilitation centre, Thangmeiband, Imphal West.**

Year	Recovery rate	Relapse rate
April 1993 to March 1994	43%	57%
April 1994 to March 1995	43%	57%
April 1995 to March 1996	41%	59%
April 1996 to March 1997	49%	51%
April 1997 to March 1998	41%	59%
April 1998 to March 1999	41%	59%
April 1999 to March 2000	45%	55%
April 2000 to March 2001	39%	61%
April 2001 to March 2002	52%	48%
April 2002 to March 2003	47%	53%
April 2003 to March 2004	55%	45%
April 2004 to March 2005	51%	49%
April 2005 to March 2006	51%	49%
April 2006 to March 2007	50%	50%
April 2007 to March 2008	60%	40%
April 2008 to March 2009	53%	47%
April 2009 to March 2010	63%	37%
April 2010 to March 2011	64%	36%

**Conclusion**

Considering the present scenario of the issues relating drugs, it is the high time we have a state drug policy and for the sustainability of the program. We need to sensitize to relook the program run by the central Government through the concern department. At the same time the people from various sector time should involvled to reduce the problems relating to drugs since it is not only duties and responsibility of various NGOs who are responding in the issues. The main goal of rehabilitation centres – "A sustainable whole person recovery".

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## EFFECT OF MUSIC THERAPY ON INTRINSIC MOTIVATION, PHYSICAL SELF EFFICACY AND PERFORMANCE OF FEMALE FOOTBALL PLAYERS

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### Abstract

*Music therapy is increasingly used in sports for enhancing sport performance. It provides a mean of improving mental strength among sportspersons. The purpose of this study is to enhance intrinsic motivation, physical self-efficacy and performance of female football players through music therapy. For this purpose, twenty two female football players, in the age group of 21-26 were screened on the basis of their scores on Sport Motivation Scale and Physical Self-Efficacy Scale. Then, they were randomly assigned to experimental and control groups. The experimental group was given music therapy intervention for fifteen days. After intervention period, same scales were re-administered. In order to analyze the statistical data, t-test was applied. The results have shown that experimental group was significantly higher on intrinsic motivation and physical self-efficacy in comparison to control group. A football match was arranged between both groups at the end of study. The experimental group won the match by 4-2. The present research implies that music therapy can be highly effective in increasing psychological strength of sports persons.*

**Keywords:** music, intrinsic motivation, physical self-efficacy, performance, female, football players

In achievement contexts, considerable demands are placed on an individual who has the potential to challenge their ability to cope and evoke a substantial emotion response. Sport is an excellent example of such a context. The competitive nature of sport has the ability to evoke more negative and maladaptive affective states. Sport exerts considerable stress on the athlete at the highest level of performance. The mismatch between the demands placed on a sport performer and their ability to cope with the concomitant emotive states that arise from that demand, then it may interfere with their ability to perform, what Zajonc (1965) called the 'dominant response', i.e. the well practiced or trained movements and skills involved in sport performance. This can often, catastrophically, manifest itself in sometimes embarrassingly poor performances relative to performance in practice and training, a phenomenon often referred to as 'choking' (Baumeister, 1984).

In recent years, sport psychology researchers identifying psychological factors associated with athletic success. Competitive sports often demand athletes to train in intensely physical, psychological, and stressful environment to cope with various stresses in sport situations, such as physical injury, performance slumps, time management, interpersonal conflict, expectations, and fear of failure. Coping plays an important role in performance enhancement, injury prevention and recovery, and managing performance slumps. Certain physiological & psychological factors are catching attention these days. Physiological factors like Strength, flexibility and endurance are the important abilities for successful performance in sports and the relationships among these three create crucial physical athletic qualities (Maes et al., 1996; Thomis et al., 1998). The fundamental motor skills are another important physiological factor that affects sports performance directly (O'Connor, 2000). Those who lack fundamental motor skills are likely to experience frustration and difficulty in learning more advanced skills, reducing their enjoyment of sports and other activities (Rose et al., 1994). Psychological factors that exert profound influence on the

performance of sportspersons include anxiety (Weinberg and Genuchi, 1980), stress (Junge, 2002), fatigue (Sharpe & Miles, 1993), motivation (Edmunds, Ntoumanis, & Duda, 2006) and self efficacy (Feltz & Mugno, 1983). The focus of this research would be on enhancing motivation and physical self-efficacy of sportspersons because motivation, an innate part of their psychological makeup, moves a sportsperson to engage in needed preparation, even when practices are difficult, grueling and long, and self-efficacy is considered as performance modifier when the competitive circumstance is quite well defined and the level of importance of the competition is quite high (Grace, 1983).

Motivation is defined as "those psychological processes that cause the arousal, direction, and persistence of voluntary actions that are goal directed (Mitchell 1982). Intrinsic and extrinsic motivation has been of particular interest to researchers in the field of sport psychology (Deci & Ryan, 1985, 2000, 2008; Vallerand, 1997, 2001). Intrinsic motivation, recently been labeled "enjoyment-based intrinsic motivation" (Lindenberg, 2001), entails participation in an activity for the feelings of fun, pleasure, excitement, and satisfaction associated with it. In contrast, extrinsic motivation involves participation for the attainment of such rewards as money, trophies, and social approval or to avoid punishment. The concept of amotivation, or having no sense of purpose and lacking intent to engage in a particular behaviour, too has been added in Self-determination theory (Deci & Ryan, 1985, 2000; Ryan, 1995; Ryan & Deci, 2000).

Self-efficacy is beliefs in one's capabilities to successfully execute necessary courses of action (Bandura 1986 & 1997) which has been associated with task choice, effort expenditure, and perseverance in the face of failure or aversive stimuli (Bandura, 1986). Self-efficacy is both an important determinant and a consequence of physical activity (McAuley & Blissmer, 2000) and higher levels of self-efficacy are associated with superior sport performance (Moritz et al., 2000).

### Rationale

Researchers have applied a number of intervention





techniques, like mental imagery, progressive muscular relaxation, rationalizing, reappraising, blocking, and positive self-talk, avoidance coping, and emotion-focused coping etc., primarily oriented towards altering the individual's level of performance but music therapy alone didn't get much attention. Music Therapy is one of the most modern ways of enhancing intrinsic motivation, physical self-efficacy and sport performance in the most natural and effective way. The prevailing belief is that the music facilitates exercise performance by reducing the sensation of fatigue, increasing psychological arousal, promoting relaxation and improving motor coordination (Szabo, Small & Leigh 1999), But whether such beliefs are supported by scientific evidence showing that it is possible to enhance some aspects of performance using music therapy, the present research was conducted to put this belief to the test.

### Music Therapy

Music therapy is an aesthetic process which contains qualities such as creativity, intuition, inspiration, intention and spiritual elements (Amir, 1992). The benefits of music therapy in the context of sports psychology are enormous. Scientific inquiry into music and its effects on motor behaviour dates back to the early 20th century when it was suggested that music acts as a stimulus that promotes the body's natural movement (MacDougal, 1902). The scholastic literature suggests four ways in which music might improve physical performance: reduces perception of fatigue (Yamashita et al., 2006); increases levels of arousal (Karageorghis & Terry, 1997); encourages motor coordination or synchronization (Simpson & Karageorghis, 2006); and increases relaxation (Copeland & Franks, 1991).

Haun et al. (2001) proposed music therapy as a means of decreasing the physiological and behavioral anxiety. Music accompaniment has been shown to improve muscular endurance in the performance of junior high students doing sit-ups (Chipman, 1966). In a meta-analysis of various studies, a significant decrease of arousal due to stress was found by use of music alone or music assisted relaxation techniques (Pelletier, 2004).

Music therapy is highly motivating and engaging, and may be used as a natural "reinforcer" for desired responses. Music therapy describes how it enhances self-esteem and self-efficacy (Purdie, 1997; Purdie and Baldwin, 1994) as well as develops positive self-image (Jochims, 1995; Magee, 1999; McMaster, 1991). Music is often used to enhance self-efficacy, motivation and well-being (Iwanaga and Moroki, 1999). Lanzillo, Burke, Joyner, & Hardy (2001) showed that an individual music session that featured the participant's favorite music significantly enhanced feelings of state self-efficacy in collegiate athletes. Music appears to exert direct physiological effects through the autonomic nervous system. The aim of this study was to determine if regularly listening to a 30-minute music therapy over two weeks period would positively affect the participant's intrinsic motivation, self-efficacy and performance. The study verified the following hypotheses: Music therapy would enhance the intrinsic motivation. Female football players in the experimental group would in the experimental group would improve their intrinsic motivation

relative to the female players in the control group.

Music therapy would enhance the physical self-efficacy. Post intervention physical self-efficacy of experimental group would be more as compared to the control group.

Music therapy would enhance the sport performance. The experimental group would perform better relative to the control group.

### Research Design

Sample: Twenty-two female football players were screened on the basis of their scores on motivation and self-efficacy measures. The participants were in the age range of 21-26 years. All the screened participants were randomly assigned to experimental and control groups.

### Tools Used

Sport Motivation Scale; Physical Self-Efficacy Scale (PSES)

### Design and Procedure

An experimental and control assessment design was used in this study to examine the influence of music therapy intervention on intrinsic motivation, physical self-efficacy and sport performance. The participants were screened on the basis of their scores on Sport Motivation Scale and Physical Self-Efficacy Scale. Then, they were randomly assigned to experimental and control groups. Experimental group was given music therapy intervention for fifteen days. These participants were subjected to the instrumental flute music for half an hour daily. They were seated in a semicircle facing outward and were instructed to enjoy music through headphones till the music continued. After intervention period, the same scales were re-administered and a football match was arranged between both groups to study the efficacy of music therapy.

### Results And Discussion

The following Tables illustrate the statistical results of the effect of music therapy on sport performance and selected psychological variables.

Table 1 - Mean, Standard Deviation and t-value of Experimental and Control Groups on Sport Motivation Scale.

	Mean	SD	t-value
Experimental	69.45	4.73	6.49**
Control	61.59	3.14	

\*\* Significant at .01 level.

Figure 1 - Comparison of Mean values of Experimental and Control Groups on Sport Motivation

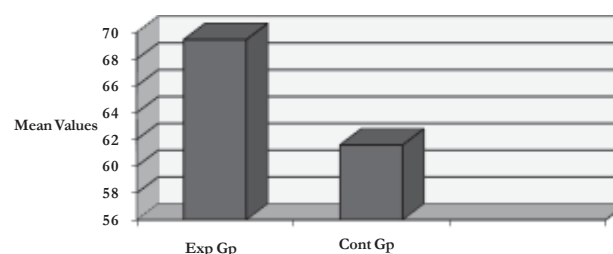


Table 1 shows that experimental group mean scores on intrinsic motivation are higher than control group mean scores. Experimental and control group scores have significant difference on sport motivation ( $t = 6.49$ ,  $p < .01$ ). These results led to the acceptance of our first hypothesis, which says that music therapy would help sports persons in



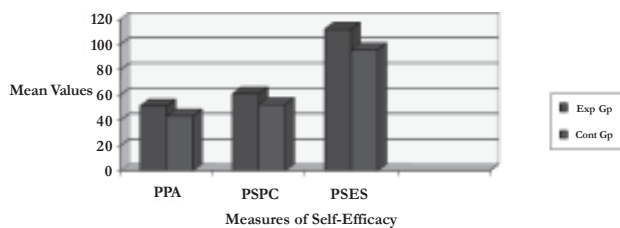
increasing their intrinsic motivation level. Figure 1 represents the mean difference in bar diagram form.

Table 2 - Mean, Standard Deviation and t-value of Experimental and Control Groups on Physical Self Efficacy Scale.

		Mean	SD	t-value
Perceived Physical Ability (PPA)	Experimental	51.23	2.91	9.10**
	Control	43.36	2.82	
Physical self-Presentation Confidence (PSPC)	Experimental	60.86	3.81	7.75**
	Control	52.45	3.38	
Physical Self-Efficacy Scale (PSES)	Experimental	112.09	4.46	11.49**
	Control	95.81	4.95	

\*\* Significant at .01 level.

Figure 2: Comparison of Mean values of Experimental and Control Groups on Physical Self-Efficacy Scale.



Experimental group mean scores on subscales of physical self-efficacy scale are comparatively higher than control group scores (Table 2). There is a significant difference between experimental and control group scores on perceived physical ability subscale ( $t = 9.10$ ,  $p < .01$ ), physical self-presentation confidence subscale ( $t = 7.75$ ,  $p < .01$ ) and physical self-efficacy scale ( $t = 11.49$ ,  $p < .01$ ). Graphical representation of mean scores has been shown in Figure 2. In addition to this, experimental group won the arranged football match by 4-2. These results prove our second as well as third hypotheses and are in line with the previous researches. Gold et. al. (2005) studied the effectiveness of resource-oriented music therapy and found that music therapy helps in creating positive self-image, thus enhancing patient's self-efficacy. In music therapy, the use of music (i.e. playing or listening to music) itself can often be a motivating factor for persons who may otherwise not be motivated for any other form of psychotherapy. Montello and Coons (1998) also found that group music therapy can facilitate self-expression and provide a channel for transforming frustration, anger, and aggression into the experience of creativity and self-mastery.

There are various studies that show the positive effect of music therapy on overall performance of sports performance (Templin & Vernacchia, 1995; Papa 1998, and Lanzillo et al, 2001). This research suggests the need for music therapists and sports specialists to work together to produce closer more productive links between music and sport.

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## EFFECT OF DIFFERENT INTENSITIES OF AEROBIC TRAINING ON STROKE VOLUME OF MIDDLE AGED OBESE MEN

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**Abstract**

To achieve this purpose forty five ( $N = 45$ ) obese men ( $BMI 30 \pm 1 \text{ kg/m}^2$ ) from Annamalai Nagar, Chidambaram, Tamil Nadu, India from the total population of (obese volunteers) 173 were selected at random subjects for this study. Their age mean height and weight were  $43 \pm 2.7$  years,  $168 \pm 6 \text{ cm}$  and  $81 \pm 3.7 \text{ kg}$  respectively. They were randomly divided into three equal groups, and each group consisted of fifteen ( $n = 15$ ) subjects, in which, Group I underwent low intensity aerobic training, Group II underwent high intensity aerobic training and Group III acted as control. Low Intensity was Pedal at cadence of 40 revolutions per minute of bicycle ergo meter training for 5 days per week for sixteen weeks. High intensity Pedal at cadence of 60 revolutions per Minute of bicycle ergo meter training for 5 days per week for sixteen weeks. The selected criterion variable stroke volume to assess M-mode Doppler echocardiography and transducer was used. Pre-test data were collected two days before the training program and post-test data were collected two days after the training program. The collected data treated with ANCOVA. Level of confidence was fixed at 0.05. If obtained 'F' ratio significant scheffe's post hoc test were used. The result shows that High intensity aerobic training was effective method as compared to low intensity training increasing stroke volume of middle-aged obese men.

**Keywords:** low intensity and high intensity aerobic training, stroke volume, bicycle ergometer

Health related physical fitness of a patient is dependent on both lifestyle related factors such as daily physical activity levels, nutritional habits and genetic factors, and is an important indicator of health status (Takken, 2003). Low physical fitness is associated with a higher mortality rate, a higher risk of certain forms of cancer, obesity, decreased mental health, diabetes, hypertension, and a lower quality of life (Booth, 2002). Everybody desires a long and healthy life and exercise has a great part to play in this. In one aspect the body can be said to commence ageing from the moment it is born, although it is usual to say it really begins in about the mid-thirties. However, different system of the body age at different rates, no doubt depending upon how they are used or not used. Many people continue a very active life, both physically and mentally, well in to their old age. The barrier of these activities often seems to be physiological rather than physical, and when a person thinks he is too old to do something physically he may well be completely wrong, although too much of exercise could do harm.

**Obesity**

Obesity refers to the condition in which a person has an excessive amount of body fat. This implies that the actual amount of body fat or its percent of the total weight must be associated or estimated. Exact standards for allowable fat percentages have not been established. However, men with more than 25% body fat and women with more than 35% should be considered obese. Clarke (1976), the efficiency of an individual in performing physical activities depends

basically on his/her cardio respiratory efficiency. Through training the efficiency of the circulatory and respiratory systems are improved. Ehasni *et al.* (1991), felt that after training the LV fills more completely during diastole than it does in an untrained heart. More blood entering the ventricle increases the stretching of ventricular walls. This results in more recoil. Hypertrophy with ET increased contractibility would cause the more blood would be forced out of the heart during the more powerful contractions, leaving less blood in the LV after systole. Increased contractibility coupled with the increased elastic recoil results from greater diastolic filling increase the EF in the trained heart.

**Stroke Volume (SV)**

ET leads to overall increase in SV. SV at rest is substantially higher after an ET than it is before training. Maximal SV during exercise in untrained subjects is 80 ml/beat to 110 ml/beat. Highly trained subjects have entirely different values than untrained. Their SV is at rest 100 ml/beat to 120 ml/beat at rest during exercise 160 ml/beat to > 220 ml/beat. The purpose of the study was find out effect of different intensities of aerobic training on stroke volume of middle aged obese men

**Methodology**

To achieve this purpose forty five ( $N = 45$ ) obese men ( $BMI 30 \pm 1 \text{ kg/m}^2$ ) from Annamalai Nagar, Chidambaram, Tamil Nadu, India) from the total population of (obese volunteers) 173 were selected at random subjects for this



study. Their age mean height and weight were  $43 \pm 2.7$  years,  $168 \pm 6$  cm and  $81 \pm 3.7$  kg respectively. They were randomly divided into three equal groups, and each group consisted of fifteen ( $n = 15$ ) subjects, in which, Group I underwent low intensity aerobic training, Group II underwent high intensity aerobic training and Group III acted as control. Low Intensity was Pedal at cadence of 40 revolutions per minute of bicycle ergometer training for 5 days per week for sixteen weeks. High intensity Pedal at cadence of 60 revolutions per Minute of bicycle ergo meter training for 5 days per week for sixteen weeks. The selected criterion variable was stroke volume variable, M-mode Doppler echocardiography and transducer was used to assess stroke volume. Pre-test data were collected two days before the

training program and post-test data were collected two days after the training program. The collected data treated with ANCOVA. Level of confidence was fixed at 0.05. If obtained 'F' ratio significant scheffe's post hoc test were used.

**Training Program**

The percentage of intensity (Watts) variations in sixteen weeks training for 40 revolutions and 60 revolutions groups are given below:

**TABLE 1**

<b>Week</b>	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15 & 16
<b>% of Intensity (Watts)</b>	60	65	70	75	80	85	90	95

**Results**

**Table 2 - Analysis Of Covariance On Stroke Volume Of Low And High Intensity Aerobic Training Groups And Control Group**

		Low Intensity Group	High Intensity Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	'F' Ratio
Pre-test	MEAN	0.675	0.699	0.674	B	0.006	2	0.003	2.89
	S.D	0.02	0.04	0.03	W	0.042	42	0.001	
Post-test	MEAN	0.850	0.922	0.692	B	0.415	2	0.208	174.82*
	S.D	0.05	0.27	0.02	W	0.05	42	0.001	
Adjusted Post-test	MEAN	0.85	0.92	0.70	B	0.360	2	0.180	170.22*
					W	0.043	41	0.001	

\* Significant at 0.05 level of confidence.

The table value for significance at 0.05 level of confidence with df 2 and 42 and 2 and 41 are 3.22 and 3.21, respectively.

The table II shows that the pre-test means of low and high intensity groups and control group are 0.675, 0.699 and 0.674 respectively. The obtained 'F' ratio of 2.89 for pre-test means of stroke volume is lesser than the table value 3.22 for df 2 and 42 required for significance at 0.05 level. The post-test means of low and high intensity groups and control group are 0.850, 0.922 and 0.622 respectively. The obtained 'F' ratio of 174.82 for post-test means of stroke volume is higher than the table value 3.22 for df 2 and 42 required for significance at 0.05 level. The adjusted post-test means of low and high intensity groups and control group are 0.85, 0.92 and 0.70 respectively. The obtained 'F' ratio of 170.22 for adjusted post-test means of stroke volume is higher than the table value of 3.21 for df 2 and 41 required for significance at 0.05 level. The results of the study indicate that there is a significant difference among low intensity, high intensity and control groups on stroke volume. To determine which of the paired means had a significant difference, Scheffe's post-hoc test was applied and the results are presented in Table -III.

**Table 3 - Scheffe's Test For The Difference Between The Adjusted Post-test Paired Means Of Cardiac Output**

Adjusted Post-test Means			Mean Differences	Confidence Interval
Low Intensity Group	High Intensity Group	Control Group		
0.85	0.92	-	0.07*	0.03
0.85	-	0.70	0.15*	0.03
-	0.92	0.70	0.22*	0.03

\* Significant at 0.05 level of confidence.

The table -III shows the adjusted post-test mean difference of stroke volume between low intensity and high intensity groups, low intensity and control groups and high intensity and control groups are 0.07, 0.15 and 0.22 respectively, which were greater than 0.03 at 0.05 level of confidence. The results of the study showed that, high intensity aerobic group has significantly differed on stroke volume level when compared to low intensity aerobic and control groups. Low intensity aerobic group also significantly differed on stroke volume level when compared to control group. Hence it was concluded from the results that both high and low intensity aerobic training was better method to increase stroke volume level. Among the training high intensity aerobic training was much better than low intensity aerobic training for increase the stroke volume level.



## Discussion on Findings

High and low intensity aerobic training has significantly improved stroke volume, when compared to control. However between the training significant differences was found infavour of high intensity aerobic training on stroke volume. Hence it was concluded that high and low intensity aerobic exercises positively influence stroke volume. Further it was concluded, high intensity aerobic training was the best method to improve stroke volume for obese people. The results shows that High intensity, Low intensity aerobic training positively influences the cardiopulmonary (Stroke volume) variable of middle-aged obese men. Same results agreement with that Concluded, highly trained endurance athletes tend to have lower, maximum HR values. Their heart has been adapted to training by drastically increasing their SV, so lower HR, maximum values can provide optimal cardiac output (Turkvich *et al.* 1988),. Found that in contrast, athletes achieved a substantially increased  $\dot{Q}$  basically through a prominent increase SV, their exercise HR was similar to that of sedentary individuals. The greatly increased SV resulted from both increases in end-diastolic volume and marked decreases in end-systolic volume compared with those in sedentary persons. These volumetric changes were reflected in a striking increase in ejection fraction (Henriksen, E. *et al.* 1999). Physical training improves SV and cardiac enlargement (Whyte *et al.*, 2004). Short term aerobic training alone influence several physiological improvements on cardiovascular function in humans (Yang *et al.*, 2010). When muscles demand for  $O_2$  during exercise the increase directly. When the level of exercise exceeds 40%, 60% of the individual capacity SV has either plateau or begun to increase at a much slower rate. Thus further increase in are largely the results of increase in HR (Willmore 1996). According to the cardiovascular system accomplishes this by increasing and redistributing blood flow to the active muscle via neural regulations of the hemodynamic responses and local regulation of the flow within the active muscle. This local blood (250 to 400 ml/100g/min) neural regulations of the cardiovascular system regulates hemodynamics responses by increasing HR, SV, and  $O_2$  extraction at the tissue level (Richard Allen 1999). The results of the study may in conformity with the above findings.

## Conclusion

High intensity aerobic training was effective method as compared to low intensity training increasing stroke volume of middle-aged obese men.

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## EFFECT OF ONE MONTH RESIDENTIAL YOGA PROGRAM ON MEASURING THE POSITIVE AND NEGATIVE ATTITUDE

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### Abstract

*The Effectiveness of One Month Residential Yoga Program on Measuring the Positive and Negative Attitude among 50 participants was examined. The participants were divided into two groups -Yoga and Control group. Yoga Group comprising of both Male and Female attended one month Residential yoga program where they followed a strict schedule of 10 hours per day. Result indicated that Yoga Program contributed significantly in improving positive attitude and reducing in negative attitude in healthy volunteers. Positive thinking can lead to positive attitudes and peace of mind. Much of your behavior depends on your attitudes. If your attitudes are negative, you can expect to be vulnerable to addictions and psychosomatic disorders, and the resulting lack of focus and concentration may degrade every area of your life. A positive attitude can be developed by monitoring and disciplining your thoughts on a moment-by-moment basis.*

**Keywords:** *yoga, attitude, psychology*

“Psychology Today” magazine, reports that the average person generates 25,000 to 50,000 thoughts per day. Beginning in 1952 with Norman Vincent Peale’s book, “The Power of Positive Thinking,” a large school of thought has developed around the idea that happiness and unhappiness are largely by products of thoughts and that “negative thinking” results in a variety of psychological and physiological disorders. The remedy, according to these thinkers, is to exercise control over your thoughts to achieve health, serenity, an enhanced sense of well-being and increased personal effectiveness at work and at home.

Attitudes are organized collections of thoughts about a particular issue. To think positively, you need to eliminate certain negative thinking patterns that nearly everyone indulges in at least some of the time. These include the four major types of negative thinking filtering, personalizing, catastrophizing and polarizing. Filtering refers to psychologically screening out the encouraging aspects of complex scenarios. Personalizing means automatically blaming yourself every time something bad happens. Catastrophizing is expecting the worst possible outcome in any situation, and polarizing is a type of black-and-white thinking that defines failure as any result short of perfection

Emotion is a common component in persuasion, social influence, and attitude change. Much of attitude research emphasized the importance of affective or emotion components. Emotion works hand-in-hand with the cognitive process, or the way we think, about an issue or situation. Emotional appeals are commonly found in advertising, health campaigns and political messages. Recent examples include no-smoking health campaigns and political campaign advertising emphasizing the fear of terrorism. Attitudes and attitude objects are functions of cognitive, affective and cognitive components. Attitudes are part of the brain’s associative networks, the spider-like structures residing in long term memory that consist of affective and cognitive nodes.

By activating an affective or emotion node, attitude change may be possible, though affective and cognitive components tend to be intertwined. In primarily affective networks, it is

more difficult to produce cognitive counterarguments in the resistance to persuasion and attitude change.

In terms of research methodology, the challenge for researchers is measuring emotion and subsequent impacts on attitude. Since we cannot see into the brain, various models and measurement tools have been constructed to obtain emotion and attitude information. Measures may include the use of physiological cues like facial expressions, vocal changes, and other body rate measures. For instance, fear is associated with raised eyebrows, increased heart rate and increase body tension. Other methods include concept or network mapping, and using primes or word cues in the era.

The effects of attitudes on behaviors is a growing research enterprise within psychology. Icek Ajzen helped develop two prominent theoretical approaches within this field: the theory of reasoned action and, its theoretical descendant, the theory of planned behavior. Both theories help explain the link between attitude and behavior as a controlled and deliberative process. Russell H. Fazio proposed an alternative theory called “Motivation and Opportunity as Determinants” or MODE. Fazio argues that motivation can modify our deliberative attitude-related behavior, only if the opportunity presents itself.

Yoga suggests attitudes to cultivate for removing the mental and emotional blocks that veil the joy of the true Self. Each of these can be the subject of meditation and contemplation as well as being practiced in daily life. Attitudes meditations are foundations for the subtler meditations. Correlations were obtained between scores on the Yoga Attitude Scale and improvement in a group of 20 psychoneurotic patients undertaking yoga therapy of 4-6 weeks duration. A significant positive correlation was found between the improvement in social and vocational disability and scores on the Yoga Attitude Scale at intake. However, during treatment and follow-up, there was a significant change in the attitude towards yoga - it became more positive.

Correlations were also performed between improvement and change in attitude over the 5-month study period. Significant positive correlation was seen only on personal distress.

Improvement in the other symptoms of neurosis i.e. anxiety, depression, features, vegetative symptoms of neurosis i.e. anxiety, depression, features, vegetative symptoms and the other neurotic features i.e. hysteria, obsessions-compulsions and phobia did not show any relationship with the patient's attitude towards yoga.

**Method**

The Subjects in study were taken from one month Residential yoga program and control Group. The subjects comprised of 50 participants. 25(Yoga Group) participants both male and Female aged 20 to 45 years. Control group comprised of 25 Participants Both Male and Female raged 22 to 45 Years.

**Measure**

Positive and Negative Affects Scale (PANAS) to assess these specific emotional states in one Month Residential Yoga Program Participants. It is taken in individuals before and after yoga.

Watson, Clark, and Tellegen (1988) developed the Positive and Negative Affect Schedule (PANAS), which consists of two 10-item scales for PA and NA, Respectively in addition to the two original higher order scales the PANAS-X measures 10 specific affects: Fear, Sadness, Guilt, Hostility, Shyness, Surprise, Joviality, Self-Assurance, Attentiveness, and Serenity. PANAS-X provides for mood measurement at two different levels. That is personality and emotionality PANAS-X scales shows significant discriminate validity when correlated with peer-judgments.

**Procedure**

Om Meditation: a type of meditation using the syllable om chanting mentally to achieve a state of alert full rest (Telles, Nagarathna and Nagendra,(1995). The person seated in any comfortable meditative posture goes on repeating the syllable Om mentally leading to effortless flow of a single thought in the mind.

Yoga practice: yoga practices formulated based on the requirements of the patients developed by SVAMI VIVEKANANDA YOGA ANUSANDHANA SAMSTHANA YIC (One month residential Yoga Instructed Course).

Pranayama: Pranayama is a state of voluntarily regulated breathing while the mind is directed to the flow of breath to the flow of breath or prana.A typical cycle of the slow type breathing involves the phases of inhalation, exhalation; there are different kinds of pranayama varying according to the durations of the phases in the breathing cycles, and the nostrils used.

Cyclic Meditation: This has included a combination of both stimulating and relaxing or calming practices (Nagendra and Nagarathna 1997) its basis from traditional text. Studies on this meditation have shown that this technique, which is a combination of yoga postures interspersed with relaxation, reduces arousal more than relaxation alone

Trataka:One of theKriya (cleansing technique) mentioned in yogic texts to remove impurities of the ophthalmic tract and to attain mental stability (DHARANA).

**Results & Discussion**

**Table 1**

Means And SDs of Scores on The Measure of Emotional Competence by Yoga And Control Groups Before and After Intervention. This explains the comparison between pre and post assessment on negative attitude of Experimental Group.

Variable		Mean=+SD	% change of mean	P value
Afraid	Pre	2.231=+1.1066	15.93	085
	Post	2.654=+1.3840		
Scared	Pre	2.269=+1.1509	16.91	171
	Post	2.731=+1.4576		
Nervous	Pre	2.385=+1.2673	6.02	596
	Post	2.538=+1.2722		
jittery	Pre	2.231=+1.2746	0	689
	Post	2.423=+1.2385		
irritable	Pre	2.192=+1.2335	22.97	130
	Post	2.846=+1.6172		
hostel	Pre	2.731=+1.4016	4.43	697
	Post	2.615=+1.2985		
guilty	Pre	2.154=+1.3173	5.06	718
	Post	2.269=+1.4016		
ashamed	Pre	2.038=+.8237	19.70	260
	Post	2.538=+1.5028		
upset	Pre	2.577=+1.2704	10.67	307
	Post	2.885=+1.657		
distressed	Pre	2.577=+1.2704	23.87	001*
	Post	3.385=+1.3879		

**Note:** Wilcoxon Test showed that amongst 10 negative attitude, Yoga group showed significant reduction in distressed (p>0.05).

**Table 2 -** This explains the comparison between pre and post assessment on positive attitude of Experimental Group.

Variable		Mean=+SD	% change of mean	P value
active	Pre	3.038=+.9992	8.88	400
	Post	3.308=+1.1232		
alert	Pre	3.115=+.9089	6.16	380
	Post	2.923=+1.0554		
attentive	Pre	2.923=+.7442	2.63	783
	Post	3.000=+1.2000		
determined	Pre	3.192=+.7494	9.61	314
	Post	2.885=+1.1073		
enthusiastic	Pre	3.000=+.9798	6.4	445
	Post	3.192=+1.0961		
excited	Pre	3.000=+1.0583	3.83	.824
	Post	2.885=+1.2434		
inspired	Pre	3.000=+.9381	7.7	385
	Post	3.231=+1.1767		
interested	Pre	2.923=+1.0168	14.47	119
	Post	3.346=+1.2944		
proud	Pre	3.346=+1.0175	12.64	491
	Post	2.923=+1.0168		
strong	Pre	3.423=+.9454	7.85	309
	Post	3.154=+1.2229		

**Note:** In within group comparison (Yoga group) Wilcoxon test did not show any significant improvement in positive attitude

**Table 3 -** This explains the comparison between pre and post assessment on negative attitude of group.

Variable		Mean=+SD	% change of mean	P value
Afraid	Pre	3.542=+1.3181	21.17	023*
	Post	2.792=+1.2151		
Scared	Pre	3.125=+1.4540	5.34	655
	Post	2.958=+1.5737		





Nervous	Pre Post	3.500=+1.4446 3.375=+1.6101	3.57	758
jittery	Pre Post	2.708=+1.5737 2.708=+1.3667	0	951
irritable	Pre Post	3.333=+1.3726 3.292=+1.4590	1.23	828
hostel	Pre Post	3.000=+1.3831 2.875=+1.5126	4.16	704
guilty	Pre Post	3.167=+1.4646 3.458=+1.4136	9.18	542
ashamed	Pre Post	3.167=+1.4646 2.917=+1.6659	7.89	639
upset	Pre Post	3.708=+1.2676 3.167=+1.2039	14.59	172
distressed	Pre Post	2.583=+1.529 2.667=+1.6594	3.25	947

**Note:** Within group comparison was done by using Wilcoxon Test where the result showed significant improvement in the attitude afraid in Control Group.

**Table 4 -** This explains the comparison between pre and post assessment on positive attitude of group.

Variable		Mean=+SD	% change of mean	P value
active	Pre	2.917=+1.2129	1.38	.048*
	Post	2.958=+1.3345		
alert	Pre	2.958=+1.5458	20.22	088
	Post	3.708=+1.2676		
attentive	Pre	3.375=+1.2091	14.09	207
	Post	2.958=+1.3667		
determined	Pre	2.625=+1.2790	21.24	073
	Post	3.333=+1.4039		
enthusiastic	Pre	3.083=+1.2129	8.65	307
	Post	3.375=+1.3126		
excited	Pre	2.917=+1.1757	4.47	750
	Post	2.792=+1.2151		
inspired	Pre	2.958=+1.5737	14.45	263
	Post	3.458=+1.3181		
interested	Pre	3.250=+1.1516	1.30	935
	Post	3.208=+1.4136		
proud	Pre	3.042=+1.3667	4.28	809
	Post	2.917=+1.4116		
strong	Pre	3.250=+1.3593	3.70	649
	Post	3.375=+1.2091		

**Note:** Within group comparison was done by using Wilcoxon Test where the result showed significant improvement in the attitude active in Control Group.

**Table 5 -** This explains the comparison between the group (Yoga and Control).MannWhitney (Between group)

Variable	P value	Variable	P value
Afraid pre	.614	active pre	.268
Afraid post	.006*	Active post	.580
Scared pre	.713	alert pre	.037
Scared post	.073	Alert post	.837
Nervous pre	.103	attentive pr	.796
Nervous post	.017*	Attentive post	.066
Jittery pre	.527	Determined pre	.270
jittery post	.638	Determined post	.064
irritable pre	.263	Enthusiastic pre	.618
Irritable post	.016*	Enthusiastic post	.684
Hostel pre	.487	excited pre	.723
Hostel post	.959	Excited post	.533
guilty pre	.019	inspired pre	.535
Guilty post	.053	Inspired post	.886
ashamed pre	.480	interested pr	.695
Ashamed post	.027*	Interested post	.318
upset pre	.329	Proud pre	.332
Upset post	.020*	Proud post	.561
Distressed pre	.220	strong pre	.693
Distressed post	.420	Strong post	.737

**Note:** In between group comparison Yoga group showed significant improvement in the negative attitude such as afraid, nervous, irritable, ashamed and upset.

In a previous, open-armed observational study on 312 participants of a weeklong free yoga camp for promotion of positive health through integrated yoga practices showed significant reduction in negative affect and increase in positive affect scores on modified version of PANAS questionnaire; The current study reveals that in a within group comparison Yoga Group showed a significant reduction in negative attitude, distressed ( $p > .001$ ) whereas no changes was observed in positive attitude.; In control group negative attitude afraid was reduced significantly ( $p > .023$ ) and positive attitude active, increased significantly with  $p > .05$ .; In between group comparison yoga group showed significant reduction in negative attitude such afraid ( $p > .05$ ), nervous ( $p > .05$ ), irritable ( $p > .05$ ), ashamed ( $p > .05$ ), and upset ( $p > .05$ ); In positive attitude result between group did not show any significantly improved in yoga group after one month of intervention.; Yoga intervention has shown significant change in reducing negative attitude an improvement in positive attitude in healthy volunteers.

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## EFFECT OF SHORT TERM YOGA PRACTICES ON COGNITIVE FUNCTION AND ATTITUDE TOWARDS VIOLENCE IN SCHOOL CHILDREN- A RANDOMIZED CONTROL STUDY

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### Abstract

*The effectiveness of short term yoga practice on cognitive function and attitude towards violence in school children (n = 100) was examined. The participants were divided into two groups -Yoga and Control group. Yoga group was given 10 days yoga intervention programme for one hour every day. Results indicated that yoga intervention contributed significant result in cognitive function and no significant result in ATV (attitude towards violence) in school children.*

**Keywords:** School children, cognitive function, attitude towards violence, yoga

**Cognition:** A term psychologists use to refer to the activity of knowing and the mental processes by which human beings acquire and use knowledge to solve problems, the cognitive processes that help us to understand and to adapt to the environment include such activity as attending, perceiving, learning, thinking and remembering in short, the unobservable events and undertaking that characterize the human mind. Cognition is a term referring to the mental processes involved in gaining knowledge and comprehension. These processes include thinking, knowing, remembering, judging, and problem-solving. These are higher-level functions of the brain and encompass language, imagination, perception, and planning.

**Cognition and its development:** The activity of knowing and the processes through which knowledge is acquired. Change that occur in mental activities such as attending, perceiving, learning, thinking and remembering.

**Cognitive equilibrium & Meta cognition:** Piaget's term for the state of affairs in which there is a balanced or harmonious, relationship between one's thought processes and the environment. One's knowledge about cognition and about the regulation of cognitive activities.

**Cognitive function in school children:** Developing an understanding of the world around you is a lifetime process that begins at birth. Knowing about the regularity and predictability of the universe is important. This knowledge, called cognitive development, is learned through mental processes and sensory perceptions. Warm, supportive interactions with others, as well as the ability to use all five of the sensory modes—seeing, hearing, touching, tasting, and smelling—are required for maximum development of the mental or cognitive processes. High-quality child development centers have always placed priority on children's intellectual learning. Today the emphasis is greater than ever, because new

research is being reported that helps teachers better understand the mental or cognitive processes that are at work in the child.

**Violence:** The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal development, or deprivation.

**Effect of violence in school children:** High profile acts of violence, particularly in schools, can confuse and frighten children who may feel in danger or worry that their friends or loved-ones are at risk. They will look to adults for information and guidance on how to react. Parents and school personnel can help children feel safe by establishing a sense of normalcy and security and talking with them about their fears.

**Attitude:** Attitude is a readiness of the psyche to act or react in a certain way. Attitude is an evaluation of an attitude object to vary from extremely negative to extremely positive, but also admits that people can also be conflicted or ambivalent toward an object meaning that they might at different times express both positive and negative attitude toward the same object. This has led to some discussion of whether individual can hold multiple attitudes toward the same object.

**Violence attitude in school children:** Children who exhibit explosive or noncompliant behaviour can be a difficult challenge to school personnel and parents. These children are chronically violent or aggressive and may be defiant, start fights, push, kick, hit or grab, throw things, verbally threaten classmates or staff, or destroy property. Some children respond to verbal prompts to interrupt and stop this type of behaviour. Others melt down with little obvious provocation and, once they "lose it," cannot be reached until they have exhausted their rage. Typically, these children do not handle transitions or unexpected change



well and have low tolerance for frustration. This is different from violent behaviour that is “episodic” (i.e., out of the norm for the child and perhaps the result of an isolated event at school or home) or “goal oriented” (i.e., employed to achieve a specific desire or targeted at a specific person). Aggression is usually defined by behavioural scientists as behaviour that is intended to harm another person. Common forms of aggression are physical (for example, punching), verbal (for example, saying or writing hurtful things to another person), and relational (for example, intentionally and publicly not inviting someone to a party to harm his social relationships). Violence usually is conceived as more extreme forms of physical aggression that are likely to result in physical injury. The most extreme form of violence is homicide, but any form of aggressive behaviour that is likely to result in an injury serious enough to warrant medical attention is considered violence. Thus, fights involving weapons as well as fistfights by adolescents old enough to be able to inflict serious injuries are considered acts of violence.

**Literature Review**

Faculties’ beliefs in their collective instructional efficacy contribute significantly to their schools’ level of academic achievement. Findings shows there are diverse ways in which perceived self-efficacy contributes to cognitive development and functioning. Faculties’ beliefs in their collective instructional efficacy contribute significantly to their schools’ level of academic achievement.

Progressive behavior both in Grades 1 through 3 (ages 5–8) and Grades 4 through 6 (ages 9–12), the effects on social cognition were only evident in the later grades. Furthermore, the effect of violence exposure on aggression in the later grades was partially mediated by its effect on social cognition. These findings suggest that witnessing community violence has an effect on children’s aggressive behavior through both imitation of violence and the development of associated cognitions as children get older.

The yoga intervention produced improvements in physical measures (e.g, timed 1-legged standing, forward flexibility) as well as a number of quality-of-life measures related to sense of well-being and energy and fatigue compared to controls. Those in the yoga group showed significant improvement in quality-of-life and physical measures compared to exercise and wait-list control groups.

Three hundred and twelve sets of pre–post data were analysed. There was an increase in PA of PANAS by 13% and OPA by 17%. The NA reduced by 47% and ONA by 48% It is feasible and safe to conduct a weeklong yoga camp in an urban setting, and integrated yoga practices can reduce the negative affect and increase the positive affect within one week.

**Method**

Sample: The sample consisted of 100 school students, Chaitanya Vidyanikethan Educational Society, Hyderabad. The school is situated in rural area. The age ranges were between 13 to 15 years. 8<sup>th</sup> & 9<sup>th</sup> standard from both sex (boys and girls) Total sample size 100 was divided into two groups. Experimental group 50 No. and control group 50 No.

Measure: DLST (Digit Letter Substitution Test), scale is developed by Natu MV, Agarwal AK. (1997). was used to measure the cognitive function (perception, thinking, memory, recollect, analyze, judgment, fast dissension). ATV (Attitude towards Violence) scale is used to measure the attitude towards violence in school children.

Procedure: The DLST and ATV scales were administered to all the members participating in this study, before and after the intervention. The intervention which was given to yoga group was short term yoga practices which consist of Starting prayer (Om sahanavavatu.....) loosening exercise, breathing exercise, relaxation techniques like QRT, DRT, asana ( physical postures), pranayama ( breathing practices ).Meditation and closing prayer (Sarve bhavanthu.....) daily 1 hr and 15 minutes for 10 days. Loosening exercise: condition exercise from toe to head. Breathing exercise: hands in & out, hands stretch, ankle stretch. Relaxation techniques: like QRT (quick relaxation technique), DRT (deep relaxation technique). Asana: Standing-Ardhachakration, padahasthsan, Ardhakati chakrasan, Pariorutha, Trikonasan. Sitting- vajrasan, shasankasan, ustrasan, bharadvajasan. Pranayama: Kapalabathi, bastrika, bhramari, Nadisuddi pranayama. Meditation: silence. Whereas the control group was given PE (physical exercise) daily 45 minutes for 10 days.

Results and Discussion: Intense short term yoga practice in school children lead to significant improvement in cognitive function and no significant result shown in attitude towards violence.

**Table 1 - DLST (within group result) Paired Sample T test**

Scale/Gro up	Pre/po st	MEA N	Percent age of Mean	Std. Deviatio n	Sig {2-tailed test}
DLST(Y)	PRE	45.22	42%	8.09	0.000
	POST	64.30		11.69	
DLST(C)	PRE	49.5	24%	6.84	0.000
	POST	61.4		7.87	

**Table 2 - ATV (within group result) wilcoxon signed rank test**

Scale/Gro up	Pre/po st	MEA N	Percent age of Mean	Std. Deviatio n	Sig {2-tailed test}
ATV(Y)	Pre	16.3	3.0%	4.2	.572
	Post	15.8		4.1	
ATV(C)	Pre	17.9	12.8%	3.3	.003
	Post	15.6		3.4	



**Table 3 - DLST & ATV (Between Groups) Independent t Test Mann Whitney test**

scale	Pre/post	Sig{2-tailed test}
DLST	Pre	0.003
	Post	
ATV	Pre	.654
	Post	

In table-1, the data was normally distributed therefore parametric test (Paired sample T test) within group was conducted . In yoga group the percentage mean is increased by 42% (p> .05) and the control group is increased by 24% (p>.05).; In table -2, Data was not normally distributed therefore Non-Parametric test (Wilcoxon signed rank test) within group was conducted . Here there is 3.0% percentage change in yoga group (p< .05) and there is 12.8% change in ATV in control group (p>.05).; In table -3, Betweens group DLST & ATV (Independent t test & Mann Whitney test) was administered and result showed significant result (p> .05) in DLST and no significant result in ATV.; In addition they have experienced other benefits like physical flexibility digestion, sleep, mental relaxation and stress free and they are very cooperative with teachers and parents. This study lends further support to supposed linkages between yoga and personality development at physical and mental level in school children. However, there is need for a more detailed study to spell out the processes and mechanisms of yoga intervention in school children.

**Conclusion**

This study was conducted with aim to see the effect of short term yoga intervention on cognitive function and attitude towards violence in school children at the end of the study we observed significant improvement in cognitive function and mean percentage change is high in yoga (42%) compare to control (24%) and, no significant result shown in attitude towards violence but there is a sign of improvement in ATV in terms of mean percentage change by 3 % in Experimental group. This is an first attempt to measure ATV ( Attitude towards Violence) in school children’s.

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## EMOTIONAL INTELLIGENCE WITH RESPECT TO SENIOR LEADERSHIP AND JOB ENHANCEMENT

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### Abstract

*This paper is an endeavour to bring out the importance of emotional intelligence towards individuals who will tend to occupy higher and senior positions in organizations. An attempt has also been made to relate emotional intelligence to job enhancement by focusing on the research carried out by me on Indian Army officers. Certain recommendations have also been given towards improvement of Emotional Intelligence which would contribute immensely towards attainment of organizational goals.*

**Keywords:** *emotional intelligence, senior leadership, job enhancement*

Intelligence has been researched for almost a century with battery of tests having been designed to measure it. Mental testing for intake of manpower in organizations is in vogue since World War I. Researchers during the past four decades or so have found that intelligence in itself is not adequate for success but something more is needed. This led to a large number of scientific studies being undertaken to analyze the concept of emotional intelligence. Emotional intelligence (EI) can thus be defined as the capacity of an individual to define his own emotions and to become sensitive to those that he perceives from the environment and the circle of people he is interacting with. Researchers would further add that EI is a part of our personality that dictates us to become more aware of what triggered a specific reaction, both by the self and people surrounding the 'self'. Why is that that the smartest people are not always the wealthiest and why some people are instantly liked upon introduction, while others are distrusted? Emotional intelligence is what gives people a competitive edge, and makes them more effective in managing their life.

It has been found that individual with higher emotional intelligence can motivate themselves in the face of frustration, control impulses, delay gratification, regulate the moods and prevent emotions from clouding the rational thinking processes. Such qualities would suit the most on people occupying higher positions and corporate leadership especially those involved in active / high pressure/ higher goals oriented jobs. The high EI individual, relative to others, is less apt to engage in problem behaviours and avoids self destructive and negative behaviours. EI may also contribute to work performance by enabling people to nurture positive relationships at work, work effectively in teams and build social capital. It enables people to regulate their emotions so as to cope effectively with stress, perform well under pressure and adjust to organizational change.

### **The Leadership Challenge**

In a fast changing world, leaders are faced with significant challenges that require extraordinary insight and skill.

Continuous and dynamic change has replaced years of somewhat predictable and stable operating environment. Immense competition, a shifting and increasingly global world economy, new technologies, new markets and an increasingly diverse workforce are only a few of the many challenges that leaders now face.

Cooper and Sawaf (1997) cited that 7% of leadership success is attributable to intellect; 93% of success comes from trust, integrity, authenticity, honesty, creativity, presence and resilience. Leaders with high levels of emotional intelligence positively apply social skills to influence others, create strong relationships with clients and employees, and are effective motivators by controlling their emotions and understanding their weaknesses (Feldman, 1999; Noyes, 2001; Chastukhina, 2002).

People have theorized that EI contributes to people's capacity to work effectively in teams, manage stress, and/or lead others (Ashkanasy, Trevor- Roberts, & Kennedy, 2000; George, 2000; Goleman, 1998; Mayer et al., 2004a; Prati, Douglas, Ferris, Ammeter, & Buckley, 2003). For example, leaders who are poor at perceiving emotions may unknowingly miss important emotional signals from their co-workers. Similarly, leaders who are poor at managing their own emotions may allow emotions to interfere with effective action. For instance, when they feel anxious, they may avoid giving an important speech, or when they feel angry, they may inappropriately lash out at a co-worker.

Finally, leaders who are poor at managing others emotions would be expected to be poor at resolving interpersonal conflicts and creating positive "emotional climates" that maximize productivity.

### **Emotional Intelligence Towards Job Enhancement**

Emotional intelligence may contribute to job enhancement (as reflected in salary, salary increase, creativity, better supervisory abilities, leadership, integrity, company rank) by enabling people to nurture positive relationships at work, work effectively in teams, and build social capital. Job



enhancement often depends on the support, advice, and other resources provided by others (Seibert, Kraimer and Liden, 2001). Emotional intelligence plays a significant role in the kind of work an employee produces, and the relationship he or she enjoys in the organization. Emotional intelligence competencies enable people to regulate their emotions so as to cope effectively with stress, perform well under pressure and adjust to organizational change.

Among other things / purposes, organizations are places where individuals are “*organized*” to work. To the extent that the work requires interactions among individuals, emotions such as excitement, anger and fear are indispensable in facilitating cooperation. Employees who are “*intelligent*” about their emotions will, therefore, be more efficient and effective in their interactions with the work environment and with their co-workers. This emotional intelligence – performance link has been proposed in a few previous studies which are mentioned as follows:

An analysis of job competencies in 286 behaviours worldwide indicated that 18 of the 21 competencies in their generic model for distinguishing better performers were based on emotional intelligence (Spencer and Spencer, 1993).

Pesuric and Byham (1996) established that after supervisors in a manufacturing plant received training in emotional competencies, such as how to listen better and help employees resolve problems on their own, lost-time accidents were reduced from an average of 15 per year to 3 per year, and the plant exceeded productivity goals by \$250,000.

#### **Study on Emotional Intelligence in the Indian Army**

A study was conducted on a sample of **220 Indian Army officers**. Data was collected through a series of questionnaires by addressing officers of College of Materials Management(CMM), Jabalpur and Central Ordnance Depot (COD), Dehu Road, in the ranks of Lieutenant to Colonel, Non Commissioned and Junior Commissioned officers and Civilian Officers. Three tools were utilized viz. Emotional Intelligence tool by Prof NK Chadha, Leadership Effectiveness tool and Job Performance tool(both developed by the researcher in conformity to the requirements of the Indian Army).

Confidential reports formulated to assess leadership potential of higher ranks that were tested over a period of twenty years in the Indian Army were considered for the development of the tool. Apart from this, extensive review of research in the field of leadership effectiveness showed that there were majorly 11 factors that were influential. These were then matched to the ones that were chosen for the purpose of this study. Thus, Integrity and Loyalty, Moral Courage, Dependability, Determination, Morality, Decisiveness, Communication, Empathy, Motivation, Problem Solving and Analytical Skills and Tolerance for

Ambiguity were the eleven dimensions that were decided to form the basic parameters for assessment and accordingly situations were devised in the scale. The above qualities were provided to the test maker based on the criterion set by the Army for the selection of officers. In order to form the relevant statements, various journals and other forms of literature related to the army field were reviewed.

In order to define the criteria of the construct of interest i.e. job performance, certain methods were utilized for effective results. Existing review of literature regarding the parameters of performance in a job plus the interviews with executives from Banking, Insurance, IT, Retail and Manufacturing revealed certain criteria for measurement of Job performance. These criteria were then modified according to the Indian Army needs and finalized. The eight domains that were decided upon to measure job performance were Quality of work, Initiative, Ethics, Completion of targets, Conflict Resolution, Communication, Interpersonal Skills and Supervisory abilities. The statements after revisions of the scale consisted of 25 statements that measured job performance. Content Validity was ensured on the basis of the judgment of the Subject Matter Experts (SMEs) involved in the test construction. Only those items that represented consensus, appropriateness, level of readability, relevance to the construct, lack of bias were retained. The review panel also viewed the final form of the scale consisting of 25 items in order to ensure accurate item formations.

#### **Findings**

The findings of the current study showed that overall; there is a requisite to improve the Emotional Intelligence and Leadership Effectiveness amongst the Army Personnel. In this case, there can be an extensive study that will help formulate the training and developmental programs that will enhance such variables in the Army Personnel in turn resulting in greater productivity. Since social and emotional learning is more complex than cognitive learning, training in emotional competencies for the successful development of emotional intelligence in organizations should be undertaken according to specific guidelines (Cherniss & Goleman, 1998; Goleman, 1998).

#### **Measures for Improvement**

To truly improve your ability in the four emotional intelligence skills(self awareness, self management, social awareness and relationship management), one needs to better understand each skill and what it looks like in action. The four emotional intelligence skills pair up under two primary competencies: personal competence and social competence. Personal competence is made up of your self-awareness and self-management skills, which focus more on you individually than on your interactions with other people. Personal competence is your ability to stay aware of your



emotions and manage your behavior and tendencies. Social competence is made up of your social ability to understand other people's moods, behavior and motives in order to improve the quality of your relationships.

Repetitive programs throughout the year will ensure inclusion of the necessary qualities of Emotional Intelligence into the Personnel, specifically of those groups which need to be upgraded on this aspect. The first and foremost step considering the aspect of Emotional Intelligence is to convey its relative importance to personnel as much as technical training. Certain aspects of Emotional Intelligence like Sensitivity which seemed to have played a vital role in Job Performance and Leadership Effectiveness need to be inculcated in the training program for specific target groups. The second challenge is to identify the emotional competencies that are important for being successful. Employee's profiles of strengths and weaknesses should be prepared to identify those areas of improvement in order to avoid unnecessary repetition of training programs that impart competencies already existing in the personnel.

In this case, training needs to focus on changing or modifying the existing parameters with respect to emotional behaviour in the personnel. This will help in ease of inculcating novel and enhanced ways of coping with emotional stress at work, having better communication patterns with respect to emotional conflicts, adopting more empathetic approach while dealing with other personnel and the like. The organization can help develop such programs in order to maximize effectiveness in the personnel. Emotionally Intelligent teams created through such training can be more productive and less stressed which would avoid rework in the organization. In case of leadership programs, it needs to be noted that personnel require support from the top management, especially the superiors, which instills more positive attitude towards the entire training and development program. Superiors' recommendations and support can enable greater acceptance at the employees' level. If appropriate and timely feedback is given as a part of the training development program especially with respect to certain leadership qualities in an atmosphere of confidence and trust, it is bound to ensure qualitative improvement.

### Conclusion

Leadership can particularly be a sensitive issue in terms of employees being criticized on those lines questioning their integrities. The feedback given to the employees lacking in aspects of leadership can be advised specific steps to rectify these measures and can be assured that the organization trusts them which will motivate them to produce the required change. The employee can thus improve his competencies on these lines, which can be a part of the career development program. In case of these training programs, it also becomes

useful to consider the employees' opinions while designing the modules as it ensures much more involvement in terms of their goal setting. With respect to Job Enhancement, if training programs specifically focus on improving personnel skills with respect to improving their work performance and managing work pressures in a restored way, it will be better acknowledged by the personnel. Job-oriented training programs that directly link the training effect to productivity on the job and consequently job performance need to be introduced. It is better accepted when it is custom designed or tailor made according to the need.

How much of an impact does EQ have on your professional success? The short answer is: a *lot!* It's a powerful way to accounts for 58 percent of performance in all types of jobs. It's the single biggest predictor of performance in the work-place and the strongest driver of leadership and personal excellence.

No matter whether people measure high or low in EQ, they can work to improve it, and those who score low can actually catch up to their co-workers. Research conducted at the business school at the University of Queensland in Australia discovered that people who are low in EQ and job performance can match their colleagues who excel in both-solely by working to improve their EQ.

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## A STUDY ON EKLAVYA MODEL RESIDENTIAL SCHOOLS (EMRS) IN TRIBAL EDUCATION

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### Abstract

*Eklavya Model Residential School (EMRS) scheme supports the establishment and running of quality residential schools for Scheduled Tribes (STs) students with an objective to provide quality education to the tribal students. EMRS start at Class VI and admission to these schools is patterned on the Jawahar Navodaya Vidyalaya model. Education in EMRSs is entirely free. This paper intends to evaluate the Eklavya Model Residential School (EMRS) with the objective to find whether the design of programme is appropriate to meet the stated objectives, whether they constitute felt needs of the community, bottlenecks if any in proper implementation of the scheme, whether these schemes are augmenting the education among STs and support to increase the literacy rate of STs. Whether there is any impact of these schemes in decreasing the dropout rates of STs. The analysis of EMR school data reveals that the EMR School is not managed as per the guidelines. The arrangement of the black boards in the class rooms is appropriate but the maintenance of the boards is poor, the number of toilets is less considering the strength of the students and maintenance was found to be poor. The study suggests, the guidelines of EMRS should indicate the organizational structure, Manpower and Educational expertise for the Tribal welfare Residential educational institutions societies on par with Navodaya Vidyalaya Model pattern. EMRS should have separate budget plan for both infrastructure, recurring, non-recurring expenditure every year and it should be included in the annual work plan & budget.*

**Keywords:** *Eklavya Model Residential School (EMRS) Tribal Education*

Swami Vivekananda said that “Education is the manifestation of the perfection already in man”. Secondary education spreads sixth to tenth class, between eleven to fifteen years, Secondary education period is molding age of students. In this period students will know about their state, country, continent, world and space. Schultz has developed the idea that “expenditure on education was not primarily consumption but rather an investment in the increased capacity of labour to produce material goods. Hence, formal schooling was at least in part an investment in human capital, an investment with economic yield in terms of higher product per worker holding physical capital constant. (Financing Educational Development Proceedings of an International Seminar held in Mont Saints Marie, Canada 19-21 May 1982). Thus education is an investment in people to the extent that it improves their capabilities and there by increases the future earnings of people. The educational system was to cope with the changing economic and technological conditions (Rajana Srinivastava 1980). Alfred Marshall goes a step further and stresses the real importance of investing in human beings as “the most valuable of all capital”, and points out that “skill is the base for the production and education is the ways and means of bringing economic development.” (Goel, S. C 1975).

Tribes or indigenous people live in and around the forests or hilly tracts where development process reaches very late. The inaccessibility to the tribal habitations makes it very difficult for the administration to provide basic education to the tribal children as teachers either refuse to go there or adopt dubious means to avoid duties however they used to take salary (Janmejay Sahu, April 2013). The Constitution of India provides for a comprehensive framework for the socio-economic development of Scheduled Tribes and for preventing their exploitation by other social groups. Article 46 expresses the clear intent to promote with special care the educational and economic interests of Scheduled Tribes and

to protect them from social injustice and all forms of exploitation. Since the problems and needs of Scheduled Tribes are different from those in respect of other communities in the society, particularly due to isolation of tribal areas from rest of the parts in the country, a separate and focused approach was considered necessary in terms of solutions to those problems and needs in respect of Scheduled Tribes. Accordingly, a separate Ministry of Tribal Affairs was created out of the then existing Ministry of Welfare in the year 1999. Several new schemes have been taken up for educational upliftment of the Scheduled Tribes. Among the educational schemes for the upliftment of the STs, Eklavya Model Residential School (EMRS) is one of the schemes.

On this background the study is aimed at assessing the Eklavya Model Residential School (EMRS) scheme, its impact on tribal education.

### **Eklavya Model Residential School (EMRS)**

The Eklavya Model Residential School (EMRS) scheme supports the establishment and running of quality residential schools for ST students. EMRS start at Class VI and admission to these schools is patterned on the Jawahar Navodaya Vidyalaya model, through selection/competition with suitable provision for PTGs, first generation school goers etc. Education in EMRSs is entirely free, as in the Navodaya Vidyalayas. Ministry of Tribal Affairs (MoTA) supports States/UTs for setting up these residential schools provided that they can ensure smooth management and efficient running of the schools including timely fund flows, recruitment of teachers in required numbers, medical facilities for students and staff, nutritious and hygienic food, and generally a happy, healthy environment. Sufficient land for constructing an EMRS is made available by the concerned State/UT free of cost. The scheme provides for a holistic and generous building lay-out, which includes all the features





expected in a good quality school. EMRS funding is governed by liberal norms, both in terms of capital as well as recurring costs. In the last three years, the grants allocated to EMRS under Article 275(1) have seen a sharp increase, from about Rs 400 crore to over Rs 1000 crore. (Ministry of Tribal Affairs, Government of India)

With the objective of providing quality education to the tribal students, it was decided during 1997-98 to utilize a part of the grant under Article 275(1) of the Constitution of India for setting up of 100 Model Residential Schools from Class VI to Class XII. Till the end of X plan 100 schools were sanctioned to 22 States, of which 90 are reported to be functional. 37 new EMRS have been sanctioned in 11 States during 2010-11. The schools were required to be operated in each State through an autonomous society formed for this purpose. In order to provide a uniform pattern of education in those schools and enable their students to compete effectively for higher education programmes (medical, technical etc.). These schools have been named as Eklavya Model Residential Schools (EMRS) and envisaged on the lines of Navodaya Vidyalayas but with state-centred management.

The main features of EMRS are:

Each school will have ST Students from 6th to 12th standard. Every class will have 60 students (30 boys and 30 girls) and the total sanctioned strength of the school will be 480 students. The land allocation for each school should be 15 to 20 acres of which up to 3.5 acres may be used for the construction purposes. The remaining area must be maintained properly and a reasonable portion may be earmarked for the sports/ games. The tasks of school admission, appointment of teachers, appointment of staff, personnel matters and day to day running of the schools would be handled entirely by the society chosen by the State Government/ UT Administration and in the manner deemed most suitable.

The capital cost for the school complex, including hostels and staff quarters has been revised from Rs. 2.50 crores to Rs. 12.00 crores with a provision to go up to Rs. 16.00 crores in hill areas deserts and island. Any escalation is to be borne by State Government. Recurring Cost has been fixed at Rs. 42000/- per student per annum. This may be raised by 10 percent every second year to compensate for inflation etc.

EMRSs may be affiliated either to the State or Central Boards of Secondary Education as deemed fit by the State Governments. Each State Government would be solely responsible for the management and effective functioning of the EMRS.

Objective of EMRS

The objective of EMRS is to provide quality middle and high school level education to Scheduled Tribe (ST) students in remote areas, not only to enable them to avail of reservation in high and professional educational courses and as jobs in government and public and private sectors but

also to have access to the best opportunities in education at par with the non ST population. This would be achieved by: Comprehensive physical, mental and socially relevant development of all students enrolled in each and every EMRS. Students will be empowered to be change agent, beginning in their school, in their homes, in their village and finally in a larger context.

Focus differentially on the educational support to be made available to those in Standards XI and XII, and those in standards VI to X, so that their distinctive needs can be met.

Support the annual running expenses in a manner that offers reasonable remuneration to the staff and upkeep of the facilities.

Support the construction of infrastructure that provides education, physical, environmental and cultural needs of student life.

(Source: Ministry of Tribal Affairs, Government of India)

Eklavya Model Residential Schools (EMRS) in Andhra Pradesh

The Scheduled Tribe population in the State is 50.24 lakhs as per 2001 census. They constitute 6.59 percent of the total population of the State. There are (35) Scheduled Tribes out of which (12) tribal groups are categorized as Particularly Vulnerable Tribal Groups (PTGs). Andhra Pradesh is covered under the provisions of Fifth Schedule of Constitution of India. In the State the Scheduled Areas extend over 31,485.34 Sq.Kms. in (9) districts of Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari, Khammam, Warangal, Adilabad and Mahabubnagar covering (5,948) villages.

Under Article 275 (i) of the Constitution of India, Government of India releases Grants-in-Aid to State Plan for development of Scheduled Tribes and the Scheduled Areas. These grants are utilized to bridge critical gaps in infrastructure by taking up infrastructure development facilities and administration of 12 Eklavya Model Residential Schools. Headed by Secretary a separate Society in the name of APTW Residential Educational Institutions Society (Gurukulam) was established in 1999 by bifurcating APREI Society, for managing tribal residential institutions. To impart quality education to ST students, Government is maintaining (284) residential institutions with a strength of (87,440) students - As per the G.O. Ms. No. 49 SW(TW Edn) Dept. dated 25-06-2005 (37) Upgraded Residential Jr. Colleges are bifurcated into Residential Schools and Residential Jr. Colleges in the year 2007-08. Out of (284) institutions, (77) Residential schools, (55) Residential Jr. Colleges, (03) Schools of Excellence, (06) Jr. Colleges of Excellence, (41) Mini Gurululams, (102) Kasturiba Gandhi Balikala Vidyalayas are functioning with a strength of (87,440). Government have sanctioned (3) Schools of Excellence and (6) Jr. Colleges of Excellence to provide intensive coaching for selected tribal students studying from 8th class onwards. Further, (10) Eklavya Model Residential Schools which were sanctioned by Ministry of Tribal Affairs, GOI are also managed by



Gurukulam. (2) new Ekalavya Model Residential Schools have been started at G.K. Veedhi, Visakhapatnam district and Dornala, Prakasam district in 2011-12. Details of EMRS are given below:

#### Ekalavya Model Residential Schools in Andhra Pradesh

Sl. No	District	Mandal	Boys/Girls	Type of School
1	Mahaboobnagar	Balanagar	B	APTWR School & College
2	Karimnagar	Yellareddypet	G	APTWR School & College
3	Nizamabad	Gandhari	B	APTWR School & College
4	East Godavari	Y.Ramavaram	G	APTWR School & College
5	Warangal	Kuravi,	G	APTWR School & College
6	Adilabad	Narnoo	B	APTWR Jr.College
7	Nellore	Kodavaluru	G	APTWR School & College
8	Karimnagar	Marimadla	B	APTWR School & College
9	Visakhapatnam	G K Veedhi	B	APTWR School
10	Prakasam	Dornala	G	APTWR School

(Source: APTWREIS)

#### The Study

Objective of the Research Study: The objective of the research study is to find whether the design of programme is appropriate to meet the stated objectives, whether they constitute felt needs of the community, bottlenecks if any in proper implementation of the scheme, structure of the programmes etc, whether these schemes are augmenting the education among STs and support to increase the literacy rate of STs. Whether there is any impact of these schemes in decreasing the dropout rates of STs.

Methodology: Both primary and secondary data were gathered for analyzing the data. Eklavya Model Residential School (EMRS), located at Y.Ramavaram, ITDA, Rampachodavarm is purposively selected to conduct the study on "A Study on Eklavya Model Residential School (EMRS) in Tribal Education, Y.Ramavaram, ITDA, Rampachodavarm". Students from Sixth class to tenth class, parents, teachers and administration staff were contacted for collecting the data on school, hostel, campus, facilities, food, infrastructure, teaching materials, course work, sports, health, and etc. Group discussions with the students, and their parents were conducted. Interactions with administration staff and school principals were made. A brief questionnaire was prepared to collect various data from students, teachers, parents and the staff.

#### Results And Discussions

Grants under Article 275 (1): Grants for the Period 2007-2008 to 2011 - 2012 (Rs in Lakhs) in respect of (EMRS) For Girls at Y.Ramavaram, ITDA, Rampachodavarm of East Godavari District are given below table. It is observed from the table except for the year 2010-2011, for the remaining all the years the percentage of utilization is below and the average of utilization is coming to 97.31 percent.

#### Grants under Article 275 (1): Period 2007-2008 to 2011 - 2012 (Rs in Lakhs)

S. No	Year	Amount Released	Amount Utilized	Percentage of Utilization
		Capital (Non Recurring) In Rs.	Capital (Non Recurring) In Rs	
1	2007-2008	6546100	6207816	94.83
2	2008-2009	5446424	5389900	98.96
3	2009-2010	6157664	6086075	98.84
4	2010-2011	7323786	7323786	100.00
5	2011-2012	9650873	9172109	95.04
<b>Total Rupees</b>		<b>35124847</b>	<b>34179686</b>	<b>97.31</b>

(Source: ITDA Rampachodavarm)

#### Students

Information on the students enrolled, class wise strength of girl students shows that out of 480 students in class V to 10<sup>th</sup> (80 students in each class), tribal students were 457 (95.21 percent) and non tribals are 26 (5.42 percent). Tribewise distribution shows showed that 340 students (70.83 percent) belongs to Konda Reddy followed by Koya, Konda Kamara, Valmiki, Bhagata, Konda Dora, and Porja Tribes. Non representation of other tribal communities residing in East Godavari District need to be looked into and remedial measurement to be thought about by the policy makers and the administrators.

Drop Out Students: Information on number of girl's students in the EMRS dropping out during 2007-08 to 2011-12 showed that of 30 cases. The number per year ranged between 4 to 9. There is high drop outs at Class VIII is because of early marriage as reported by Principal of the Institution.

Transfer Sought: Out of 513 students seeking transfer certificates from the school 471 (91.81 percent) were those who had completed Class X education. The remaining 42 students (8.18 percent) left the school at different levels due to their personal reasons. It is suggested that ITDA Staff should be deployed to meet the parents of their girls and persuade them to send back the girls to learning institutions.

Teaching Staff: Information on teaching staff revealed that out of 35 posts sanctioned in total, only 7 posts were occupied by regular staff and the remaining 28 posts were managed by staff engaged on contract basis. Even among the teaching staff the position was distressing as 7 out of 9 Post Graduate Teachers and 8 out of 9 Trained Graduate Teachers were temporarily engaged in contract basis.

#### School Campus

Particulars of Land: As on 1.08.2007, the land area of the EMRS was 14 acres, of which 10 acres were left open and buildings were constructed. The school campus has buildings for school, hostels, dormitories and residential quarters. Plinth area for school building measures 11,755 Sqft and that for hostel and dormitories about 13,251 Sqft .

Availability of Accommodations: Accommodation is available for school, hostel, kitchen and staff quarters, but additional space is required for (a) Toilets (b) Staff Quarters and



Dormitories for all categories and for (c) Laboratory, on priority basis. It is reiterated that this EMRS is for girls and it is no more proper to witness the adolescent girls attending the nature call in the fields and taking bath in the open. For want of space in the dining hall, they find the food in plates and eat it in open verandahs. During the visit to school, it was informed that buildings for Conference Hall / Auditorium, Recreation Hall, Computer Laboratory, Library, Science Laboratory, Sports room, and Sick room in the hostel are required and budget should be made available for this purpose.

Outdoor Facilities: The EMRS for girls lacks Eco friendly space for horticulture, vegetable garden and compound wall of 8ft height and separate toilets for male workers and male visitors. For Pump maintenance of the campus additional rooms are necessary to the following.

Electric Control Room; Underground tanks, Pump House; Sewage treatment plant; Security cabin/guard room; Sanitation; Health Care and First Aid

Games and Sports: Whereas open ground is available for playing Volleyball, Kabadi and badminton etc, games material is not provided to engage 480 girls. It was suggested that a track of 200mts for athletics and additional games material for girls, such as, skipping ropes, indoor games, badminton etc may be supported.

Co-Curricular Activities: Nine girls have earned laurels in Co-Curricular activities held at national and state level competitions, prominent among them being Mathematical Olympiad, Science exhibition, General Knowledge test, Essay writing etc, as may be seen from the Table given her under:

**Students Participation in Co-Curricular Activities**

S. No	Name of Competition	Competition Type	No of Appreciation Won
1	A.B.H. All India Level General Knowledge and Talent Test	General Knowledge and Talent Test	1
2	Lead India 2020	2nd National Movement for Development "Aap Badho Desh Ko Badhao" (Training and Research Programme)	1
3	Election Commission Of India (Elocution Competition)	National Voters Day	2
4	39th Mathematical Olympiad		1
5	Election Commission Of India	Essay Writing	2
6	Reliance Dhirubhai Ambani	Quiz Competition	1
7	District Level Science Exhibition	Science Exhibition	1

Health Upkeep of Students: The study team made an analysis of health record of students for the year 2011 kept by the A.N.M. posted in the school. It was found there from that fever and cold (67 percent) were main ailments with which

the children suffered. Other diseases common to the children were loose motion, *Diarrhea*, stomach and headache. A few of them were also treated for boils, wounds, mumps, chicken pox and jaundice.

Ambition of Tribal Girl Students: In response to a question about knowing their ambition for life and future career, out of 209 student respondents nearly 1/3<sup>rd</sup> desired to join medical profession either as doctors or staff nurses. Those who loved to be engineers were 14 percent and teachers 19 percent.

**Students Observations On Certain Issues**

Views solicited from 209 tribal girls students indicated that they very much looked for (a) Coaching in English (87 percent) and Mathematics (84 percent) (b) Student Identity card (77 percent) and (c) Stationary and Note Books (70 percent). Other demands that they put forward were for additional footwear (79.435), transport facilities for going to hospitals (74.16 percent), Sports Material (69 percent) and additional teachers (55 percent). Nearly half of them urged for telephone facility in the school for talking to parent and a little more pocket money to enjoy the company of friends. Detailed response are contained in as regards upkeep of hostels and facilities in the EMRS, all of them urged for (a) improved bathrooms (b) Sufficient water for washing clothes (c) Well ventilated hostel rooms (d) More space for playing, eating and reading.

**Students Observation on certain issues**

Issues		Percent
House Rooms	Un Hygienic, No Ventilation, Less Electrical Equipments and accommodation is not spacious	54
School Surroundings	Poor Management of School Surroundings making presence of wild animals like Snakes, Lizards, Flies, Mosquitoes Etc.	65.07
Play Grounds	Play grounds are not suitable for practice	53.59
Water Leakages	Mentioned leakages from Walls of Class Rooms.	22.49
On class rooms	Agreed about Insufficient Class Rooms, and Less Class Room Equipments like charts, boards Etc	69.38
Dormitories	Insufficient Dormitories	57.42
Books	Text and Note Books are insufficient	74.64
Teaching Staff	Insufficient Teaching Staff (Ex: Physics and Zoology Subject Teachers and Vocational Courses)	55.98
Dining Hall	In sufficient Space, Poor Ventilation, Poor Electrification, Un Hygienic.	86.12
Laboratory Equipment	Availability of Laboratory equipments like Aprons, Glassware, R.B.C Meter, W.B.C Meter, Weighing Machine, Gloves, Mask, White Shoes, Black Leather Watches Nets, Pocket Articles like thermometer, Torch, Clinical Records	23.92
Library	Proper Maintenance of Library and Books	80.86
Bathrooms	Insufficient, Unhygienic, and un comfortable to Use	100
Service / utility Water	In sufficient supply of utility water for cleaning, bathing, washing and other purposes	100

**Parents Observations**

Twenty seven parents were interviewed to know their responses about the school and the manner in which their



wards were at a place away from home. All the parents were satisfied with the supply of food, uniform, books and stationary but they urged that personal attention of teachers, which the children received at home is lacking in the school. They were delighted to hear their children speaking English an keeping good health. They suggested that the children should be kept engaged in watching T.V, movies, other entertainment programmes, and sports and games. As regards shortcomings in the school all of them requested in one voice for having a waiting hall with toilets (for Men and Women). A vast majority of them advocated for allowing their children to visit their parents on festivals and birthdays of the children and holding of parents meet regularly. They also urged for the maintenance of students toilets, bathrooms and students halls, EMRS authorities needed a little more attention of this.

**Observations Made By School Staff**

Members of school staff gave their views on a verity of subjects; some of which have been summarized in the following paragraphs.

Health Related Issues:

Sick Room: There is no separate sick room at present and therefore patients are treated in the residence of ANM.

Transport Vehicle: At present, sick students who are referred to the Hospitals are transported on RTC Bus and in some cases private Vehicles. Transportation on RTC Bus is not at all comfortable and Transportation on private vehicles is a costly, for which budget is not sufficient, hence a three or four wheeler multipurpose vehicle is needed.

There is no Refrigerator to store Injections, Blood Test Equipments and Solutions etc, which may be provided

First Aid Box is not available in the school.

Doctors Visit at least Twice a Month is necessary.

Mosquito NETS and Coils may be supplied

Hair Cleansers for treatment of Head Lice may be supplied.

R.O.Plant (Drinking Water): Owing to low capacity of the R.O.Plant it is often under repairs. At the time of evaluation we observed that R.O Plant got repaired and students suffered from non availability of drinking water for 3 days. Principal stated that because of increased strength of the EMRS the present capacity of the R.O Plant is not sufficient for drinking water supply.

School Infrastructure Accommodation: Required attention on maintenance of Conference Hall, Recreation Hall/ Auditorium, Computer Lab, Store Room, Sports Room, Sick Room, Toilets for Staff, Electric Supply for 24 hours

Regarding Staff Quarters: Additional Staff Quarters may be constructed so that lady teachers joined the EMRS.

Hostel: Hostels needed to be equipped with sufficient furniture, equipment, well ventilated rooms, warden rooms, washing room and mosquito nets for every students.

Sanitation: Number of toilets for 480 students is inadequate. Safaiwallas may be engaged to maintain cleanliness

Waiting Hall/Guest Room/Parents Room/ Visitors Room  
Waiting hall with Toilet Facility for Men and Women may be constructed

The EMRS for girls should have a compound wall of right specifications., A good library may be developed in the School Library, Budget of Rs 10000/- for Sports per annum is not sufficient and it may be raised

Hostel: Except regular supply of drinking water, the hostellers required additional amenities and basic requirements to meet the demand of 480 girls. Rooms for warden, Sick Children and guests are urgently needed. Mosquito nets may be provided on priority. The following Table touches upon the requirements:

S. No	Items	Notes (Adequate or otherwise)
1	Well ventilated dormitories	Ventilated Dormitories required
2	Furniture and Equipments	Cots, Trunk Boxes, Steel Plates & Steel Glasses Etc., are required
3	Assured / reliable water Supply	Drinking water is sufficient Utility water is insufficient.
4	Electricity and Fans	Majority of fans not in working order
5	Office Room for hostel Warden / Watchman	It is required
6	Arrangements for washing And drying clothes	Only one spot is available - 4 spots required
7	Recreation / common room	Its only 40 students capacity, Required for 500 students capacity
8	Rainwater harvesting	Yes it is being followed
9	Reliable sewage system	Rs 2500/- received from NGC Programme for this purpose
10	Openable/cleanable nets on doors and windows to keep out mosquitoes /insects.	The mosquito nets are required at windows and doors.
11	Dinning /Kitchen	Dining hall has 38 cement tables. But 15 more tables required. There is no proper ventilation. Fans and Lamps are required. All Water Taps are not working
12	Solar water heating	It is Required.
13	Multipurpose area-covered Verandah attached to Kitchen	It is required
14	Entertainment Room, Hostel Library for Indoor Games, TV, Reading Room	No, there is no room available for entertainment and indoor games. It is required.
15	Bath Room and Latrines	Some are condemned. Additional 50 Toilets are required
16	Warden House	There is no warden room. Its required
17	Sick Room	It is required
18	Guest Room for Parents	It is required
19	Sports Ground	Only volley ball, Kho-Kho, Ball Badminton Courts have been provided There is no place for other track & field Games. It is required



Staff Sanctioned

S. No	Sanctioned Posts	Post Filled with Regular Staff	Post Vacant	Remarks
1	Principal	01	0	
2	Vice Principal	01		Additional duties to
3	Head Master	01		senior PGT
3	PGT's	02	15	15 Post Guest Teachers
4	TGT's	01	07	7 Post Guest Teachers
5	PII	01		Deputed to RJC, Y.Ramavaram
6	Sr. Asst	0	01	Working Contract basis
7	Jr. Asst.	0	01	Working Contract basis
8	ANM	0	02	Working Contract basis
9	Record Asst.	01	0	Working on Deputation
10	Attendees	0	2	Working Contract basis
11	Cooks	0	7	Working Contract basis
12	K.Helpers	0	2	Working Contract basis
13	MPW's	1	2	Working Contract basis
14	Ayah	0	2	Working Contract basis
15	Watchman	0	02	Working contract basis
16	Whether salary of EMRS staff is higher than State Government			They got only State Government salary

Housing for Staff

1	Number of staff quarters constructed (teaching/ Non-teaching)	Quarters available for 20 teachers and 2 non teaching staff
2	Number of quarters occupied	All quarters are occupied by teachers
3	Number of staff quarters still required	Four quarters required for teachers and Quarters required for 16 non-teaching staff

Review of Exam Result for 2011-12 Sessions

Data on the results shows for the year 2011-12, 2 percent of failure was recorded in the 10<sup>th</sup> class. This was because of student's poor performance in science subjects.

1. Class VI : 100 percent
2. Class VII : 100 percent
3. Class VIII : 100 percent
4. Class IX : 100 percent
5. Class X : 98 percent

Periodical Review (last held)

By State Government (quarterly Review is contemplated) : No

By Ministry of Tribal affairs (Quarterly Review is contemplated) : No

Has Monitoring been done out of Article 275(1) : No

Findings

Teachers Recruitment and Training: Teachers appointed in EMRS should be given regular in-service training for upgradation of their knowledge and skills. It is observed that occasionally some teachers were sent to 3 to 4 days training at the local level. As per the guidelines of EMRS, in each EMRS maximum number of trained women teachers are to be appointed. But it is observed that this norm violated in Andhra Pradesh as male teachers are working in girls school. It having number of teachers' vacancies. The

Principals are finding it very difficult to manage the schools without required number of subject teachers. In Andhra Pradesh, the Principal post is and vacant this is hampering the entire educational administration of the Ekalavya Model Residential Schools.

Teaching Learning Process: Teaching learning process in EMRS, is found to be of conventional type. In Gujarat it is noticed that technology enabled class room teaching is practiced with EDUCAM and Digital class rooms. This type of modern facility should be arranged. Further it is noticed that teachers are not having proper understanding about the continuous comprehensive evaluation concept and practice. This is very much the need of the day when we are following the National Curriculum Framework 2005.

For effective Teaching Learning Process, procurement of teaching learning material (TLM) is very much required. It is observed that the TLM is found to be inadequate.

Library facility is one of the important aspects for ensuring quality teaching and learning but it has not been given due importance by any school.

Infrastructure Facilities: Infrastructure is provided either in Old Buildings or New Buildings but the facilities are inadequate and there is no requisite budgetary provision for regular and immediate maintenance. Poor maintenance is observed in buildings, toilets, Hostel kitchen, dormitories, and rooms of the hostels.

Boarding Facilities: The quantity and quality of food is very much essential and need to be ensured for residential schools children. The quality of food supplied to the students and per capita expenditure is for Class 5 to 7 students it is Rs. 473/- and for 8 to 10 the class Rs. 535/- per month dent. Food expenses for each child should be on par with Navodya Vidyalaya.

Lodging Facility: To accommodate the students in EMRs, either dormitories have been built or rooms are provided. But in majority of the studied EMRS, rooms are not clean, bed with cot is not available, more number of students is accommodated in one room. Bath-rooms and Toilets are inadequate and windowpanes are broken. This is causing distress to the students and health concerns for the parents when the children are reported sick.

Kitchen and Dining Halls: The food cooked in unhygienic environment has been observed. Dining halls are also not fully furnished. Children found taking food in their dormitories, sitting on the floor near their cots.

Uniforms and Other Cosmetic Charges: The students of EMRs should be provided with good quality Uniforms



with warm clothes for winter, soon after their admission but it is reported there is delay. Each school should have some buffer stock over and above the strength of boarders.

#### General Performance

The general performance of Eklavya Model Schools shows that the pass percentage in class X is found to be satisfactory whereas in the higher secondary classes, performance needs lots of improvement; It is noticed that teachers are not staying in the schools and quite frequently they are availing leaves and sometimes they are absent. As a result, the class room teaching and learning process get affected. This is also because of lack of sufficient quarters for the teachers as well as for the staff.; Children's dropouts: Drop out of children is reported. This is an indication of substandard management of schools and also lack of enabling environment in these schools to retain the admitted children.; In this globalized situation, every student of EMRS is expected to be literate in Computer and Information Technology. There is a need of establishing fill fledged computer labs with adequate computers made available to each student along with internet facility.; Management of the EMRS: The per-capita expenditure of Rs.42,000 per child per year is low to provide the quality education on par with Navodaya Vidyalaya schools. The Navodaya Vidyalaya schools per capita expenditure is around Rs.90,000 per child. Low paid teachers, Contract, Guest teachers, Retired persons managing the EMRS is not at all helpful for ensuring the quality of education. The administration and performance of Tribal Welfare Residential Societies in Andhra Pradesh was not quite satisfactory as expected, It is observed that the Tribal welfare Department is not having the requisite expertise and skilled manpower to look after the EMRS.; The arrangement of the black boards in the class rooms is appropriate but the maintenance of the boards is poor.; Toilets in the Schools, the number of toilets is less considering the strength of the students. And maintenance was found to be poor.; Drinking Water Facility, drinking water facility is available in all the six states but the quality of drinking water was found to be poor. Reverse Osmosis Units are arranged for purification of water, but the maintenance of the Unit is found to be poor.; Playground, facility of Play ground is very much essential for residential schools. Here the play grounds needs developments and the availability of sports and games material is found in adequate. Trained physical education teachers are very much required for the residential schools.; Pupil Teacher Ratio, Pupil teacher ratio is inadequate and therefore more teachers are required in all the EMRS. Teachers in subjects like Science and Mathematics are in great demand.

#### Suggestions And Recommendations

Based on the field observations and analysis of the situation of Ekalavya Model schools, the following suggestions are made for the effective implementation of the scheme;

The guidelines of EMRS should indicate the organizational structure, Manpower and Educational expertise for the Tribal welfare Residential educational institutions societies on par with Navodaya Vidyalaya Samithi pattern.; EMR should have separate budget plan for both infrastructure, recurring, non-recurring expenditure every year and it should be included in the Annual Work plan & Budget.; Tribal welfare department of each state should create sufficient manpower to plan, implement and monitor the Education sector programmes for Tribals.; The managing societies of EMRS are to be given instructions that they should mandatorily prepare the perspective education plan and get it approved by the Ministry of Tribal affairs before commencement of each academic year.; The budgetary provisions made available to EMRS should be one step above to the provisions of Navodaya Vidyalaya Samithi to ensure quality education for tribal students; The financial management of EMRS should be through Tribal Education Societies based on the proper monitoring system.; Like Navodaya Vidyalaya Samithi, the EMRS societies should prescribe highest standards in selection of teachers and staff by providing attractive salaries with regular appointment instead of contract and guest teachers. There should be provision of internal transfers for the teachers of EMRS.; The students and teachers should be given opportunities for exchange visit programmes.

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## THE ACADEMIC PERFORMANCES OF B.ED. TRAINEES OF TEACHER TRAINING INSTITUTES OF MANIPUR

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**Voice of Research**

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### Abstract

*This paper is an attempt by the investigator to explore the academic performance of the B. Ed. trainees of the teacher training institutions affiliated to Manipur University. The trainees of the all five B.Ed. colleges affiliated to Manipur University served as the sampling frame of the study. One of such colleges which have 100 trainees was selected for the study purposively. Then 30 trainees consisting of 20 females and 10 males were selected by applying stratified random sampling technique. After the declaration of result of B.Ed. final examination, March 2014 conducted by Manipur University, the investigator collected the theory paper marks obtained by the trainees from each college's records for his study. All the 7 theory papers carry 75 marks each i.e.  $75 \times 7 = 525$ . After collecting the information, the analysis and interpretation of the pertinent data was done in the following manner. Firstly, descriptive statistics like percentages, means and standard deviations were computed. Secondly, inferential statistics like difference between two means of small samples were computed to know the differences in the academic performance between two different types of B.Ed. trainees, such as: male and Female trainees; Arts and Science stream trainees; Graduate degree holders and post-graduate degree holders etc. It was inferred that: a) There is significant difference in the academic performance among male and female B.Ed. trainees; b) There is no significant difference in academic performance among arts and science stream B.Ed. trainees; c) There is a significant difference in the academic performance of graduate and post graduate degree holder B.Ed. trainees. The study revealed that educational stream (arts and science) had no significant impact on academic performance but gender and level of educational qualification of the B.Ed. trainees exhibited significant impact on academic performance.*

**Keywords:** Academic Performance, B.Ed. Trainee, Teacher Training Institutes of Manipur, Manipur University.

In common sense parlance, the term "Academic Performance" can be referred as the extent to which a trainee has achieved his/her educational goals. It is the output/outcome of education. It is commonly measured by examinations. Hence, quality of product or output of a training institute can be determined by its trainees' academic performance in the public examination or how well a trainee meets standards set out by the affiliating university and the institution itself. In the 21<sup>st</sup> century, as career opportunity in the teaching world grows, the importance of prospective teacher trainees doing well in their academic performance has caught everybody's attention including those of administrators, legislators and government education department alike.

According to NCTE – 2009, "Teacher education and school education have a symbiotic relationship and developments in both these sectors mutually reinforce the concerns necessary for qualitative improvements of the entire spectrum of education including teacher education as well". Hence, in teacher training institutes, along with practice teaching, trainees are given knowledge of different theoretical subjects to form sound educational base. Secondary Teacher Education programmes (B. Ed. Courses) in Manipur are provided by 5 colleges of teacher education affiliated to Manipur University, Canchipur (Manipur) India viz., 1) DM College of Teacher Education; 2) RKSD College of Education; 3) KDM College of Education; 4) Thokchom Ibotombi Institute of Teacher Education; and 5) Trinity Teacher Training College.

In these teacher training institutes four compulsory papers, two optional theory papers and one special paper are included in syllabus. The course design is as follows - Part A has four compulsory papers namely Paper I Teacher in Emerging Indian Society; Paper II Development of Learner Teaching-

Learning Process; Paper III Development of Education in India; and IV Educational Technology and Management. Part B has two Optional Papers V / VI, any two methodology subjects out of - Methodology of Teaching English, Methodology of Teaching Social Sciences, Methodology of Teaching Mathematics, and Methodology of Teaching Physical and Biological Sciences. Part C is Additional Specialization, Paper VIII: Any one special paper out of - Educational and Mental Measurement; and Educational Management and Administration. Part D consists of Field Based Experience (internship) - Classroom Teaching and Practical Work.

### Background of Teacher Education in Manipur

The teacher education in Manipur was initiated when the state education department organised a 4 months training course for improving method of teaching facilitating 20 primary school teachers in the year 1906. However, the actual beginning of imparting teacher education to secondary school teacher began when one of the teachers of Johnstone High School, Imphal was deputed to undergo B.T. Training outside the state in the year 1928. The state government took keen interest in providing teacher training programmes to the prospective teachers within the state only after 1947. With the starts of Normal Institute at Imphal in 1952 – 53, a new era of training the primary and middle school teachers in Manipur was made. Basic Training Institute (BTI) substituted the Normal Training School in 1956. Ever since, the Basic Training Institute (BTI) had been giving training to elementary school teachers in the state. There had been one Junior Basic Training Institute and one Hindi Training Institute in the State with 80 enrolments in Basic Training and 10 in Hindi Training Institute by the year 1958-59.



The training of secondary School teachers in the state starts when the BT Section was opened in the D.M College in 1959. The B.T course was intended for graduate teacher and Certificate in Teaching (CT) course for the undergraduate teachers. The B.T section at D.M College was converted into a full-fledged secondary teacher training (B.Ed.) college and renamed as P.G.T. (Post Graduate Training College) which was affiliated to Guwahati University on 15th September 1972. Subsequently, the P.G.T. College is converted to D.M.College of Teacher Education as a constituent College of Dhanamanjuri Group of Colleges which is affiliated to Manipur University w.e.f 17th January 1997. During 2005 – 2007 District Institutes of Educational Training (DIETs) under SCERT has also been established in every district of Manipur for providing Elementary Teacher Education (ETE) to teachers.

### Significance of the Study

If glanced upon the present trends and concerns of teacher education as well as on teachers in India, there would be high expectation from the future teachers. Whether it is the question of pedagogy, management and administration or assessment and evaluation sound theoretical knowledge will be the central concern of teaching and schooling. The teachers of 21st century will, therefore, be appreciated for their knowledge and pure technical skills. It is enough if the prospective teachers are empowered with knowledge and skills of their course which in turn influences their teaching competency.

In other words, for effective teaching, teacher should acquire the sound theoretical knowledge of the whole syllabus/course. He/she should know the philosophical, social and psychological background of education, evaluation procedures, use of statistics in assessment and evaluation, educational technology, ICT, methodologies of teaching various school subjects and school management and administration etc. Generally these are the major topics, included in the syllabus of B. Ed. course in all the universities. Moreover, teacher should have sound academic background, as academic achievement/performance is related with the kind of training/process factor the institute provided. So the institutes concerning with teacher training should make their training environment conducive for making the prospective teacher aware of his/her main function i.e. to create a pupil friendly learning environment in the class. In this context, a teacher of sound academic background can create the environment that motivates the students to learn effectively in the classroom. So, investigator has decided to study the academic performances (marks obtained in annual examination of all the seven theory papers) of B.Ed. trainees of the teacher training institutes/colleges affiliated to Manipur university, Canchipur, Manipur.

### Statement of the problem

The present problem can be stated as “A Study on Academic Performances of B.Ed. Trainees of teacher Training Institutes Affiliated to Manipur University, Canchipur, Manipur.”

### Definitions of Key Terms

Academic performance – It is the extent to which a trainee has achieved their educational goals. For the present study it is considered in terms of marks obtained in final B.Ed. examination conducted by Manipur University for academic year 2013 – 14.

B.Ed. – It is the Secondary Teacher Education Programme in India. It is the mandatory requirement for a graduate or post graduate to complete this course in order to be a secondary teacher/graduate teacher.

Manipur University – A teaching cum-affiliating university (central university) located at Imphal with territorial jurisdiction over the whole of the state of Manipur. All the teacher training colleges under present study are affiliated to the same.

Manipur - A state in north-eastern India, with the city of Imphal as its capital. Its alternative names are Kangleipak and Meitrapak. The state has a geographical extent of 22,327 sq. kilometres (8,621 sq. m).

### Objectives

The investigator has framed the following objectives for the study to find out the difference in Academic performances among: 1. Male and Female B.Ed. trainees. 2. Arts and Science group B.Ed. trainees. 3. Graduate and post-graduate degree holders B.Ed. trainees.

### Hypotheses

Based on the objectives the investigator has formulated the following hypotheses:

1. There is no significant difference between Male and Female B.Ed. trainees in respect of their Academic performances.
2. There is no significant difference between Arts and Science group B.Ed. trainees in respect of their Academic performances.
3. There is no significant difference between graduates and post graduates B.Ed. trainees in respect of their Academic performances.

### Delimitation of the Study

The delimitations of the present study are: a) The study was limited to only *Kanan Devi Memorial College of Education, Pangei*; b) The investigator took into account the academic performances (marks obtained in the seven theory papers) of the B.Ed. trainees only; c) Only Independent variables were taken into consideration; d) The number of samples was restricted to 30 only.

### Review of Related Literature

In the study conducted at Aurangabad (M.S.) on the sample of 143 trainee teachers entitled “*Teaching Aptitude and Academic Achievement of B.ED. Trainee Teacher*”, Fatima, Kaneez; Humera, Syeda (2011) used teaching aptitude test battery of Dr. R.P. Singh and Dr. S.N. Sharma to study teaching





aptitude and academic achievement was obtained from the college records. On the basis of their findings they concluded that B.Ed. trainees have above average level teaching aptitude & high academic achievement. The co-efficient of correlation between teaching aptitude and academic achievement is positive and low. There is no significant difference between male and female B.Ed. trainees for both the variables.

In a study conducted in the region of North Maharashtra University, Jalgaon, Maharashtra State entitled “Comparative Study of Academic Achievement of trainee teachers”, Prof. Dr. A. P. Joshi found that there is significant difference in the Academic Achievement with respect to sex, faculty, category and type of institute.

In his paper entitled as “A Study of the Relationship between Emotional Intelligence and Academic Achievement among Student-Teachers” Pratik Upadhyaya used the Test of Emotional Intelligence of K.S. Misra to assess the emotional intelligence of student-teachers and the marks obtained by the student-teachers in theory and practical examination served as an index of academic achievement. The study revealed that emotional intelligence is positively related to academic achievement (theory & practice) and student-teachers with high emotional intelligence scored better in theory and practical examination than the student-teachers with low emotional intelligence.

In a study entitled as “Self-Regulative Learning and Academic Achievement among B.Ed. Students” Dr. Suganthi conducted the survey on the sample consisting of 250 students from Nellai district by using Zimmermann B.J., Self-regulative learning questionnaire (SRLQ) as tool with Relational and differential analyses. The finding showed that there is significant difference in the mean scores of self-regulated learning and academic achievement among B.ED students. There is no significant relationship between Self-regulated learning and academic achievement of B.ED students.

### Methodology

Case study method under descriptive research was employed for the present study. All the five B.Ed. colleges affiliated to Manipur University served as the sampling frame of the present study. After the declaration of result of B.Ed. final examination, March 2014 conducted by Manipur University, the investigator collected the theory paper marks obtained by the trainees from each college's records for the study. All the 7 papers carry 75 marks each i.e.  $75 \times 7 = 525$ . As a sample, 1 B.Ed. College (Kanan Devi Memorial College Teacher Education, Pangei) was selected purposively which has 100 trainees. Among these, 30 B.Ed. trainees including 20 females and 10 males were selected by stratified random sampling method. The detailed category wise breakup of the samples is as follows: 10 male and 20 female B.Ed. trainees = 30; 14 Arts and 16 Science stream B.Ed. trainees (irrespective of gender) = 30; 12 Graduate and 18 post-graduate degree holders B.Ed. trainees (irrespective of gender) = 30.

### Variable

Dependent Variable in the present study: Academic performance in the present study is one dependent variable dependent upon independent variables such as gender, subject stream and educational qualification, etc.

Independent Variables in the present study: Gender (male and female B.Ed. trainees); Educational qualification (graduates and post graduate degree holders B.Ed. trainees); Science and arts stream B.Ed. trainees.

### Statistical Techniques Used

The following statistical techniques have been used in the present study for the analysis of collected data: firstly, basic statistics like percentage mean scores, standard deviations etc, were computed. Secondly, implication of difference between means was computed to know the difference in academic performance among two different types of B.Ed. trainees, namely, Male and Female; Arts stream and Science stream; Graduate degree holders and post-graduate degree holders etc.

### Analysis and Interpretation

The analysis and interpretation of data are presented in the following ways: Section-A: To find out to find out the difference in Academic performance among Male and Female B.Ed. trainees.

**Table 1 - Descriptive Statistics related to academic performances of female and male B.Ed. trainees and significance of difference.**

Variable		N	M	S.D.	S.E.	T value	Level of significance	
Gender	Female B.Ed. trainees	20	46.8	5.97	0.77	2.86	0.05	S
	Male B.Ed. trainees	10	44.6	4.71				

The null hypothesis developed for finding out the objective number 1 is that “is the mean score difference of 2.2 in favour of female B.Ed. trainees significant at 0.05 level?”

The critical value of T for 28 degrees of freedom at 0.05 level of significant is 2.05. The computed value of T, i.e. 2.86 is greater than the ideal T value; hence, it is significant. Therefore, null hypothesis is accepted and the original hypothesis is rejected. It was inferred that there is significant difference in the academic performance of the male and female B.Ed. trainees and in general females do better than their male counterpart.

Section-D: To find out to find out the difference in Academic performance among arts and science streams B.Ed. trainees.

**Table 2 - Descriptive Statistics related to academic performance of arts stream and science stream B.Ed. trainees and significance of difference.**

Variable		N	M	S.D.	S.E.	T value	Level of significance	
Subject stream	Arts stream	14	46.14	6.30	0.78	0.18	0.05	NS
	Science stream	16	46.00	5.02				

NS=Not significant

The null hypothesis formulated for finding the objective number 3 is that “is the mean score difference of 1.27 in favour of arts stream B.Ed. trainees significant at 0.05 level?”



The computed value of T i.e. 0.55 is less than the critical value of T i.e. 2.05 with degree of freedom at 28 at 0.05 levels of significance, hence it is not significant and null hypothesis is rejected. Therefore the hypothesis number 2 is accepted and retained and it was inferred that there is no significant difference in academic performance among arts and science stream B.Ed. trainees.

Section-C: To find out to find out the difference in Attitude towards the new syllabus among graduate and post graduate degree holders B.Ed. trainees.

**Table 3 - Descriptive Statistics related to academic performance of graduate and post graduate B.Ed. trainees and significance of difference.**

Variable		N	M	S.D.	S.E.	T value	Level of significance	
Educational qualification	Post-Graduates	12	52.00	3.03	1.12	8.79	0.05	S
	Graduates	18	42.11	2.85				

S=Significant

For testing hypothesis number 3 the null hypothesis developed is “*is mean difference of 0.18 in favour of post-graduate B.Ed. trainees significant at 0.05 levels?*”

The computed value of T i.e. 8.79 is greater than the critical value of T i.e. 2.05 with degree of freedom at 28, hence it is significant and the null hypothesis is retained. So it can be inferred that post graduate degree holder B.Ed. trainees outperformed their counterparts in academic performance.

## Results

The study has resulted in the following conclusions:

There is an important difference in academic performance of male and female B.Ed. trainees. Female B.Ed. trainees performed much better than their male counterpart.

There is no important difference in academic performance among B.Ed. trainees belonging to science and arts streams.

There is an important difference in the academic performance of post graduate degree holder B.Ed. trainees and graduate degree holder B.Ed. trainees. Post graduate degree holder B.Ed. trainees performed much better than their graduate degree holder counterparts.

## Discussions And Conclusions:

The present study was undertaken by the investigator to measure the level of difference in academic performance among various categories of B.Ed. trainees. After the survey work the obtained data was systematically categorized under various heads. To know the difference in academic performance between two mutually contrary groups of B.Ed. trainees, college records of trainees’ academic performance was used. The difference in academic performance was then measured by administering inferential statistics on the raw scores obtained by B.Ed. trainees. The level of significance of difference in academic performance was judged on the basis of significance of difference between M’s in small independent samples. The original hypotheses anticipated that there would not be significant difference in academic

performance among the following categories of B.Ed. trainees – a) Female and male B.Ed. trainees; b) Arts and science stream B.Ed. trainees; c) Graduate and post graduate degree holder B.Ed. trainees.

However, after determining the level of significance it was found that significant difference in academic performance exists in cases of - a) Female and male B.Ed. trainees; and b) Graduate and post graduate degree holder B.Ed. trainees. Accordingly hypothesis 2 was accepted and retained. In case of Hypotheses 1 and 3, which assumed that there would not be significant difference in academic performance among the various categories of B.Ed. trainees as mentioned in respective hypotheses, were rejected and the null hypotheses were accepted.

The following conclusions have been drawn in the light of the present investigation that educational stream (arts and science) had no significant impact on academic performance but gender and level of educational qualification exhibited significant impact in academic performance of B.Ed. trainees.

## Suggestion

The work can also be done on M.Ed. and D.Ed. teacher trainees.

The study can also be conducted by increasing the sample sizes and including more institutes in Manipur.

The work can also be extended by including other independent variables like religion, locality etc.

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## INSTRUCTION AND LEARNING IN TEACHER EDUCATION PROGRAMME

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### Abstract

*In India, where classrooms are intentionally structured in a manner that they could accommodate maximum number of children. Educators were involved in lecturing and not teaching. Children waited for teachers to deliver instructions, which they immediately captured in their notebooks and memorised and produced during exams. This was instructional approach. In the Learning approach, all of this would change. One major shift that learning approach could bring about in the Indian education system is to introduce constructivism in educational institutions. Considering constructivism is the only possible framework for teaching and learning. It is one way of thinking about how knowledge is formed and understanding takes place.*

**Keywords:** Instruction, Teaching, Learning, Constructivism

Students come to educational institutions with multiple learning styles. The curriculum delivery mechanism should be sensitive and flexible in accommodating diverse learning needs. We find that lectures continue to be delivered in classrooms with the pre-conceived notion of one size fits all. We hope for homogeneity of the class room. Diversity has become a fact of life. The society is building pressure on institutions to rethink their existing curriculum delivery approach. Educational institutions are being increasingly pressured to undergo a shift from the instruction approach to learning approach. People may look beyond mere delivery of instructions to students. People should concentrate more on ensuring that real-time learning takes place. Teachers are expected to play the role of designers of learning environment, contributing towards making their institution a learner-centric one. Curriculum design and delivery would have to be based on the analysis of what the students need to know to function in a complex world rather than on what the teacher knows and wants to teach.

### Instructional Approach

In India, where classrooms are intentionally structured in a manner that they could accommodate maximum number of children. The instructional approach prospered as the educators were involved in lecturing and not teaching. Children waited for teachers to deliver instructions, which they immediately captured in their notebooks and memorised and produced during exams. In the Learning approach, all of this would change. The class strengths would be small, learning would be self motivated preferably in groups, grades and marks would not be necessarily looked upon as a measure of learning. Educators believe that learning approach would give children space to know one-another, engage in a dialogue, work in groups, gain feedback and understand concepts. This was not taking place in the Instructional approach.

### Learning approach

Experts believe that learning approach would create grounds to facilitate cooperative and collaborative learning. They feel it will be the future of classroom learning. Learning approach enhances student-student interactions, which is very critical for facilitation of learning and construction of knowledge. The role of teachers would change from delivering lectures

to facilitating the process of learning. This ensures classroom interaction takes place in the right environment. Educationists agree that collaborative and co-operative learning would have a significant advantage over the conventional approach. Learners would be at the core of the education process. Learners would enjoy greater amount of autonomy to learn in groups via project work and creative activities. It would empower students and encourage them to take greater control of their own learning approach. It is believed that learning would take place in a friendly atmosphere where students would have the liberty to not only share their knowledge, but also have the freedom to explain their version of how they arrived at it.

One major shift that learning approach could bring about in the Indian education system is to introduce constructivism in educational institutions.

### Constructivism in Teacher Education

Constructivism explains the nature of knowledge. Constructivism also explains how learning takes place in human beings. Constructivism explains that human beings interact with what they already know and generate their knowledge. Construction of knowledge is based on one's belief, ideas, events, and activities with which they come in contact. The teacher in the classroom fills heads of students with information which the teacher feels are important. The teacher thinks that this information is true knowledge. The students store this information as given till they need it for exams. These models of teaching are called memory-oriented transmission models. Constructivists maintain that when information is acquired through such transmission models, it is not well integrated with prior knowledge. It is accessed and articulated only for formal academic purposes such as exams. Constructivist approaches, in contrast, are regarded as producing greater internalization. It develops deeper understanding than traditional methods.

### Psychological Constructivism

Psychological constructivism believes that child should be educated in the way and in the area which are of interest to the child. Piaget believed that the child's needs are important. He believed in individual cognitive development. According to Piaget, learning is an individualistic activity. He believed in child-centered approach. Piaget's work is based on the



natural path of cognitive development. This approach believes that students come to classrooms with their own ideas and beliefs. The responsibility of a teacher is to modify them. This is done by the teacher by planning various questions that create dilemmas for students. The children work through these dilemmas and as a result knowledge is constructed. Therefore, the instructional practices include discovery learning. Children are given hands-on activities. Students challenge existing concepts. Students challenge present thinking processes. While teacher asks questions to the students, it probes students' beliefs. Teacher encourages examination and testing of those beliefs. This approach assumes that development is natural, biological process. The pattern of development is same for all individuals, regardless of gender and class. It also does not depend on race, social context in which learning and living take place.

### Social Constructivism

According to Vygotsky's constructivism, education is for social transformation. It talks about a theory of human development which is associated with a person's socio-cultural context. An individual develops from social interactions. In these interactions, cultural meanings are shared by that group and internalized by the individual. Individuals construct knowledge while doing transaction with the social environment. As a result of these interactions, the individual and the environment undergo changes. It is important to study the relationship between an individual and the social and cultural environment. Schools are based on the socio-cultural settings. Here, teaching and learning takes place. Cultural tools such as reading and writing are utilized. Social constructivism believes that learning does not take place in a vacuum. They are shaped by cultural assumptions. This theory of constructivism believes that knowledge and the manner in which it is presented are influenced by the cultural environment. Here, the cultural assumptions and power relationships that influence learning should be exposed. Different social constructivism includes social reconstructivism, socio-cultural constructivism and situated constructivism.

### Implementation of Constructivism

Constructivism is a theory of learning. It is not a theory of teaching. Translating constructivist theory to practice is difficult. Constructivist teacher education programmes neglects two major traditions. The first one is the development and second one is social reconstructivism. The teacher education programmes which have influence of developmental tradition, make an attempt to teach students how to teach in a constructivist manner. This means how to teach in Piagetian, manner. They are typically characterized by direct instruction in theory and practice. There are no opportunities for discovery, inquiry or self-examination. This approach then becomes very much prescriptive. Here, the teacher educator demonstrates models of various approaches to teaching to the students. The students are expected to employ same process in their future classrooms.

The teacher education programmes influenced by social reconstructivism tradition, tells teacher education students to deconstruct their own prior knowledge and attitudes. They are expected to comprehend how these understandings evolved. Students are expected to explore the effects they have on actions and behaviour of learners. They have to also consider alternate conceptions that may be more useful in teaching. Critical analysis and reflections are done by the student-teachers. They reconsider knowledge and everyday practical experience they get through teaching in the classroom. The challenge constructivism presents to teachers and teacher of education is the difficult work of translating a learning theory into teaching theory. Here, several questions arise such as what teachers need to know about the theory and how teacher will be able to use this theory. Teacher educators have to plan according to different disciplines. Several educators mention the importance of teacher educators' modelling constructivist approaches that engage students in collaborative activity, and field-based opportunities. This leads to experiential learning, reflection, and self-examination. To derive culturally relevant and socially appropriate practice from constructivist, teacher educators should deconstruct cultural assumptions. It is important to understand how social beliefs influence the development of theory and practices. If it is not done than societal inequities may be perpetuated in constructivist classrooms.

### Conclusion

Constructivism is the only possible framework for teaching and learning. It is one way of thinking about how knowledge is formed and understanding takes place. One should remember that there is not only one way of doing the things. Various interpretations of constructivism are compatible with one another. Trainee teachers should be exposed to different perspectives. They should be given opportunities to develop the maturity to choose appropriate skills to implement their choices. Due to constructivism, learner is able to interpret realities. The learner is able to deal with real life situations which they face. If a learner can solve problem, they will apply their existing knowledge to a novel situation.

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## INDIAN HIGHER EDUCATION: TRENDS, GROWTH & CHALLENGES

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### Abstract

*It is widely recognised that higher education promotes social and economic development by enhancing human and technical capabilities of any country like India. It provides an opportunity to critically reflect upon the social, economic, cultural, moral and spiritual issues facing humanity. It contributes to national development through dissemination of specialized knowledge and skills. Indian higher education system has undergone massive expansion since independence in terms of growth, enrolment. Keeping in above backdrop, the present paper is an attempt to analyze the trend in growth and challenges of Indian higher education system in the present era. It is clear from the analysis that there has been considerable improvement in the higher education in India in both quantitative as well as qualitative terms. But issues like access, equity, inclusion, quality, privatization and financing concerning higher education, are very complex and interrelated with political, economical geographical and international dimensions. To develop India as a knowledge hub and to become a prosperous partner in global economy, India has to qualitatively strengthen education in general and higher education with research and development in particular. For providing ROTI (Bread) and employment to the manpower, we need to increase returns on training investment (ROTI). To achieve efficiency and deliver quality education, we certainly need good governance which means to us as SMART (SIMPLE, Moral, Action oriented Responsive and Transparent) administration for every institution at all levels in India.*

**Keywords:** Knowledge economy, ROTI, Privatization, Financing, SMART & SIMPLE

Education has always been considered as the key component of human resource development (HRD) and greatest liberating force in any country including India. It is considered as fundamental to all round development of the individual both at material and spiritual levels. The Education Commission 1964-66 described the role of education in social and economic transformation through a statement- the density of a nation is shaped in its class rooms. Education creates human capital which is the core of economic progress and assumes that the externalities generated by human capital are the source of self sustaining economic process. It hardly needs any justification that higher education is an engine of economic growth as well as human development which improves physical quality of life index (PQLI) in the knowledge economy of today. In order to become prosperous global economy with in first five ranks, India has to qualitatively strengthen her education in general and higher and technical education in particular. Higher Education is very vital to achieve sustainable growth and development of any country. It provides an opportunity to reflect upon the social, economic, cultural, moral and spiritual issues facing humanity. Noble Laureate, Amartya Sen (1999) argued that it is higher education besides elementary and secondary education that forms a “human capability” and a “human freedom” that helps in attaining other “freedoms”. In this regard, higher education has significant role in supporting knowledge driven economic growth strategies. It contributes to national development through dissemination of specialized knowledge and skills. Investment in education leads to the formation of human capital, comparable to physical capital & social capital, and that makes a significant contribution to economic growth (Dickens et al., 2006; Loening, 2004; Gylfason and Zoega, 2003; Barro, 2001). Keeping in above backdrop, the second

section of the present paper describes the growth of higher education in India. Section III is dedicated on the various issues of higher education in India. Section IV, provides policy implications with challenges ahead. And lastly, Section V concludes the study.

### Growth of Higher Education in India

Higher education is recognized as a critical factor in inclusive and faster growth in any country including India. It generates skilled labour force and inputs for research and development. It fosters higher growth rate and enables people to compete in a globalize world. Therefore, for the development of nation with social justice, there is a rationale for equitable and balanced progress of all the sections of the society in general and in India particular. Over the period of time, enrolments in higher education have increased considerably which can be shown from the adult literacy rate that is literacy rate of those who are above the 15 years age. It is clear from the following table 1 that adult literacy rate of both male and female has increased in 2011 in comparison of 2001.

**Table 1 - Adult Literacy Rates (15 + Age Group)**

YEAR →	2001			2011		
	TOTAL	SC	ST	TOTAL	SC	ST
TOTAL	61	44.1	40.8	69.3	60.4	51.9
MALE	73.4	59.3	54.8	78.8	71.6	63.7
FEMALE	47.8	28.5	26.7	59.3	48.6	40.2

**Source:** Educational Statistics at a Glance 2014

It is clear from the above table that adult literacy rates of both male and female have increased but female literacy rate has increased more rapidly to 59.3 per cent in 2011 from 47.8 per cent in 2001 which clearly implies that enrolments of women in higher education is increasing. Improvement in adult literacy rate is the result of massive expansion in Indian higher education since independence. Indian higher

education has expanded exponentially over the past six decades and there has been a considerable increase in the spread of educational institutions (universities, colleges) along with enrolments at every stage. There were 20 universities and 500 colleges at the time of independence and after then mushrooming growth have taken place in Indian higher education system. The institutions of higher learning in India fall into the broad categories such as Universities, Deemed Universities, Private Universities, Institutes of National Importance, and Colleges etc. The following table 2 presents the growth of higher education in India.

**Table 2 - Growth of Higher Education Institutions and Their Intake Capacity in India**

YEAR → INSTITUTIONS & ENROLEMENT↓	1951	1961	1971	1981	1991	2001	2012	2014
Number of University level institutions	28	45	93	123	177	266	574	712
Number of colleges	578	1816	3227	4738	7346	11146	35539	36671
Number of teachers (in 000)	24	62	190	244	272	395	933	NA
Number of students enrolled (in 000)	174	557	1956	2752	4925	8399	22373	NA

Source: UGC Higher Education at a Glance & Educational Statistics at a Glance 2014

The table 2 reveals that there has been appreciable growth of higher education since 1951. Number of university level institutions and colleges has grown up from 28 to 712 and 578 to 36671 respectively from 1951 to 2014. As a result, the number of teachers as well as students has also increased significantly. The growth of students' enrolment is more than the growth of number of teachers over the period of time, may be due to the massive investment by government at school level in form of primary as well as secondary education. Rise in enrolments and institutions at school level, there is mushrooming growth in higher education institutions. The table 3 shows the growth of central institutions (central, state universities, IIT, IIM etc.) during eleventh five year plan (2007-12) which is as follows:

**Table 3 - Growth of Central Institutions During 11<sup>th</sup> Five Year Plan**

TYPE OF INSTITUTION↓	2006-07	2011-12	ABSOLUTE INCREASE
Central Universities	19	40	21
Indian Institute of Technology	7	15	8
Indian Institute of Management	6	13	7
Indian Institute of Science, Education & Research	2	5	3
School of Planning and Architecture	1	3	2
National Institute of Technology	20	30	10
Other technical institutions	15	15	0
<b>Total</b>	<b>70</b>	<b>121</b>	<b>51</b>

Source: MHRD, UGC

It is clear from the table 2 that growth of central institutions has taken place in 11<sup>th</sup> five year plan in a considerable manner. The total number of institutions has increased from 70 in 2006-07 to 121 in 2011-12 which is the result

of government efforts to increase the opportunities in higher education. The correct assessment of the availability of higher education can be made in terms of number of gross enrolment ratio (GER) rather than just a number of institutions and their growth. Keeping this aspect in mind, gross enrolment ratio in higher education can be shown from following figure 1

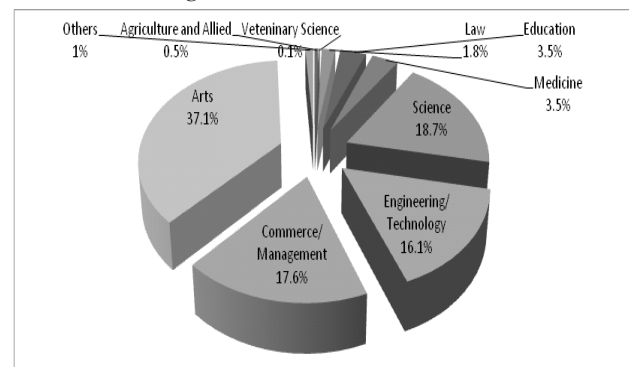
**Figure 1 - Gross Enrolment Ratio (GER) of Higher Education in India**



Source: All India Survey of Higher Education

It is clear from figure 1 that the GER is increasing of both boys and girls and it is consistent with the expansion of HEIs over the years. The GER in higher education has increased from 8.1 in 2001-02 to 21.1 in 2012-13 similarly boys and girls GER has also increased from 9.3 and 6.7 in 2001-02 to 22.3 and 19.8 in 2012-13 respectively. To make the analysis more clear, faculty wise students' enrolment has been shown in figure 2. The available data during academic year 2012 reveal that enrolment in arts faculty is maximum (37.1 per cent) followed by science (18.7 per cent), commerce/management (17.6 per cent) and engineering/technology (16.1 per cent) faculties and so on which is as follows:

**Figure 2 - Faculty-wise Distribution of Enrolment in Higher Education in India, 2012**



Source: Twelfth Five Year Plan (2012-2017) - Social Sectors

To promote the research in Indian higher education system, it is very essential to know about the enrolments of students in various disciplines at Ph.d. and post graduate level in higher education. The following table 4 provides the information about the student's enrolments at Ph.d. and post graduate level.

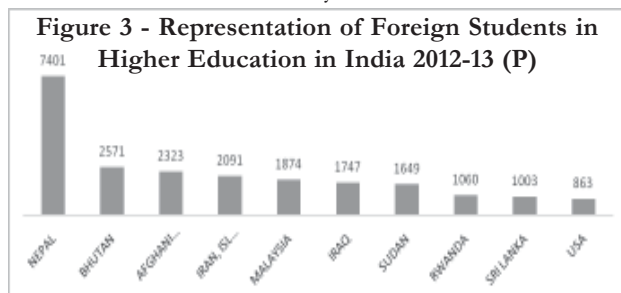


**Table 3 - Enrolment in Different Disciplines at Ph.d & PG Level in Higher Education 2012-13**

DISCIPLINE	PH.D.	POST GRADUATE
Agriculture & Allied	4.39	0.61
Commerce	3.21	8.04
IT & Computer	1.93	9.34
Engineering & Technology	17.45	6.34
Foreign Language	3.16	4.83
Home Science	0.68	0.21
Indian Language	6.14	8.78
Law	0.84	0.76
Management	4.47	16.92
Medical Science	6.5	4.17
Science	20.61	8.75
Social Science	18.27	20.58
Other	12.35	10.69

Source: AISHE Portal [www.aishe.gov.in](http://www.aishe.gov.in)

The above table clearly states that maximum numbers of Ph.d students enrolled in science faculty (20.61 per cent) followed by social sciences (18.27 per cent). To improve the quality of Indian higher education there is a strong need to enhance quality research in all disciplines and involve maximum number of eligible and intelligent. It is only research through which we can improve our teaching and provides best research knowledge to our students. Due to massive expansion of Indian higher education, a number of foreigner students are coming for higher education. It is rightly said by Mr. Arjun Singh, (2007) that “India is not knocking at the doors of the world but world is knocking at the doors of India. It is up to us to open the doors or keep it shut”. The following figure 3 shows the number of foreign students in higher education in India in 2012-13 year:



Source: Educational Statistics at a Glance 2014

The above figure reveals the representation of foreign students in Indian higher education in which 7401 students of Nepal, 2571 students of Bhutan, 2323 students of Afghanistan are getting higher education from India in 2012-13. It is also clear from the figure that 863 students of USA are also getting higher education from India.

Education is defined as the investment of current time and resources for future earnings. Quality of higher education can be judged by the one of the important indicator viz. magnitude of public expenditure. Public expenditure on education is critically important to improve the educational levels of population. Strong and vibrant education systems with national values cannot be built by a heavy reliance on private finances. Public expenditure on education is positively associated with economic growth. Many studies have been

made from time to time all over the world to assess the contribution of public expenditure on education to economic growth. Notable among them are, the studies made by Becker, Denison, Dholakia, Harbison and Myers, Mukerji and Krishna Rao, Psacharopoulos, Schultz, Solow, Tilak and Todaro. There is considerable evidence that investment in education has high pay off in terms of accelerating economic growth, and it is certainly true that which has a record of rapid economic development such as U.S.A., Japan and U.S.S.R., have made heavy investment in education. The public expenditure in education sector, especially in higher education has remained very low over the years; The National Education Policy 1968 and 1986 (revised in 1992) recommends government expenditure on education at 6% of GDP, whereas the 2010-11 (BE) expenditure was only at 3.8%. The following table 4 shows the trend of expenditure on higher education including adult and technical education in India.

**Table4 - Expenditure (Revenue) on Higher Education by Education and Other Deptt.**

SECTOR	EXPENDITURE ON EDUCATION			EXPENDITURE AS A % OF		
	STATE/UT	CENTRE	TOTAL	STATE/UT	CENTRE	TOTAL
<b>YEAR: 2010-11</b>						
University & Higher Education	38489.77	24164.41	62654.18	0.53	0.33	0.86
Adult Education	361.85	470.53	832.38	0	0.01	0.01
Technical Education	17407.67	17674.85	35082.52	0.24	0.24	0.48
<b>YEAR: 2011-12</b>						
University & Higher Education	44267.7	24786.96	69054.66	0.53	0.3	0.82
Adult Education	502.99	602.4	1105.39	0.01	0.01	0.01
Technical Education	24318.53	20731.74	45050.27	0.29	0.25	0.54
<b>YEAR: 2012-13</b>						
University & Higher Education	50820.02	32739.21	83559.23	0.54	0.35	0.89
Adult Education	479.05	709.42	1188.47	0.01	0.01	0.01
Technical Education	26109.87	24283.82	50393.69	0.28	0.26	0.54

Source: Educational Statistics at a Glance 2014

It is clear from the above table 4 that over the period of time, expenditure on higher education including adult as well as technical education is increasing. Total expenditure on university and higher education has increased from 62654.18 in 2010-11 to 83559.23 in 2012-13 and similarly expenditure on technical education has increased from 35082.52 in 2010-11 to 50393.69 in 2012-13. It is very essential to improve the quality in higher education in general and technical education in particular. India has to qualitatively strengthen her higher education including technical education to create India not only as an education hub but as a knowledge hub. Besides the growth of higher education in terms of higher education institutions, enrolments, expenditure etc over the period of time still issues like access, equity, quality, privatization and financing concerning higher education are very complex which need to be discussed.

**Issues in Higher Education in India**

The role of higher education in the emerging scenario of knowledge economy is very crucial and multifaceted for any country in general and India in particular. For last many

decades, we are facing many challenges to establish a great and strong higher education system. Various governments came and gone. Off course they tried to establish new education policies in the system but this is very sad to dictate that they were not sufficient for the country like India. Still there are many important issues related with higher education which is discussed are as follows:

#### **Access and Equity**

Today the world economy is experiencing an unprecedented change. A paradigm shift has been noticed in higher education now a day, from 'national education' to 'global education'. Consequently, access to higher education has increased to certain extent but not sufficiently. It is worth noting that while India has the second largest system of higher education, next only to USA, the total number of students hardly represent 6 per cent of the relevant age group, i.e., 18 - 23, which is much below the average of developed countries, which is about 47 per cent. It is true that enhancing social access to higher education is still important in the country. But, the major challenge before the Indian higher education system is to bring equity in quality of education across the length and breadth of the country. This is more close to the heart of students in rural, semi urban and urban areas, because they also wish to be able to participate in the new economic revolution. The twin issues of inclusion and equity need to be given due importance while making policies for expanding access to higher education. Imbalances whether related to gender, caste, religion, regional, need to be addressed so as to provide equal opportunities to students belonging to disadvantaged or vulnerable sections of the society. Thus, several social, economic and political reasons seem to act as constraints to access and equity in higher education in India. Enhancing social access as well as to bring equity in quality of higher education is still important in the country.

#### **Quality**

Absent of Quality in higher education is another burning issue which can be ensure through regular review of the functions of the institution either through self assessment or through outside agencies and by accrediting the institutions. The expansion of higher education over the years has also resulted in educational malpractices. The employability of the students graduating from the current higher education institutes is also questionable. There is no creativity in students. Our top class students are hard-worker but not innovative. They are not capable enough to produce new technology. The standards of research and teaching at Indian universities are also far below the international standards. No Indian university is currently featured in any of the rankings of the top 200 international universities. Unless the quality and standard of Indian higher education institutions is enhanced zealously and sustained at a high level through innovation, creativity and regular monitoring, it seems to be difficult for the Indian academics/professionals to compete in the World scene. This calls for suitable assessment and accreditation mechanisms to be available in the country to ensure the quality and standard of the academic programmes at higher educational institutions. Colleges and Private institutes should set up Internal Quality Assurance Cell and must follow a minimum standard to give degrees. The assessment has to be continuous and the process

has to be transparent to gain the acceptance of the society at large. Accordingly, the various regulatory bodies regulating higher education have constituted autonomous bodies for monitoring quality standards in the institutions under their purview e.g., NAAC by UGC, NBA by AICTE, AB by ICAR, DEC by NCTE etc. But, the quality norms of such councils are not comparable with international standards to a certain extent and the enforcement process is not stringent. Further political interference and corruption dilute the role and impact of these intuitions in ensuring the desired quality standards. Therefore, it is need of the hour to bring revolution in higher education to maintain quality.

#### **Financing**

Financing of higher education is one of the most important constraints that have to be noticed. Expenditure on education in general and on higher education in particular by the government, is one of the parameters to judge the quality in education for any nation. The responsibility of financing higher education is shared by both public and private sector. Even in public sector it's a joint responsibility of Central as well as State government. India being a developing economy, amongst competing governmental priorities higher education is treated as a "Merit good. (Quasi Public & Quasi Private)" The State Government has already been spending 20-30 per cent of its revenue budget on education. It could not afford to spend more. In India, higher education has received less attention in terms of public spending than other levels. It is not feasible for India to make massive state investments in research and development that produced research led universities in the west such as MIT, University of California, Berkeley in the US or University of Cambridge in Britain, whose intellectual properties-a consequence of such investments-attracted industry to their doorsteps. In the view of withdrawal of government support to finance higher education, private institutions have been allowed to take over the responsibility of imparting education to all. Further, in government aided universities and colleges the model of self financing have been introduced. All these developments have added to the cost of education significantly and restrict the talent coming from the poor families to go for higher education.

#### **Privatization**

It is evident that over the period of time, the level of demand for higher education in India has increased well above the Government's capacity to finance. Privatization of higher education is absolutely necessary in a vast country like India as government alone is helpless to fulfil the rising demand of higher education. As a result, private higher education has flourished, with a boom in commercially oriented for-profit colleges. In the present scenario, privatization of higher education is apparently a fledgling but welcome trend and is critical to maintain creativity, adaptability and quality In India both public and private institutions operate simultaneously. Most of the growth in the rapidly expanding higher education sector took place in private unaided colleges or in self financing institutions. Since grant-in-aid to private colleges is becoming difficult, many government funded institutions/universities have granted recognition to unaided colleges and many universities have authorized new 'self-financing' courses even in





government and aided colleges. Private providers, in the interest of maximizing profit, have every incentive to 'minimize costs' by compromising on the quality of education provided in their institutions. Private providers are known to exploit the supply shortfall of higher education in order to maximize revenues through 'capitation fees', misrepresentation of courses, corruption in admissions practices, and other methods that ultimately harm the interests of students. Thus, there are serious implications for quality in private provision of higher education.

Last but not least, quality of teaching staff is one of the considerable issues for higher education sector to sustain in the future. The National Education Policy, 1986 stated 'the status of teacher reflects the socio-cultural ethos of a society.....'. It is said that in the earlier era, teachers were less paid but they looked upon their works as a noble mission. They were committed to their students to their subjects and to their profession. Today, high salaries are available but the commitment is less. Thus, it is the need of the hour to free the higher education system from unnecessary constraints and political interference and provide academic and administrative system which is accountable, transparent and equitable.

#### **Policy Implications With Challenges Ahead**

Indian higher education system has undergone massive expansion since independence. And thus there has been considerable improvement in the higher education in India in both quantitative as well as qualitative terms. There is a rationale for broadening our vision, developing skill and integrating all those aspects which is important to meet the challenges of higher education. In order to respond to the global challenges more strongly than ever before, India today needs a knowledge- oriented paradigm of development to give the country a competitive advantage in all field of knowledge. According to Dr. Manmohan Singh (Ex. Prime Minister of India) 'The time has come to create a second wave of institution building and of excellence in the fields of education, research and capability building'. The present system of higher education produced some degree holders with mere knowledge and information in a particular area, but it has failed to develop general employability skills needed for entry level employee. Hence, it is high time for planners, policy makers and practitioners of higher education to ponder over it and make necessary reforms in the course and strategies so that employability skills can be developed among the students. To keep the higher education within the reach of poor aspirants, there is a strong case for effective monitoring and regulation of the private sector through appropriate policy measures – a judicious mix of policies, which ensure efficient use of the available educational resources. To meet the growing demand for higher education, there is a need to search alternative sources of financing. The new challenges facing the system of higher education in the country cannot be met without a total overhaul of the structure of management of higher education institutions. This has become all the more necessary because of internationalization, which requires talent, competence, drive, initiative and innovation at several levels. Therefore, there is a rationale of good governance at all levels in higher education system. Designing the higher education with relevance to the present

as well as future demands is really a challenging task. It is important to realize that we live in a fast changing world, dictated by the developments in technology. Quick access to information has made knowledge creation fast, and the multiplier effect has made it even explosive. All this calls for a team of professionals in different areas to come together to develop proactive strategies for higher education to meet the future demands. Indian student is required to develop a multifaceted personality to cope up with the rapid changes in the world at large. Rising demand for higher education and associated shortage of faculty resources leads to inevitable trade-off between quality and quantity. Unless the quality and quantity of Indian higher education institutions is enhanced zealously and sustained at a high level through innovation, creativity and regular monitoring, it seems to be difficult for the Indian academics/professionals to compete in the World scene.

The cause of concern for the gaps in the demand and supply of manpower in India is the imbalance between quality and quantity without manpower planning. To research the ways and means of solving unemployment problem, there is an intellectual debt on the economists and policy makers of India. For providing ROTI (Bread) and employment to the manpower, we need to increase returns on training investment (ROTI).

To achieve efficiency and deliver quality education, we certainly need good governance which means to me as SMART (SIMPLE, Moral, Action oriented Responsive and Transparent) administration for every institution at all levels in India. We are required to promote spiritual mathematics  $1 (\text{soul}) + 1 (\text{GOD}) = 1$  with a smile of anticipation for bright future. Spiritual, humanitarian existence of a human being is capable of removing all kind of inequality (gender disparity) which is a social reality existing in India.

'SIMPLE' Model of Sustainable Human Development developed by me consisting of six human development activities such as Spiritual quotient (SQ) development, Intuition development, Mental level development, Love yourself attitude development and Emotional quotient (EQ) development is essential requirement of the entire World including Indians in India and elsewhere in all times to come. Being a researcher, I promote the role of non-economic factors more than economic factors towards sustainable development of India which stand for me as (Independent, non-violent, democracy with integrity and amity) attributes. We need to stop producing half baked products as semi educated and unemployable manpower in our educational institutions. This is essential to stop youth fall prey to destructive and anti social activities including terrorism and crimes of various kinds. Let the youth be provided employable skills with the trust in the dictum 'work works'. We need to bring hope, optimism, passion and enthusiasm (HOPE) by motivation through identification of the potential for achieving success with hard work and patience. Even at the risk of being misunderstood by the fraternity of economists, I wish to say that the economics of education at micro level instead of increasing the value of education has devalued the real value of education. There is a strong case for strengthening the educational value of education which is more than making a person capable of earning his/her livelihood

Let us create conducive environment for proper, productive and practical utilization of positive potential of youth as demographic dividend. Let them be really educated to use their hands, head and heart (3H) with a positive mindset. Let them understand sex as poise, sacred and secret allowed in a married life only. The polluted minds in India are committing crimes including rapes one after the other. The challenges of quality in globalized era calls for change in the mindset of all the stakeholders.

### Conclusions

To conclude, we can say that over the period of time, growth have been take place in higher education in terms of institutions, enrolments etc. but it is not sufficient. Besides, Indian economy is facing various challenges regarding higher education in twenty first century, which need to overcome through appropriate policy formation and their effective implementation. India is today one of the fastest developing countries of the world so there is a strong need to increase the number of institutes and also the quality of higher education in India. To reach and achieve the future requirements there is an urgent need to relook at the Access and Equity, Quality Standards, Financial Resources and at the end Privatization. To develop India as a knowledge hub or to become a prosperous partner in global economy, India has to qualitatively strengthen education in general and higher education with research and development in particular. India has demographic advantage in the form of huge number of young people. To make the best, these young minds need to be provided opportunities for accessing quality higher education. For better contribution of higher education in Indian economy, there is emergence of paradigm shift from literature type education to productive, up to date, job oriented education as per requirements. We need job led growth and for this, the thrust should be on quality and vocational/technical education according to requirement. The cause of concern for the gaps in the demand and supply of manpower in India is the imbalance between quality and quantity without manpower planning. To research the ways and means of solving unemployment problem, there is an intellectual debt on the economists and policy makers of India. For providing ROTI (Bread) and employment to the manpower, we need to increase returns on training investment (ROTI). To achieve efficiency and deliver quality education, we certainly need good governance which means to us as SMART (SIMPLE, Moral, Action oriented Responsive and Transparent) administration for every institution at all levels in India.

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## APPLICABILITY OF MASS MEDIA IN HIGHER EDUCATION IN MANIPUR

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### Abstract

*A society index lies on the education system of that society. Education are said to be an instrument that build up a society and it is one of the most needed tool that are needed in day to day life. It becomes one of the most important tools that are needed in every person in this modern world. It is a device that helps in building up a person personality, knowledge, power; confidence and sense of humor that are capable of providing them to build up a well developed and meaningful life. The main objective of the researcher in this paper is to highlight the higher education of Manipur, the steps that are needed to be taken up for higher education in Manipur and the role played by media in the education system of the state. In the society of Manipur media role is much needed as media are the one, who informed, communicated and educated a society. Having situated in the eastern most part of the country development in the state is far lacking behind. Good education and good education system is much needed in a state like Manipur for its development and to build up as a well cohesive society.*

**Keywords:** Education, Media, tool, society, material, cohesive society.

Education is the index of a society. Education is the most powerful instrument which donates upon people is knowledge, confidence and sense of purpose for building a dynamic, vibrant and cohesive society capable of providing them with the magic wind for creating a better, fuller and meaningful life. Education is among the highest priority of human needs due to many reasons including the empowerment of people to change their life enhancement of national economic growth and the promotion of sustainable development. Education provides proper attitudes, values, capabilities of knowledge and skill to individuals. As well as it provides strength and spirit to people to respond to social development. Education in developing world has come to be one of the most potent instruments of modernization.

It has been generally recognized that education is concerned with the development of the 'whole-man'-his physical fitness, his mental alertness, his moral excellence and his social adjustment. To realized this objectives of education, society has developed a number of specialized institutions like the school, the community, the family, the temple, the church, the library, the newspapers, the magazines, the exhibitions., the radio, the cinema, the television, the internet etc. These institutions are known as the agencies of education. Today is the world of new technology. Many new methods have been used by the new technologies to educate, to inform, to develop well and to improve the strength of the nation. The current paper will focus on the agencies of education that is the newspaper, the radio, the television, the internet which come under one agency namely the Mass Media. It will focus on the impact, uses of Mass Media in higher education and it will also deal on how far mass media has focus on the development of higher education.

### Transformation in Higher Education

Higher education means education beyond secondary level. It helps reform, conduct, behaviours and integrity of personality in the individuals and play key role in accelerating techno-economic modernization. The availability of appropriate and adequate manpower for socio-economic development of a society and the vitality of its moral, spiritual

and cultural values depend largely on the quality of higher education. So it is the apex of all education which is the medium and agency of all kinds of development of the society and promotes human resources development in the society and nation. The progress of society and nation is not possible without proper and effective role of the higher education which has been given a place of special importance because it provides ideas to human kind to shape their future and to sustain all others level of education. The quality of life and pace of development of a nation depends on the ideological climate, perceptions of history, culture, tradition, values, confidence, spiritual thought and above all, capabilities of its people. Its nature has a special role in determining the quality of overall environment. Higher education supplies a wide range of increasingly sophisticated, ever-changing variety of man-power needed in administration, industry, agriculture, services etc.

Higher education in India is undergoing a transformation. This change is mainly because of the expansion of higher education and introduction of many new policies, programme, demands and many more in the field of higher education. There is a rapid growth in numbers of many colleges and universities in the past two decades. Even in the past two decades considerable attention has been drawn towards quality assurance, quality enhancement, and quality evaluation of higher education. The National Policy of Education (NPE) and Programme of Action (POA) were formulated in 1986 to sustain and enhance the quality of higher education in India but they were revised in 1992. The NPE and POA together reflect the determination of the Government to reconstruct the educational system. National Policy on Education 1986 has also greatly highlighted on the quality and excellence of higher education in the country as a instrument for advancing in the development of its citizens and nations in the 21st century ahead. As per the Census of India 2011, India has managed to achieve an effective literacy rate of 74.04 per cent (2011).<sup>1</sup> As against the country's literacy rate stood at 64.8 percent in 2001, this shows a tremendous improvement in the last decade. However with all these policies and programme the scenario of higher

education in the country is not up to its mark. The courses of study, examination system, medium of instruction, problem of admission, teacher and the taught, research and development, vocational education, gender education, physical education, moral education, religious education, standard of education etc. need to be more in focus for the development of higher education in the country.

In Manipur the present scenario of higher education is not at its desirable stage. Although many colleges and some universities have been uplifted, the present condition of higher education in the state needs special attention for its accountability and excellence. Quality measures have to be taken up by providing and developing effective mechanisms of the improvement of higher education in the state. Importance of qualitative measurement should be taken up apart from quantitative expansion and consolidation. The status of higher education has to be developed comparable to national and international level. Certain programme and policies need to be introduced and recognized more in the state.

### **Journey of Mass Media in India**

Mass media is the most powerful tool of communication. Its effects on society are phenomenal. It gives the real exposure to the mass audience of what is happening in the society. It has a constructive role to play for the society. The print media, electronic media and new media are the subsets of mass media. As media is the new mantra of development, it can play the role for solving many social menaces and becoming a force multiplier of the modern civilization. It also plays a very important role in shaping the personality of people. So mass media are the storage and transmission channels or tools for using to store and deliver information or data. It bridges the gulf, broadens the horizon of knowledge and understanding and inculcates scientific temper, builds confidence and maintains mutual respect in this global world. Truly it can be mentioned that mass media act as a bridge in this information world in getting information, education, knowledge etc. It can function as a watchdog, ombudsman, constructive critic, public investigator and expositor, philosopher, guide and even an entertainer of the society. As it can make the individual the importance personality who has adequate place in the society, it can so called the fourth pillar of the nation.

In India the journey of mass media arrived in the late 18th century with the introduction of print media in 1780. With the introduction of "The Bengal Gazzate" by Hicky Augustus James on January 29, 1780 the influence of mass media came in the country. After its introduction many other forms of media like electronic media and new media came in the country. Print media, being the leader over a considerable period of time has now been in the competition trend with electronic and new media which is on the way to reshape to a new society. Radio apart from providing news and views has also developed a flair for entertainment, thereby getting a lot of acceptance. There is also the new media with internet being its flag bearer. Internet has indeed made it possible to disseminate information and ideas in

real time across the globe. In Indian democracy mass media has a responsibility which is deeply associated with the socio economic conditions. The present scenario is not quite encouraging and certain areas need to be addressed. Media organizations, whether in print, audio visual, radio or web have to be more accountable to the general public. It should be monitored that professional integrity and ethical standards are not sacrificed for sensational practices.

### **Mass Media in Manipur**

In Manipur the wave of mass media could be felt only in the early part of 1920s with the introduction of print media by Hijam Irabot. The first recorded event in the history of the print media in Manipur is publication of the journal Meitei Chanu by Hijam Irabat in the mid-1920s. Despite the fact that Hijam Irabot published Meitei Chanu in 1922 as the pioneer in this field but many feels that it cannot be trusted as the first chapter of print media journalism in the state as the said publication was not in printed form. It was a hand-stencilled and cyclostyled by Irabot himself. The State of Manipur witnessed a sudden increase of newspapers and magazines after the attainment of full-fledged state in 1972. There was a big wave of mass media brewing in all parts of the State. The people of Manipur, particularly the 'hoi polloi' started to understand the importance of media in development process. Awareness among the public was visibly increasing. A new gear of media spirit was added to the journalists' community following the attainment of statehood. It is, therefore, no surprising to see the number of newspapers and magazines increasing by leaps and bounds.

### **Impact of Mass Media on Higher Education**

As the 21st century begins many of the incommensurable problems confronting humanity in the 20th century have not been resolved. Among these is the problem of serving higher education. Higher education provides access knowledge to an individuals and groups. It is through this higher education that an individual and groups can make better informed decisions, which can lead to change and development of a nation. In India, the status of higher education is no better comparing with the other developed countries. More policies and acts need to be developed and introduced more in the country. In the last decades the skills and knowledge that are required for the higher education changed rapidly, though it did not reach up to the mark. In the past 50 years, various forms of mass media whether print media, electronic media and new media that of internet had been used as an important tools to assist in meeting significant educational needs. The uses of various types of mass media had been presented as central to the solution of emerging, immediate and other long standing educational needs. The mass media used to extensive and extremely useful materials for education. With the introduction of electronic media, new media and new communication technologies had taken on importance during the past decade. The direct broadcast satellite delivery of audio visual or television programming had the ability to covered the whole geographical areas, while that of internet and new



media offered to a wide range of digital materials and media services. With this dramatic growth of information technologies rapid intensification in communication and development in the field of higher education climbed up to a degree. Progress in mass media in India could be significantly open new avenues for higher education and approached to be an engine for providing crucial knowledge services.

Radio which is a part of mass media is a great medium for communication. Its educative value depends upon various terms. It can communicate with millions of people at the same time, it brings us into direct communication with people who enjoy great prestige with us, it can also tap resources available in any part of the world. As a tool of education, radio plays a very important part. Students in institutes need to be informed faster and more fully the subject that is taught. It gives an opportunity to the students to listen to the subject experts, historians, the authors and the first rate teachers. It promotes the students deeper and wider understanding of themselves, their surroundings and gives them habits of observation. The newspaper is another outstanding passive agency in education. In the modern world it has developed into a social institution. Reading is a very valuable experience. Its value in the modification of behaviour is not so much realized in this country, because it is mostly confined to classrooms, where there is very little relation between the interests of the readers and the material read. But if reading material is related to the expert of the reader, it exerts great influence in modifying his behaviour. Television is one of the most exciting and efficient forms of mass media created by human endeavors. In radio broadcast only audio is transmitted. But in television, we get both audio visual experiences. Therefore, it is considered as a powerful agency of communication. Television brings both audio and visual together and thus makes the experience concrete, real and immediate. It provides real life experience and as a mass media of communication it serves as a means by which all shares a common experience. In this age of constant change, television has opened a new vista of institutional media. By the help of this medium we can solve some difficult problems like shortage of qualified teachers, lack of well-equipped laboratories, the mounting costs of education, problems of providing facilities for the constantly growing school population etc. Television as an agency of education can be used in a variety of ways for effective teaching, for supplementation or enrichment in schools and colleges for eradicating illiteracy, for teacher's training etc... Today, it is the largest telecommunications network. Millions of people have access to the resources on the Internet, and the number grows every month. Students today use internet to get all kinds of information and engage in meaningful research and project. Internet has an agency of education helps the students in various ways. A student can get a hold of a conversation with eminent historians, educationists and teachers. He can get answers of difficult questions from a variety of experts. Students can collaborate with each other from remote and urban locations around

the world and can share their various ideas. Thus the internet makes students learn more in a very easy, faster and less costly. All the above mentioned agencies of education come under mass media. Thus it shows that mass media is a very important agency of education.

Knowledge services had the potential to simplify many different points at which a citizen can interact with the world, with the nation or with the state. Traditionally, these points of interactions had been vulnerable to unscrupulous activities and rent-seeking. However with the introduction of new technology being a part of mass media it could provide opportunities to ensure accountability, transparency and efficiency to the public for the global changes and the idea of development. Let's take up an example. E-governance is one of the governments functioning in which a citizen can be empowered to increased transparency of government functioning, leading to greater efficiency and productivity. It has the potential to ensure speedy delivery, productivity and efficiency of services, making them citizen-centric and ensuring that the right people are served. The benefits of these E-governance includes- reducing the cost and improving the reach and quality of public services, reducing transaction costs and transaction time, empowering citizens and increasing transparency of government functioning and many more.

To be brief, education through mass media has been introduced in classes in many colleges and universities. Let's see on the information brought to us by the National Geographic Channel, Discovery Channel, Animal Planet, CNN and many more. These networks provide us with tremendous information, educate the public and changed the way we think. All these are the efforts of mass media. As it is cost efficient, time conserving and easier to serve it becomes one of the effective tools of higher education. There are also many subjects, topics and areas that are more effective with the use of Mass media. Many formal education programs and informal public information campaigns can draw with the help of mass media for better communication and development of the society. One of the most powerful conceptual models for global change in the past half century is the idea of higher education to make our society more informative, develop and modernization.

#### **The Case of Manipur**

In Manipur, higher education has expanded over the years both in terms of the number of institutions and enrolment of students. The present status of it in the state is not up to the desired standard. The quality of education has deteriorated due to the rapid growth of many colleges uncared for. These colleges which have not proper adequate infrastructures and proper facilities, which is one of the major, cause the decline of higher education. There were also lacks of proper academic atmosphere in the state out of the reasons so happened, lack of students' knowledge and skills necessary to cope with the demands of their courses. Proper information, knowledge, discipline, commitment, communication and many more are also lacking behind. The ideas, technique, process, etc... that can be thought

through mass media in Manipur is under process. The knowledge of many schemes, project has been taken by the education department of the state, but the work is still in progress and has not been applied in the education system. Having situated in the easternmost corner of India, the wave of mass media in the state could be felt only in the early part of 1920s with the arrival of journalism. In a state like Manipur where there is a low progress of media and low technology progress, the impact of mass media in higher education is slow. As the arrival of mass media in the state is very late, the public and the society are less aware of the new technologies and information. One of the major causes of this trouble is having situated in the conflict atmosphere the freedom of functioning of mass media in the state is also very critical. Frequent strike and *bandh* happening in the state is also a major problem. In this new era of globalization, higher education to each and every individual is a must, as without education a society cannot be built up. As many new forms of technologies have been introduced by the mass media, it enables each and every individual to cope up with the modern society. So the new technologies are more informative, reducing transaction time, reducing cost, can communicate with the whole world in a fraction of second. Mass media perform its role as an education watchdog and at the same time can involve helping to build an efficient education system, through improved communication. Mass media is the most effective tool in reaching the newest generation of prospective students.

### Conclusion

In the above discussion, mass media and higher education has a deep relationship in terms of development, informative and communicate with the global process. In a developing country like India and in a developing state like Manipur, higher education is a must, in order to develop and modernize the society. As higher education is the mirror of the society, this mirror must be developed with usefulness of mass media which should be aware to each and every individual and groups. The new age of computerization should be introduced in each and every corner of the world and the old age methods process should be left behind in order to compete with the new era of technology world. It is also important to provide secure broadband infrastructure and associated hardware, software and hosting facilities nationwide with easy access at all levels. As education is a passport for prosperous life and the new things can be productive in the hands of productive people and it can be more prosperous with the new technologies used by mass media. We have accepted the boons of technology as a matter of fact and the life is deemed to be meaningless without these benefits. We are so much used to the technology as a way of life that the new innovations are accepted as a logical consequence. Information and communication technology need to be established in a developing state like Manipur, as the new form of higher education can be achieved/introduced through this new technology. Class room, libraries, laboratories and many

more needs to develop up to the mark. Media technologies should be used as a more effective way of distributing education programme in a state like Manipur where the needs of education are great and technical experts are in short supply. Thus, impact of mass media in higher education should be discussed and analysed in order to fetch up a modernized and develop society. Both the mass media and higher education should clutch together as both of them have a vast interaction to develop a society.

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## EDUCATION DEVELOPMENT IN UZBEKISTAN

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## Abstract

*The present level of scientific, technical and socio-economic development based on knowledge, determines the leading role of education in the renewal of all aspects of society. Education, among the factors influencing the functioning of the human potential, occupies a leading position. Radical reforms initiated in Uzbekistan, called for the creation of the education system that was adequate for socio-economic transformation of society and the perspectives of its development. The concept of reforming education, developed in Uzbekistan, envisages the followings as the most important goals: the reorientation of the education system onto market economy and open society; creation of equal opportunities for education as a condition for raising the standard of living; improving the system of financing education in order to provide a stable and qualified educational services and increase efficiency of resources utilization; improving the management of the education sector. The concept of public policy and the reform of education in Uzbekistan were embodied in the new Law "On Education" and the National Professional Training Program, adopted on August 29, 1997 by the Parliament of the Republic of Uzbekistan.*

**Keywords:** education, development, uzbekistan

Sources of science of Uzbekistan date back to ancient centuries have deep and strong roots. Through concentration, it can serve the whole humanity in achieving the secrets of the nature. Such great scientists as Ahmad Al-Farghoni, Abu Raikhon Beruni, Abu Ali Ibn Sino, Mukhammad Al-Khorazmi, Mirzo-Ulughbek, Alisher Navai who originated from Central Asia, in medieval ages made great contribution in development of such sciences as astronomy, geography, geology, geophysics, mineralogy, pharmacology, botanic, anatomy, human physiology, medicine, chemistry, physics, metaphysics. Uzbekistan flourished as the medieval center and intellectual center of the Muslim world due in part to scholars, philosophers and cultural leaders. Their contributions to world culture in the humanities and sciences were numerous.

#### Briefly about History of Development of Education System:

Uzbekistan was one the Central Asian republics of the former Soviet Union. The standards of education prior to 1991 were quite different in Uzbekistan than those used nowadays. The structure of the education system was represented by: Preschool education - 7 years, ages 1-7; Secondary school education - 10 years, ages 7 - 17; Higher education - 5 years, ages 17 - 22; Post graduate education and scientific research - 3 to 6 years, ages 23 - 34

Apart from this, there were technical schools that provided vocational training, however, their quality and prestige for attendance was not that high. The grading system in all educational institutions was on the scale of "5 to 1", "5" being the highest and "1" the lowest mark. Entrance examinations as well as end of term examinations were either in oral or written form, there was no testing system.

As an independent state, Uzbekistan had to face various issues connected with economic, social and cultural development. One of the burning issues of a new born country in 1991 was training of highly qualified specialists in various fields.

The changes that followed the declaration of independence, the transition to the market economy and the introduction of the concept of democracy into the society could not leave the existing Uzbek education system unchanged. Moreover, the new challenges faced by the country at the initial stage of its independence raised a strong demand for dynamic, open-minded and proactive generation of specialists, who could contribute to the country's speedy evolvement as a valuable member of the international community. In connection with this, a number of educational reforms were implemented, that covered all areas of the education system on all levels which included the change of curriculum in educational institutions, introduction of a new grading system in schools

and universities, creation of new higher educational institutions and introduction of new departments in existing ones to train for the specialties that did not exist before, such as management, marketing, etc.

#### Development of Modern Education System as One of the Priorities:

In Uzbekistan education is given prior importance in the nation equally for every child irrespective of gender. Education at any age is encouraged in Uzbekistan. New methods and technologies are created based on the national needs. The basic principles of Education in Uzbekistan are democratization and humanization. Education of Uzbekistan helps the Government to solve many economic and social problems.

Education in Uzbekistan is supervised by two Ministries, namely the Ministry of Public Education who looks after the primary, secondary, and vocational education; and the Ministry of Higher Education, supervising the post-secondary education.

In accordance with the new structure of the education system, it covers such grades: Preschool education - ages 0 - 6; Primary education - 4 years, ages 6 - 10; Secondary (general) education - 5 years, ages 10 - 15; Secondary specialized education - 3 years, ages 15 - 18; Higher education (Bachelor's degree) - 4 years, ages 18 - 22 approx.; Graduate education (Master's degree) - 2 years; Post-graduate education (Ph. D.) - 3 years

Higher education also became two stages baccalaureate and magistracy, which open way to university institutions - post-graduate or doctoral studies. Besides, the system of continuing retraining and raising the level of skills is being formed.

In due course, quality content of the process of education and curricula were significantly modified with the aim at:

Maximum approximation to the needs of the market economy  
Restoration of historical values, abandoned cultural and spiritual traditions of the people, populating Uzbekistan  
New style of education must consider the best teaching techniques, which ensure high level of requirements to knowledge of pupils/students and educating of diploma holders on maximum high professional level for participation in quiet saturated labor market.

The Ministry of Higher and Secondary Special Education together with the Ministry of Public Education under the supervision of the Cabinet of Ministers of the Republic of Uzbekistan, and according to the Presidential decrees addressing the issues of education, introduced the following changes into the system of education of Uzbekistan during the past 23 years: Uzbek language was accepted as a state language. As a result, the number of subjects taught in Uzbek in schools increased.

Cyrillic alphabet used in Uzbekistan for the past 70 years was

replaced with Latin alphabet for two reasons: Latin was the alphabet long before Uzbekistan became a part of the former USSR.; Latin alphabet is used in many countries at present, and the government saw this measure as helping the process of integration of Uzbekistan into the world community.

Special trainings for adults to learn the new alphabet were carried out at their working places. For the pupils of secondary schools and students of universities the change was easier, since they all knew Latin alphabet from their foreign language classes. As for elementary school students, all their books were re-written with the new alphabet, which meant for them Latin would be the only alphabet of Uzbek language they know, it would be a totally different generation of children born and educated in independent Uzbekistan.

The 8-year compulsory education was extended to 9 years.; 10-year secondary schools were divided into 9-year general education and 3 years of secondary specialized education. The positive side of this reform was that the pupils of secondary schools were given an opportunity to choose between pursuing an academic study and a vocational training after 9-year compulsory education. For this purpose, Academic Lyceums and Professional Colleges were set up, the former providing a deeper study of science, economics or law, preparing the students for the university study; and the latter enabling them to continue studying the subjects of general education, at the same time obtaining a profession, should they choose to work rather than study at university after they have completed their secondary specialized education.

Acceptance of children to elementary schools from the age of 6, using a special entrance examination to determine the level of knowledge the child received in preschool kindergarten. The examination requires a thorough preparation as it has questions about the history of the country, basic knowledge of mathematics, the ability of the child to memorize short poems and retell stories.; Total revision of school curriculum, introduction of new subjects of study: economics, ethics and enlightenment (study of national culture), environmental studies, AIDS/HIV study.; Abandoning written and oral examination for end of term testing and accepting the new testing methods such as multiple-choice questions.; Changing from "5 to 1" grading system to gaining a certain number of units system, taken as a model of developed countries similar to "A to E" system, "A" being the highest, and "E" being the lowest mark.; Abandoning 5-year university education and separation of higher education to 4 years of Bachelor's and 2 years of Master's studies. 3 years PhD study was introduced. Girls and boys are legally considered equal and study in the same classes and schools. Schools are open to all ethnic groups, and minorities in schools are rarely an issue. The academic year begins on the 2<sup>nd</sup> September (the first of September is the Independence Day) or the first working day of September. The academic year ends in June for secondary schools and in July for higher educational institutions.

Uzbekistan pays great attention to education of population. The government policies of Uzbekistan have built up 50,000 new educational institutes annually for the past few years. More schools are yet required to fulfill the public demand. All the educational institutes of Uzbekistan aim at educational development. They follow certain principles as:

Modifying and further improving the educational and socializing content; Developing new schools, curriculum and textbooks; Stress on individual capability and talent; Vocational and Professional training, keeping in mind the changing economical needs; Raising Uzbekistan's educational system to match the international standards.

Population of Uzbekistan speaks in two languages (Uzbek and Russian); most speak in three or more languages. The

study of English language has become very popular ever since independence. Many students speak it well, others, including adults, are vigorously learning it. The switch from a planned to market economy after independence has triggered wide-spread interest in the fields of economics, business, management, international relations, medicine, law, agriculture, education, engineering, the physical sciences, language and literature.

Uzbekistan's independence has created a fundamentally new education system that successfully reveals talents and prepares professional personnel. In our country, for young people with bright thoughts and aspirations - all roads are open. And it is no coincidence, because those who are now sitting at their desks will support the country tomorrow.

All this change is to be based at the root of the 1997 National Program for Personnel Training. The principal difference from the current system of many of the world is that the twelve-year compulsory free education scheme nine years of schooling and three - in college or high school, enables every child to learn a profession and specialty. Government pays a great attention to the implementation of this rule.

On the country's social sector about 60 percent of the state budget is allocated. Almost half of these funds are spent on the development of educational institutions. Only this year 756 educational institutions, children's music and art schools, children's sports facilities were built, renovated and repaired. The state continues to invest in education, because these investments will necessarily be justified. After development of the country there is nothing more effective when every citizen engaged in the business for the benefit of the people. Today about 10% of graduates of secondary specialized educational institutions continue their studies in colleges and universities across the country. Efficiency increases at times when people come to work, having strong theoretical and practical skills. Annually, about 53% of state budget is appropriated for further improvement of education system in the country. Educational institutions are supported by banks. They, in turn, give microloans to graduates wishing to engage in business activities, concessional to buy equipment to start a business. A priority is integration of higher education and science. Over the past two years under the jurisdiction of the leading universities and institutes received ten research centers and institutes of the Academy of Sciences of Uzbekistan. There are financial incentives for young scientists. Annually the Committee for Coordination of Science and Technology conducts among scientists under 35 a contest of scientific projects. Most topical studies receive state grants.

#### Conclusion

Uzbek national education model includes all stages of education and upbringing of personality, preschool education, primary and secondary education, vocational education, higher education, raising skills/training and further education. The country carries targeted activity for basic and professional education of talented children and youth overseas. Since the very day of Independence of Uzbekistan, thousands of young people have undergone courses on different prestigious programs or have been educated in solid universities abroad.

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## INDIAN LIBERALS AND INEFFECTUAL ROLE IN POLITICS

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### Abstract

*Several influential, but intellectual persons constituted the Liberal party during the period under review. They held many conferences under the auspices of the National Liberal Federation of India. The Liberals generally blamed the government for their unfortunate position. The paper presents the facts of liberals and their role in politics.*

**Keywords:** *liberals, politics, ineffectual role*

Several influential, but intellectual persons constituted the Liberal party during the period under review. They held many conferences under the auspices of the National Liberal Federation of India. These conferences were presided over by very prominent persons, who were known for their outstanding abilities. Among them, the beginning was made with Surendra Nath Banerjee in the year 1918. Some of the best and most experienced brains called themselves liberals and they were willing to participate in the Liberal councils. What, then, were the reasons of their ineffectual roles and the apathy towards the Liberal Party?

The Liberals generally blamed the government for their unfortunate position. Firstly, there was some reality in such accusation, The Party was constituted in the year 1918 as a 'break away' from the Congress when the Congress rejected the Montagu-Chelmsford reforms of 1918. Its initial viewpoint was that though the Reforms of 1918-19 did not offer as much as they should have, they contained the promise of enough real advance to warrant patriotic Indians' sincere attempts to work them. The Liberals thought that they would be able to modify the working of that part of the system over which under the constitution they had no control. Secondly they also expected to establish themselves in the eyes of the countrymen. They would also be able to prove that the rash methods and undue haste of the Indian national Congress were unnecessary. Accordingly the Indian Liberals took office and at first exercised some influence on the course of the government. Of course, they got valuable support from Edwin Montagu, the Secretary of State for India. In fact, he was a pillar of strength to them, all the time that he was in power.

It appears that Montagu has really an ardent desire to lead India towards full self-government. "You must govern India," he wrote to Chelmsford, "as a country on its way to self-government and not as a dependency unless all the work which we are doing is merely to be a sham." But in this desire Montagu was alone. He was the member of a coalition government in England. It, as he himself described, consisted of the whole of the Conservative Party, a few Liberal members disowned by their organization and a few Labour members repudiated by the Party that they presented. However, to the Conservatives Montagu had already been a figure of dubious motives whose highest crime was the 'Reckless surrender of India to the

revolutionaries'. It was, indeed disheartening to him to find a lack of interest and enthusiasm in the affairs of India. Montagu was really a 'tragic figure' from 1917, groping his way almost alone by the flickering light of liberalism on the wane.

Montagu had a fight against heavy opposition at home in piloting the Government of India Bill through its final stages. The Liberals rightly thought that Montagu was a genuine friend and he meant well by India. At the very outset, they, therefore, put their trust in him. They also felt that with Montagu's firm patronage from London and with their own presence in various ministries in India, they would exercise a constitutional presence which would hasten the process of constitutional evolution. This faith was abundantly justified. Montagu recognized the great help that the Moderates in India had rendered him by supporting the reforms of 1919, and he advised Chelmsford always to encourage the Moderates, to put fresh life into them so that they might be strengthened to attract the waverers from the extremist camp who must not be left sitting on the fence. Montagu also advised Lord Reading to take the Moderates into greater confidence of the government and to lend a more sympathetic ear to their appeal.

The news of Montagu's resignation in March 1922, therefore, came as a serious blow to the Indian Liberals. Thenceforth, they could no longer hope for any support from the British official circles. Their impact in Indian affairs started steadily to dwindle. It was true that the Labour party, which had committed itself against imperialism and had repeatedly promised to grant India her right of determination, came to power in Great Britain with Mr. J. Ramsay MacDonald as the Prime Minister in 1924 and again in 1919. The Liberals' opinion expected that the Labour party would do big things for India. However, the attitude of the Labour Party, at that time made them realize that, after all, where the question of Indian self-government was considered, there was very little to choose between one British party and another.

It is worth mentioning that without the moral support of White Hall since Montagu's fall from power (Wedgwood Ben's term of office may be ignored) the Liberals in India began to find themselves in a difficult position. They were now confronted with a Secretary of State who presented neither Montagu's vision nor sympathy. For the remaining period the Liberals had to face a Pusillaninous Government, afraid



of the rashness of its own promises and 'bent on nothing so much as on taking back in practice what it had already conceded in theory'. Under such circumstances 'the cooperation of the Liberals, depending as it did on the political life of one man, was a political mistake of first magnitude.

Up to the time of Simon commission, the Liberals in India were passing through a very poor situation; many of them were passing time occasionally taking part in various conferences with the motive of expediting the progress of the constitutional development of India or devoting their energies to such matters as ameliorating the conditions of Indian overseas. When the government of India declared the setting up of a purely parliamentary commission in the autumn of 1927, the Liberals joined the Indian National Congress in declaring a boycott. The Liberals could get a fresh lease of life with Irwin's announcement on the Round Table Conference on dominion Status in October 1929. They understood at the same time very well the need of securing the co-operation of the Congress, for the acceptance of the announcement by them would have little practical worth in India if the congress Party was not reconciled to it. In the autumn of 1929, the Liberals re-emerged in Indian politics in the role of mediators between the government and the Congress. However, all their efforts at securing the co-operation of the Congress were rendered futile by the reactionary debate in British parliament, and the subsequent rough handling of the situation by the government of India. The Liberals finally left for London amidst maledictions of the Congress sympathizers. But they knew from the very beginning that no constitution could be worked in India with active hostility of the Congress because it was the most effective and well organized party in India at that time. Being in close touch with the Congress circles, the Liberals were sure that there was growing body of opinion among them which, while dissatisfied with the constitution and unprepared to bless the proposal of the Round Table Conference, would like to capture the machinery so as to prevent reactionary elements from doing so and for that vision they would enter the Legislature. Sapru thought that they should be better inside the constitutional framework and face responsibility then remaining outside. The sad experience of the Swarajists' non-cooperation from within the Council during 1924-26 was not forgotten by them. They were sure that once the Congressmen went in, they would work upon the Constitution agreed upon.

Thus while the Conference was in session and more especially during its later stages the Liberals' policies had been directed at the one end to try to influence the deliberations of the Conference and the joint parliamentary Committee in their favour as well as on the other side to impress upon the Viceroy of India the need of the repeal of repressive ordinances. It was also to impress upon him to release the political prisoners. If these demands were met, it would facilitate the Congress participation in the conference. It

would also secure their acceptance of the constitution which would emerge out of its deliberations.

However, all their efforts proved meaningless. for it appears that the policy of both the Secretary of State, who was hard pressed by the Tories at home, and the Viceroy, similarly pressed by reactionary officials of the government of India, had been characterized by a contemptuous disregard of the wishes and opinions of the Liberals. They displayed a tendency to lean more and more upon their two reactionary props—the princes and the various minority factions, especially the Muslims. The latter appeared to fall in line with their opinion. The Liberals were distressed to say that the die-hard politicians in Great Britain and bureaucrats in India had reverted to the time honoured policy of 'no truck with the Congress' from which the Gandhi-Irwin Pact' had been a temporary deviation.

It must be admitted that the Liberals had time and again been treated in this manner by the government particularly since they went out of office in 1923. Sapru rightly made a complaint: "We Liberals are being blamed both by the people and the government. My feeling is that government recognizes us a Party only when we are on any question in agreement with them, otherwise we are dismissed a Party with no influence and no backing." Indeed, whenever the government of India found itself in trouble, it turned to the Liberals for help. The Liberals also lost no time in responding to such a situation, being assured of government's sincerity they began negotiations galore and devised legion formulas. While their advice was being considered, they would be hopeful that their method would prove most effective in helping to free India from the foreign domination. However, reaction would not be long in coming. The Liberals would soon be asked to retire from the scene. They lamented that notwithstanding their tried policy of co-operation with and confidence in government, the liberals should be treated in this manner. "We feel like cardinal", Wolsley said, the most imminent among them.

For another reason also the moderates had blamed the British. If the British had conceded reforms in time, the Congress policy would not have taken such a radical turn. Indeed, nothing was more fatal to the moderates' position than an Indian policy of vacillation. From 1916 onwards the old moderates had been steadily losing their influence in the Congress. As Lord Sinha, who had presided over the session of the Indian National Congress in 1915 had predicted: "Government's long delay in making its intention clear had undermined the position and authority of the moderates." Both in 1919 and in 1935 the reforms had come after long delay, which discredited the Liberals in popular esteem. The Liberals' position was bound to be somewhat shaky and embarrassing whenever the concessions they asked for were refused or postponed. They deplored that the government should be playing into the extremists' hands by repeatedly declining to listen to their voice. It was a vicious circle in which the Liberals gradually found



themselves involved. For a while the attitude of the bureaucracy towards legitimate Indian aspirations stiffened the Congress attitude in India, the utterances and activities of the Congress extremists in turn hardened the heart of government against any material surrender of power. For all these ills the Liberals continued to blame the government for its stiff naked attitude for their obtuse method of 'riding roughshod over the delicate susceptibilities of the Indian people. They also censured the Congress for having opened Pandora's Box of mass politics, which it could not contain or control.

But why, knowing that their advice would rarely be followed by the government, did the Liberals allow themselves to be treated in this manner? The Liberals took it as a matter of duty towards the country to help avoid clashes and to do what they could to prevent direct conflict between the Congress and the government. They thought that they should put their case properly time and again. They should hammer it into the consciousness both of the people of India and the British government. They took great pains in mastering the facts of the case and presenting it in a very sober, well balanced form before the government and the public.

The Liberals thought it their pious duty to remain true to their pledge to Montagu. It appeared that Montagu had never held any high opinion about Chelmsford and the government of India. Montagu had lamented again and again about their complete lack of any political sense. He found the Indian politicians ready to co-operate with him. A kind of personal friendship developed between him and them. Surendra Nath Banerjee was a great friend of Montagu. However, of all the Indians, Lord Sinha knew Montagu best and next to him came Sastri and Sapru. It seemed that he entered into an understanding with them that they should stand by the reform and help the government whenever they could. As a result, the Indian Liberals had been loyal to their pledge and hoped that they would be able to influence the course of the government.

Another fact which counts for the fate of Indian Liberalism was that the Liberals were oblivious of the necessity of any proper political organization. It can not be denied that despite their wealth and their far-reaching influence among prominent personalities both in British and in India, the Liberals never had a real organization or an effective machine of propaganda in the sense in which the Congress or the Muslim League had. They were blissfully ignorant of all these so much so that any man who did not belong to any other Party could call himself a Liberal. There were only two newspapers in the whole country and one of these, 'The Leader' was increasingly becoming more radical in its views. After Surendra Nath Banerjee's demise, the Party's leadership passes to the United Provinces and Bombay which henceforth become the stronghold of the Liberal Party in India. However there were endless jealousies and countless personal quarrels. Chitamanii, Kunzru and Stalved led one group. This group showed a distinctly Leftist tendency. Soon, Sapru, in disgust,

resigned his membership because the Party could not make up its mind about any definite course of action. So all they could present to Indian and the world was a disunited front. The Liberals had thus made a pathetic exhibition of themselves.

It was inevitable, however, that the influence and effectiveness of the Indian Liberal Party in organised politics should wane as extremist views began to dominate the scene and inter-communal antagonism overshadowed the land. For the appeal of the Indian Liberals was always an appeal 'to moderation, to precedent which had been the characteristic of British political development and to an equitable settlement of internal communal claims based primarily on the objective condition of the Indian situation and broad logical principles of equity'. However, the emergence of the Liberals created a separate political climate in the country. Reforms previous to the year 1919 had not made very great impact on India; Montagu had intended his 'reforms to disturb the placid, pathetic contentment of the Indian masses'. In this desire he succeeded to a great extent. The characteristic feeling of unsettlement caused by the First World War and followed by such brutal incidents like the Rowlatt Act and Jallianwala Bagh massacre awoke the people from their long slumber and then Gandhi appeared on the political stages. Gandhi's programme and activities created political excitement in the country. Politics was no longer confined to the intellectual classes alone. The Liberals could not identify themselves with the aftermath of this process that they had to deal.

However, despite this radical change in political atmosphere, the Liberals had first hoped that they would be able to influence the course of events. For some time this hope was justified. In the early days of reform though the Indian Congress at first refused to work, it slowly saw the mistake of leaving the fields of the Liberals alone. The rise of the Swarajya Party in 1923 clearly meant, in reality, a relapse into constitutionalism. In the legislative assembly and the provincial councils the Swarajya had in practice played the role of a constitutional opposition. By the mid twenties the Liberals, responsivists, independents, all were for accepting office and working the reform for what they were worth.

There were also some minor organizations and some other individuals with local and sectional influence for instance, Justice Party of Madras, the Indian Christians, some prominent landowners, Zamindars and some Muslims whose views were not completely different from those of the Liberals. However, no attempt could be built upon all those Liberal elements—the independents, the responsivists, the Liberals, the Justice Party, landholders, moderate type of Muslims and some others who differed in no material sense from one another; a constructive cohesive party, non-communal, all-embracing and 'stable enough to assume the immense burden of self-government'. The reason, no urge formally to coalesce with the Liberals. The trouble about these people was that, as the government rightly saw the

situation, there was always communal feeling or personal jealousy getting in the way of any possible teamwork in order to secure any purpose which they might have in view. But though no such middle party could be constituted based upon all these elements, the Liberals had fairly succeeded in justifying their initial viewpoint to all those groups in one respect viz. the reforms were to be worked, for stalemate led nowhere.

The Liberals, in fact, become anxious from 1920 onwards when they notice the quick growth of the youth movement as well as the spread of socialistic and communalistic ideas. The youth movement thought in 'apocalyptic terms of new world emerging out of cataclysm, and it despised the bourgeois objects and methods of the Indian National Congress as much as the Congress had spurned the moderation of Indian Liberals'. Once the young men had come to dominate the Congress, there is no room for men of the liberal sedate outlook. The Liberals saw that neither side in their hearts of hearts wanted their formulas for action or their devices for exit. Indeed, when there was one side determined to secure power and the other side determined not to yield any, when the Congress was firm to organize itself as a parallel government and the government of India was hardened against any material surrender. There was no room for any carefully devised phraseology of Liberalism which smacked of Victorian consensus of fundamentals. The Liberals gradually found themselves encircled by an uncongenial atmosphere from which they could desire no encouragement.

However, of their faith was shaken it was a temporary weakening, for in 1931 they again persuaded the Indian National Congress to agree to take part in the proceedings of the Round Table Conference and when the Act was finally passed in the year 1935, they found the Congressmen ready to enter the provisional legislature. After that they went to the background.

### Conclusion

The Liberals were destined to play a tragic role upon the stage of Indian history. They followed a course of action which, for the circumstances in which they worked, would perhaps have met with greater success. The current of public opinion was against them; instead of swimming with it, as was done by the Congress, they swam against it. Hence the fate of the Liberals in India reminds one of the similar fate of the Liberals in England after the fall of Lord George. Placed between conservatives and Liberates, the English Liberals too petered out. As Major Milner, the labour MP one told Chintamani in 1932, "You are between two stools, and will be crushed as the British Liberals have been". Hence the methods followed by the Liberals were outstripped by events which had thrown them in to the background.

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## THE NEED FOR DESIGN APPROACH IN OPPORTUNITY IDENTIFICATION STAGE OF PRODUCT INNOVATION

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### Abstract

*The role of innovation in organisational growth and survival is often emphasised, but the role of design in the critical phase of opportunity identification stage of innovation is yet not widely recognized. The broadening scope of invention and idea generation for opportunity identification beyond technology and marketing; the recognition of creative opportunity identification possibilities and the recognition of design beyond its role in new product development leads to interesting possibilities. Design is already playing an important role in new product development. It is argued that extension of this role to the opportunity identification phase will not only help in arriving at new opportunities but will also enable seamless integration between opportunity identification and new product development. A planned approach to opportunity identification through design thinking and approach can lead to establishing systems for continuous innovation.*

**Keywords:** *Design approach, Opportunity identification, product Innovation*

Innovation is being increasingly recognized as a key factor for the growth of enterprises. As Drucker puts forth, every organization – not just business – needs one core competence: innovation.”From an economic perspective, innovation is a matter of life and death. A company must innovate today if it wants to be in business tomorrow.” (Esslinger, Hartmut, 2009) Innovation is often defined as invention plus implementation/commercialization. Innovation involves both opportunity identification and opportunity evaluation. Opportunity identification is considered to be the explorative creative phase which results in ideas and concepts whereas opportunity realization phase includes evaluation and planning for commercialization. In fact, it is even argued that the entire strategy innovation process should be considered as the fuzzy front end of an overall strategy creation process, leading seamlessly from opportunity identification and creation to opportunity evaluation and integration (Johnston, Robert, 2013).

The creative component of the innovation process is often emphasized. It is further stated that although sometimes innovation in organizations may happen through chance, considering the criticality of the same, innovation cannot be left to chance but has to be planned. In the current scenario, wherein there is cut throat competition it is even more imperative to come up with new products on a continuous basis. A planned, systematic approach to innovation, especially in the opportunity identification stage is required. The role of design in new product development i.e. designing and developing new products based on design briefs is well recognized. It is argued that design with its characteristic planned, creative approach can play a critical role in opportunity identification for product innovation

### Innovation

The root of the word ‘innovation; is from innova or ‘new’. Innovation is an invention that has been commercialized (a definition first articulated by Chris Freeman and Luc Soete

in their book the economics of industrial innovation). Innovation is defined as invention plus implementation/commercialization wherein invention involves the process of taking an idea and developing it into a concept, which finally leads to innovation (Gaynor, 2000). The importance of innovation for business in the current competitive world is reflected in some of the definitions such as ‘Innovation is the constant search for fresh approach to every aspect of running the business’ (Mark and Spencer, 1996). Innovation is important for sustaining and growth of an organization. ‘Innovation is the central issue in competitiveness’ (Porter, 2000). As Drucker reiterates, except for innovation and marketing, the remaining activities of an organization are only expenditure. Thus the importance of innovation in today’s competitive times is often reiterated.

There are various types of innovation. The generally accepted innovation categories include incremental, discontinuous, architectural, system, radical and disruptive. The simplified classification includes three categories: incremental, new to the market/society and breakthrough. Incremental innovation is described as improvements to current products, processes, services and systems. (Gaynor,2000) Breakthrough innovation is often the result of technical invention whereas new to the market innovation, innovates to fulfill the needs of consumers for the new markets. A majority of innovation happens in incremental innovation – they often reflect changes in market dynamics and issues related to product differentiation to cater to various market segments. This enables industries to sustain their product range for as long as possible.

The process of innovation reflects this approach. Innovation lies on a continuum of events that begins with a raw idea, which is developed into a concept, which then yields some type of invention and which is finally implemented and commercialized (Gaynor,2000).Innovation has focused on two strategies: quantum leaps in product performance by breakthrough technologies and improved product solutions by better analysis of user need. The former domain of



radical innovation is pushed by technology and the latter domain of incremental innovation is pulled by the market. (Verganti, Roberto, 2009)

Further, it is recognized that Innovation involves both opportunity identification and opportunity evaluation phases. Opportunity identification is considered to be the explorative creative phase which results in ideas and concepts whereas opportunity realization phase includes evaluation and planning for commercialization. When an invention is done, the second half of innovation begins: turning the idea into a business success. (Gifford Pinchot, 1986) It is being increasingly recognized that innovation includes the whole organization.

### **Opportunity identification**

Opportunity identification is considered to be the explorative creative phase which results in ideas and concepts. Opportunity implementation is given a lot of importance since it involves finances, organizational infrastructure, organizational resources and planning. Opportunity identification stage is critical since the seed of innovation for new product development takes place during this stage. Opportunity identification can itself happen in many ways: top down approach wherein the top management decides on the opportunity idea and then involves other people from the organization to explore the possibilities. Conversely, in the bottom up approach, people from within the organization arrive at opportunity ideas and propose the same to the management. (Gaynor, 2000).

The greatest weakness in product innovation is the fuzzy front end. New product development has become a core business activity that needs to be closely tied to the business strategy and a process that must be managed through analysis and decision making. Companies generally begin work on new product opportunities often called pre phase zero of the front end process when they first recognize in a semiformal way an opportunity (Khurana and Rosenthal, 1997). A process of strategy innovation should be the fuzzy front end of an overall strategy creation process, leading seamlessly from opportunity identification and creation to opportunity evaluation and integration (Johnston and Bate, 2003)

### **Process for identifying opportunities**

A lot of study has been done in the various aspects of innovation: specifically opportunity implementation as well as the managing the innovation in a firm. However although opportunity identification stage is seen to be a critical phase, there is little study in terms of a planned process which would help in opportunity identification. Some of the existing innovation process models deal with recognition of opportunity followed by concept-product formulation (Roberts et al).

Robert Cooper introduced the stage gate system for moving

product innovation to the marketplace. The six stages include problem identification, ideation, conceptualization, development, testing and launch wherein problem identification begins with identifying a particular problem or opportunity. This model is similar to the Robert and Frahmman model which is also a six stage linear process starting with the recognition of the opportunity idea to the technological diffusion stage. It includes recognition of the opportunity, idea formulation, problem solving, prototype solution, commercial development and technology utilization and /or diffusion. It is often argued that innovation is not a linear process. Sometimes recognition of opportunity and idea generation might happen simultaneously.

Quinn refers to innovation process as controlled chaos and suggests that independent innovator as well as bottom up innovation in organization is more innovative than organizational innovators. Van de van and his associates after doing longitudinal research in diverse industries for many years found that innovation involves dealing with unknowns, unpredictable events and ill defined and ambiguous goals. Van de Van believes that opportunity identification happens intuitively and acknowledges that innovation does not occur through some linear or mechanistic process but shows that common elements such as initiation, development and implementation exist in the innovation. He subdivides innovation into initiation period, the development period and the implementation /termination period. According to him, the initiation period is the time of churning ideas and trying to develop the same into workable concepts.

Internal or external trigger may shock the industry into recognizing some significant opportunity. The majority of creativity takes place in the idea concept invention stage or the ICI stage (Gaynor, 2000). There are many idea generation methods. Some of these are followed to come up with a number of ideas. Discussions and critical feedback narrows down the number of ideas that could become opportunities. However there is a lack of clarity on how ideas actually become opportunities. There is also a lack of understanding on how opportunity areas lead to (product) ideas.

### **Design and design thinking**

Design is a planned, structured process to arrive at creative products, systems and services. Designers today are dealing with complex realities while working on design projects. They need to deal with not only specific problems but also aspirations, issues and concerns. The initial phase of design is often termed as fuzzy front end of design because of the vague mixture of intentions and possibilities. It is expected that opportunity identification in design would help in bringing clarity to the 'fuzzy' initial phase of design and provide creative design directions for designing products. However, there exists very little work in terms of



methodologies/conceptual framework for this stage of design. Opportunity identifying process in the initial phases of design does not seem to have been extensively studied and is still seen to be 'Fuzzy'. The fuzzy front end is represented by Darrel Rhea in his article on 'Bringing clarity to the fuzzy front end' as a cloud with a vague mixture of ideas, trends, requirements etc. which gets into the funnel and through insight gets churned out as a product brief. The first phase of the inverted cone involves discovery and observations, forecasting and identifying opportunities.

This leads us to design and how design and design thinking can make a difference in opportunity identification for innovation. Design is a planned process. It is often understood as creativity with a purpose i.e contextual creativity. The importance of designers role in the initial phase of design could be quite critical to the shaping of the project. Designers are not just problem solvers but opportunists who can join others at the initial moments of an effort or a situation. (Sabatino, Peter Di, 2005). The term "design" itself is derived from its Latin root 'designare', meaning to mark out, trace, denote, or devise. In French the word *dessein* means plan or purpose. The English word design can function as either a verb or a noun. As a verb, it means to mark out, nominate, appoint; to plan, propose, intend; and to draw and sketch. As a noun, it represents a mental plan and artistic shape. The term design takes multiple meanings in its context of use (Bucciarelli 1988). As a noun, it may refer to an artifact. As an act of planning and conceiving it can be applied to a diverse range of human experiences. Design thinking is also integrative in nature i.e. It is able to integrate various disciplines to come up with something new, novel. Simon (1969) proposed that the science of design could form a fundamental, common ground of intellectual endeavor and communication across the arts, science and technology. The study of design could be an interdisciplinary study accessible to all those involved in the creative activity of making the artificial world.

Esslinger from Frog design categorizes designers into four schools of design. According to him, the first school is represented by classic designers who generate individualistic-artistic statements that balance an appeal to the heart with an appeal to the mind. The second school of design is represented by artistic designers who rely on visceral methods to create products with spectacular visual appeal. The third school is made up of those who work in anonymity on corporate design departments. Esslinger further states that internal designers working in corporate design departments are often mismanaged and underappreciated. They work in organizations that have no consistent approach to incorporating design into their strategic plans or processes and they report to marketing and engineering managers who have a minimal understanding of the potential of

design. Therefore the forth school of design which is made up of highly creative, strategic designers who are fluent in convergent technologies, social and ecological needs and business are critical for business leaders pursuing an innovation driven business model. The designers working in this area are able to feel and see opportunities that the other may not be able to identify.

This design approach may also help companies who do not face specific product related problems. Companies and other organizations don't so much seem to have "problems" that need to be solved, but situations or predicaments that they have to deal with. (Patrick Whitney). This requires an approach which to some extent intends to identify opportunities with a futuristic perspective. There are certain approaches in design such as V.I.P or vision in product design which are futuristic in nature and which try to envisage user-product experiences for the future. Everyone designs who devises courses of action aimed at changing existing situations into preferred ones (Simon 1996). Vip is a design method which is context driven and interaction centered. Designing according to Vip is about exploring what is possible tomorrow instead of solving the problems of today. (Hekkert, Paul, 2011) It is believed that Designing is not only the making manifest of some physical object but foremost the generation and development of the idea that provides it with a *raison d'être*. The method is unique as it enables designer to embrace three values: freedom, responsibility and authenticity. Artemide has followed a strategy of design driven innovation that is radical innovation of meaning. Meaning is driven by why people need a product than 'what they need in a product. (Verganti, Roberto, 2009). This perspective brings forth interesting dimensions for opportunity identification. Opportunity identification is also considered from the product family perspective which is a part of design thinking in terms of new product development. A product platform, as described by Marc Meyer and Al Lehnerd, is a set of subsystems and interfaces that from a common structure from which a stream of derivative products can be efficiently developed and produced'. In this strategy, the platform is the innovation: the rest is the execution.

#### **Need for design in opportunity mapping**

Design thinking has a critical role to play in identifying opportunities and strategies for industries. There are many industries/institutions which are faced with the challenging task of deciding "What new product/ service/scenarios can we come up with?" Design methods and approaches can help towards bringing about a collective and creative approach towards opportunity identification within industries. The problem of a lack of design approach in arriving at opportunities is perhaps more accentuated in entrepreneurship. Why is design approach required for opportunity identification? What are the aspects of the current



scenario which has led to considering design as a significant factor for opportunity identification?

**Widening scope of innovation:** Innovation is exploitation of technical invention. Traditionally, this has led to the setting up of massive research and development departments to come up with new inventions which could then be exploited. Although this approach worked well in a closed protected environment, this model also has many limitations. A lot of funding was used for R& D activities often with few successful inventions. These inventions were patented, protected and exploited to come up with proprietary new products. Often, entire business would sustain on a single new product for many years. Increase in competition and dynamic market and social trends has changed the scenario considerably. New demands of consumers are being fulfilled by new products in short time spans. Organizations have realized that innovations need to happen constantly to fulfill the dynamic needs of the consumers.

Just as exploiting technical inventions was one of the prime means of arriving at product innovation, identifying and exploring new markets became an important factor for innovation. Understanding the various market segments with the objective of fulfilling the needs /desires through new product development became important. Product differentiation for various market segments also became an important factor in product innovation. Apart from technical and marketing factors, other changes also started playing an important role in innovation. Technological changes, socio-cultural changes, changes in product supply chain and environmental issues are a few contextual changes elucidated. (Chiapponi, Medardo, 2005). The approach to invention and raw ideas has over the years broadened its scope beyond science and technology. Innovation's criteria is not science or technology, but change in the economic or social environment, a change in the behavior of people as consumers or producers (Drucker,2000) . As discussed, design considers multiple perspectives. The broadening of scope of innovation covering various sectors has enabled design to play a role in the same.

**Creative aspect of innovation:** The invention process covers all efforts aimed at creating new ideas and getting them to work. (Roberts,2009). As Levitt says Innovation may be viewed from at least two vantage points: 1. newness in the sense that something has never been done before 2. Newness in the sense that something has not been done before by the industry or by the company now doing it. (Gaynor,2000). Invention and innovation involves creativity. They require thinking about what could be, about doing things differently and about combining known facts into new combinations. Strategy innovation requires a creative process, not an analytical one. Strategic frontiers are to established companies what corporate visions are to start ups. The goal of a vision should be to identify what the company would like to

achieve that will somehow have an important impact. ( Johnston and Bate,2003) Innovations often result from combining things that have never been combined before.

The strategy innovation process starts with tomorrow and then plans backwards to today. To be successful, the search for new business opportunities cannot be constrained by today's corporate conditions or market conditions. (Johnston and Bate,2003). Therefore it is imperative to consider the future rather than the present alone while identifying opportunities. After identifying potential new business opportunities in the future, planning works backwards to identify the key strategic milestones to get there. New growth opportunities acts as a future pull. Strategy innovation becomes the fuzzy front end of the strategy creation process within a company( Johnston and Bate,2003). Design with its visionary futuristic perspective is well suited to arrive at opportunity areas which can pull innovative ideas.

**Rapid changes in technology:** One of the factors accounting for decline of products and the shortening of life cycles is the rapid change in technology. Technological change puts extreme pressures on companies to innovate or decline. Doing traditional market analysis may not help innovation which requires a new way. The creative act consists in combining previously unrelated structures so that you get more out of the emergent whole than you put in (Arthur Koestler) This is the reason design becomes an important criteria. Innovation's criteria is not science or technology, but a change in the economic or social environment. (Drucker, 2000). In order to come up with continuous innovation, technology cannot be the only answer. Design with its ability to extrapolate at both macro and micro level is ideally suited to arrive at opportunity areas incrementally as well as at breakthrough levels.

### Conclusion

The motivation for investigating this area was to gain a better understanding the role of designers and design thinking in identifying opportunities for product innovation. It is quite clear that innovation is critical to industries and organizations and that they need to structure and integrate the process of innovation in their organizations in order to come up with continuous innovation. Considering the changing parameters, the significant role design can play in opportunity identification phase is established. The role of design and design thinking in arriving at new approaches to opportunity identification through creative, visionary approach is shown. It is expected that the integration of design in the opportunity identification phase will result in creative opportunity identification that can be seamlessly integrated to new product development. Organizations would benefit greatly through incorporating design thinking and approach to arrive at new opportunities areas that would lead to product innovations.





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## IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ON INDIAN BANKING SECTOR

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### Abstract

*Information Technology has been one of the most important factors for the development of mankind. Information and communication technology (ICT) is the major advent in the field of technology which is used for access, process, storage and dissemination of information electronically. In recent times, Indian banking industry has been consistently working towards the development of technological changes and its usage in banking operation for improvement of their efficiency and customer's satisfaction in today's world. Banking industry is fast growing with the use of technology in the form of ATMs, on-line banking, Telephone banking, Mobile banking etc. Therefore, taking an advantage of information technologies (IT) is an increasing challenge for developing countries like India. Hence, the present research paper has made an attempt to study the role of Information and communication Technology (ICT) and its importance in the development of Indian banking sector.*

**Keywords:** *Information Technology (IT), Banking Industry, Customer Satisfaction, Network.*

Technological sophistication in the banks is aimed at not only providing better services to customers but also to attain competitive advantages among them. Development of a sound and adequate ICT has become a necessity to meet the challenges of growth and diversification of banking industry. It has given the banks an opportunity to offer a wide range of services to their customers. The usage of Information Technology (IT), broadly referring to computers and peripheral equipment, has seen tremendous growth in service industries in the recent past. The most obvious example is perhaps the banking industry, where through the introduction of IT related products in internet banking, electronic payments, security investments, information exchanges (Berger, 2003), banks now can provide more diverse services to customers with less manpower. Seeing this pattern of growth, it seems obvious that IT can bring about equivalent contribution to profits.

To get the benefits of enhanced technologies, Indian banks are continuously encouraging the investment in information technology (IT), i.e. ATMs, e-banking or net banking, mobile and tele-banking, CRM, computerisation in the banks, increasing use of plastic money, establishment of call centers, etc. RBI has also adopted IT in endorsing the payment system's functionality and modernisation on an ongoing basis by the development of Electronic Clearing Services (ECS), Electronic Funds Transfer (EFT), Indian Financial Network (INFINET), a Real-Time Gross Settlement (RTGS) System, Centralised Funds Management System (CFMS), Negotiated Dealing System (NDS), Electronic Payment Systems with the 'Vision Document', the Structured Financial Messaging System (SFMS) and India Card – a domestic card initiative, implemented recently (2011).

### Review of Literature

In order to improve operational efficiency, quality of customer service and to speed it up, the Committee on public Sector banks (1978) "recommended a judicious use of computers for selected services of banks. Apart from an increase in

efficiency, it will reduce the load of routine and repetitive work and leave sufficient time for staff to provide better customer service. In their study 'Services Marketing - Challenges and Strategies', Dr. Chidambaram and Ms.K.Alameleu (1996) suggested that banks should become technology friendly by investing in technology a bank can carve a niche for itself. Well-furnished premises are a must for the satisfaction of both employees and customers. Professionalised, Well-trained and motivated employees will improve the marketability of a bank.

Gaston Leblanc (1990) studied customer motivations towards the use and nonuse of an Automated Teller Machine (ATM) customer of a financial institution. An analysis of results based on demographic variables revealed significant differences between users and nonusers in terms of education only. Results also show that convenient accessibility of a financial institution and avoidance of waiting lines is the principal reasons for using the automated teller. Robert Rugimbana and Philip Iversen's study (1994) was to determine the association between consumer ATM usage patterns and their perceptions of ATM attributes by identifying those variables that distinguish users and non-users. The results based on a survey of 630 retail banking consumers from two separate Australian banking institutions suggest that successful marketing strategies must focus on the most important attributes of ATMs as well as identify different user groups and develop strategies to maximise their patronage.

### Information and Communication Technology

Information Technology (IT) is the automation of processes, controls, and information production using computers, telecommunications, software and ancillary equipment such as automated teller machine and debit cards. It is a term that generally covers the harnessing of electronic technology for the information needs of a business at all levels. Communication is the conveyance or transmission of information from one point to another through a medium.



An example of how ICT has had an impact on the Banking Industry is that its emergence allows banks to apply credit-scoring techniques to consumer credits, mortgages or credit cards. Hence, products that used to be highly dependent on the banks' evaluation of its customers have now become more standardised. Other examples of ICT impact on the Banking Industry include the increased process efficiency, which can reduce costs in banks, and the branch renewal, where focus is gradually shifting away from traditional brick and mortar banks towards the dual-bank concept presented earlier. The tendencies above have also produced changes in the structure of bank income. As a result of increased competition that has lowered margins in lending operations (the banks' traditional business), banks have diversified their sources of income and rely increasingly on income from fees services rather than interest rate spreads. Fees charged for services include typical banking activities like payment transactions, safe custody and account administration. Data storage and retrieval is another wonderful innovation brought into the Banking Industry, where specialised software is engaged to create database to be manipulated by Database Management Software (DBMS). A single database created could be used for several purposes within the system in order to eliminate data redundancy.

#### **Significance of ICT in the Banking Industry**

ICT revolution has distorted the conventional banking business model by making it possible for banks to break their comfort zones and value creation chain so as to allow customer service delivery to be separated into different businesses. Thus, for example, primarily Internet banks distribute insurance and securities as well as banking products, but not all the products they distribute are produced by their group (Delgado and Nieto, 2004).

However, the main economic argument for diffusion of adopting the Internet as a delivery channel is based on the expected reduction in overhead expenses made possible by reducing and ultimately eliminating physical branches and their associated costs. This specifically applies to and relevant in the Spanish banking system, which is one of the most "over branched" in Europe. As stated by DeYoung (2005) and Delgado *et al* (2006), the Internet delivery channel may generate scale economies in excess of those available to traditional distribution channels.

Besides them, Haq (2005) also states that bank exists because of their ability to achieve economies of scale in minimising asymmetry of information between savers and borrowers. The unit costs of Internet banking fall more rapidly than those of traditional banks as output increases as a result of balance sheet growth. In this context, DeYoung *et al* (2007) refer to the Internet banking as a "process of innovation that functions mainly as a substitute for physical branches for delivering banking services". In the case of the Spanish banks, there is some undependable evidence that shows that the Internet distribution channel has lower unit

transaction costs than the two other distribution channels (branch and telephone) for a given type of transaction (money transfer, mortgage loan, brokerage or demand deposits).

Today, any bank that doesn't offer the very latest in information and communication technology is bound to lag behind; customers are used to the pace of the "digital" business world, and they expect a certain standard of compatibility between their online banking services and their laptops, home PC's, Macs, iPhones and so on. For this reason, banks have had to step up and move into the hottest new information and communication technology. Most customers love the flexibility of online banking and other modern services; however, there may be some who prefer to never expose their banking information online, as they fear hackers and other violations of their privacy. For people like this, old-fashioned banking may feel safer and more secure.

#### **Changing Face of Banking Services**

Liberalisation brought several changes to Indian service industry. Probably Indian banking industry learnt a tremendous lesson. During pre-liberalisation period, all we did at a bank was deposit and withdraws money. Service standards were pathetic, but all we could do was grin and bear it. During post-liberalisation period, the tables have turned. It's a consumer oriented market there. Technology is revolutionising every field of human endeavour and activity. One of them is introduction of information technology into capital market. The internet banking is changing the banking industry and is having the major effects on banking relationship. Web is more important for retail financial services than for many other industries.

Retail banking in India is maturing with time, several products, which further could be customised. Most happening sector is housing loan, which is witnessing a cut-throat competition. The home loans are very popular as they help you to realise your most cherished dream. Interest rates are coming down and market has seen some innovative products as well. Other retail banking products are personal loan, education loan and vehicles loan. Almost every bank and financial institution is offering these products, but it is essential to understand the different aspects of these loan products, which are not mentioned in their colored advertisements. The early 1980s were instrumental in the introduction of mechanisation and computerisations in Indian banks. This was the period when banks as well as the RBI went very slow on mechanisations, carefully avoiding the use of 'computers' to avoid resistance from employee unions. However, this was the critical period acting as the icebreaker, which led to the slow and steady move towards large scale technology adoption.

#### **Computerisation**

The process of computerisation marked the beginning of all technological initiatives in the banking industry,

computerisation of bank branches had started with installation of simple computers to automate the functioning of branches, especially at high traffic branches. Thereafter, Total Branch Automation was in use, which did not involve bank level branch networking. Networking of branches are now undertaken to ensure better customer service. Core Banking Solutions (CBS) is the networking of the branches of a bank, so as to enable the customers to operate their accounts from any bank branch, regardless of which branch he opened the account with. The networking of branches under CBS enables centralised data management and aids in the implementation of internet and mobile banking. Besides, CBS helps in bringing the complete operations of banks under a single technological platform. CBS implementation in the Indian banking industry is still underway. The vast geographical spread of the branches in the country is the primary reason for the inability of banks to attain complete CBS implementation.

### **Satellite Banking**

Satellite banking is also an upcoming technological innovation in the Indian banking industry, which is expected to help in solving the problem of weak terrestrial communication links in many parts of the country. The use of satellites for establishing connectivity between branches will help banks to reach rural and hilly areas in a better way, and offer better facilities, particularly in relation to electronic funds transfers. However, this involves very high costs to the banks. Hence, under the proposal made by RBI, it would be bearing a part of the leased rentals for satellite connectivity, if the banks use it for connecting the north eastern states and the under banked districts. The major and upcoming channels of distribution in the banking industry are ATMs, internet banking, mobile and telephone banking and card based delivery systems.

**Automatic Teller Machines:** ATMs were introduced to the Indian banking industry in the early 1990s initiated by foreign banks. Most foreign banks and some private sector players suffered from a serious handicap at that time- lack of a strong branch network. ATM technology was used as a means to partially overcome this handicap by reaching out to the customers at a lower initial and transaction costs and offering hassle free services. Since then, innovations in ATM technology have come a long way and customer receptiveness has also increased manifold. Public sector banks have also now entered the race for expansion of ATM networks. Development of ATM networks is not only leveraged for lowering the transaction costs, but also as an effective marketing channel resource.

The other payment and settlement systems deployed were mostly aimed at small value repetitive transactions, largely for the retail transactions. The introduction of RTGS in 2004 was instrumental in the development of infrastructure for Systemically Important Payment Systems (SIPS). The

payment system in India largely followed a deferred net settlement regime, which meant that the net amount was settled between banks on a deferred basis, may lead to settlement risks. Launched by RBI, RTGS system is used only for large value transactions and retail transactions take an alternate channel of electronic funds transfer, a minimum threshold of one lakh rupees was prescribed for customer transactions under RTGS on January 1, 2007.

RTGS minimises systemic risks too, in addition to settlement risks, as paper based funds settlement through the Interbank clearing are replaced by the electronic, credit transfer based RTGS system. High systemic risks are posed by high value inter-bank transfers, so, it is considered desirable that all major inter-bank transfers among commercial banks having accounts with RBI be routed only through the RTGS system. The RTGS system had a membership of 107 participants (96 banks, 8 primary dealers, the Reserve Bank and the Deposit Insurance, Credit Guarantee Corporation and Clearing Corporation of India Ltd.) at end-August 2009. The utilisation of the RTGS has witnessed a sustained increase since its introduction in 2004. The bank network coverage of the RTGS system increased to 58,720 branches at more than 10,000 centers facilitating the increased usage of this mode of funds transfer.

**Plastic Money:** Plastic money was a delicious gift to Indian market giving respite from carrying too much cash. Now several new features added to plastic money to make it more attractive. It work on formula purchase now repay later. There are different facts of plastic money credit card is synonyms of all. Credit card is a financial instrument, which can be used more than once to borrow money or buy products and services on credit. Banks, retail stores and other businesses generally issue these. On the basis of their credit limit, they are of different kinds like classic, gold or silver. Charged cards are too carrying almost same features as credit cards. The fundamental difference is you can not defer payments charged generally have higher credit limits or some times no credit limits. Debit card is may be characterised as accountholder's mobile ATM, for this you have to have account with any bank offering credit card.

**Mobile Banking:** Taking advantages of the booming market for mobile phones and cellular services, several banks have introduced mobile banking which allows customers to perform banking transactions using their mobile phones. For instances HDFC has introduced SMS services. Mobile banking has been especially targeted at people who travel frequently and to keep track of their banking transaction. One of the innovative schemes launched in rural banking was the KISAN CREDIT CARD (KCC) started in fiscal 1998-99 by NABARD. KCC mode is easier for framers to purchase important agricultural inputs. In addition to regular agricultural loans, banks to offer several other products geared to the needs of the rural people. Private sector Banks also



realised the potential in rural market. In the early 2000's ICICI bank began setting up internet kiosks in rural Tamilnadu along with ATM machines.

**E-Banking:** Technology has creating e-banking or electronic banking. E- Banking can be defined as the automated delivery of new and traditional banking services and products directly to customers through electronic, interactive communication channels. Technology has affected and changed banking with the many benefits and convenience e-banking has created. It includes the system that enables bank customers to access accounts, transact business or obtain information on financial products and services. Customers can now quickly complete transactions such as 5-10 minute deposits/withdrawals to 30-60secs, online checking accounts, online transfers and many e-banking transactions. The accessibility of e-banking has been possible due to the technological advancement in laptops or personal computers, kiosk, Touch Tone phones, personal digital assistant (PDA) and automated teller machines (ATM). According to industry analysts (BNET.com), electronic banking provides a variety of attractive possibilities for remote account access, including: Availability of inquiry and transaction services around the clock; worldwide connectivity; Easy access to transaction data, both recent and historical; and "Direct customer control of international movement of funds without intermediation of financial institutions in customer's jurisdiction. E-Banking is becoming increasingly popular among retail banking customers. E-Banking has helps in cutting costs by providing cheaper and faster ways of delivering products to customers. It also helps the customer to choose the time, place and method by which he wants to use the services and gives effect to multichannel delivery of service by the bank. This E-Banking is driven by twin engine of "customer-pull and Bank-push".

### **Impact of Technology on Banking**

Technology has influenced all aspects of banking activities including storage, processing, and collection of information. There are a few areas in banking that has been seriously influenced or impacted which includes;

**Tracking lending worthiness (Credit Scores):** Technology has created or led to the creation of the credit bureau. The system mathematically tracks customer's payment records to provide data which help banks make decisions on the amount and who they should borrow money to. The advance technology available has developed a scalable and resilient credit bureau platform that enables banks to track customer's necessary information. Technology has enable software programs which has provided banks with input file preparation tools, validation tools and data entry tools. Collecting data allows banks to deliver credit reporting solutions in the form of credit reposts, customer credit activity monitoring, fraud prevention systems and debtor tracking services. Today, the technologies in credit bureau

infrastructures have enabled banks to collect, load, validate, store and disseminate both the positive and negative data as well as supplementary data. The development and management of the information technology for the Credit Bureau has provided control over all processes involving the credit bureau as it relates to the banking industry. Some of the systems used in the credit bureau includes; C++, C Sharp and Java, Oracle& SQL. All these programs contribute significantly in the whole operation of the credit bureau. The typical cycle and function of the credit bureau as it relates to banks includes; storing information-credit histories, observing fraudulent behavior, previous enquires, validating data and many more.

**Banks Contestability:** Technology is affecting the degree of contestability in banks. Due to the advancement of technology, banks superiority in information is deteriorated. New competitors have emerged and the many barriers provided by banks have been declining and security breach is more imminent today. Some financial products, services and commodities are becoming more transparent. Due to the lowered entry and deconstruction of some banks, contestability in banking is rising. The advancement of technology has influenced the methods banks use to deliver financial products to its customers. Technology has created alternative delivery mechanisms such as the internet, ATMs, and many others which all reduce the dependence on the network as a core delivery mechanism. Now, financial systems are substantially over-supplied with delivery systems through a duplication of networks which allows or encourages the banks to change their delivery strategy, rationalise their branch network strategy and develop a wide Variety of delivery options.

**Internet Banking:** An internet bank can be defined as a bank that provides account balances and some transaction capabilities to retail customers over the World Wide Web. Technology has created internet banking, also called online banking. The creation of the internet through technology has lead to many banking transactions or activity options via the internet. Some of these activities includes; paying bills, 24 hour view of accounts, transferring money and many others. Customers access their banking information from a browser- software that runs the banking programs on the World Wide Web (www). Customers can personally and privately access their account information through the internet via a modem. Technology has allowed us to dial into the bank via the modem system which allows us to download data, and run programs that make us access a wide variety of banking information such as; account balances, number and types of banking transactions, bank statements, among others. On the downside, the internet has decreased operation and transaction at physical-brick and motor banks as customer can basically conduct almost all the transaction possible in a real back. Today, technology has helped create

many banks which have no physical location or brick and mortar branches.

### State Approaches to Development of ICT

In any major policy initiative that induces a major social change or transformation, the state normally is expected to play the role of the initiator, mediator, facilitator and arbitrator. The Indian state has played a major role in the context of ICT for development from the early 1980s at various levels. The approach paper to Tenth Five-year Plan (Government of India, 2001) has been prepared against a backdrop of high expectations arising from the recent performance of GDP growth. This has improved from an average of about 5.7% in the 1980s to about 6.5% in the Eighth and Ninth Plan period making India one of the ten fastest growing economies and a substantial part of the buoyancy is due to the growth in the services sectors led by ICT and telecommunications. The Tenth Plan stresses the need for defining the development objectives not just in terms of increases in GDP or per capita income but broader parameters, which enhance human well being. It tries to focus on inter-state inequalities and underlines the strategies to overcome the regional disparities and different growth rates. The Tenth Plan emphasises on those sectors, which are most likely to create high quality employment opportunities, such as construction, real estate housing, modern retailing, and IT-enabled services. Moreover, it recognises the comparative advantage of brainpower to absorb, assimilate and adopt spectacular developments in system integration and technology, and harness them for national growth in today's knowledge-based world economy.

The plan identifies telecommunications as a critical part of infrastructure in an emerging knowledge-based economy. It attributes the importance of telecommunications to enormous growth of IT and its potential impact on rest of the economy. India is perceived to have a special comparative advantage in IT, because it can provide excellent communication services at reasonable rates. To maintain this comparative advantage, the Telecommunication Policy should focus on the convergence of data, voice and image transmission, the use of bandwidth and high-speed internet connectivity.

### Conclusion

Over the years, the banking sector in India has seen a number of changes. Most of the banks have begun to take an innovative approach towards banking with the objective of creating more value for customers and consequently, the banks. The banking industry which is the back bone of every economy is confronted with various challenges such as globalisation, deregulation, competition, significant high cost of installing ICT and maintenance. The usage of ICT can lead to lower costs, but the effect on profitability remains inconclusive, owing to the possibility of ICT effects that arise as a result of high demand of skilled work force, issues

of increasing demand to meet customer's expectation for customer service delivery, trustworthiness of the information system and competition in financial services.

However, from the discussion whilst reviewing literature many researchers did not find ICT, for the delivery of customer service and profitable for bank's financial performance. So there has been an arrow head among these findings on perspective of profitability and customer service delivery. While, on the same vein, other researchers found ICT channel making profitable impact on the banks that are only internet start-ups than the conventional banks transforming into click and mortar. In addition, there are other studies that proclaim due to perceived security risk, lack of comfort with computer technology, either due to lack of awareness or age factor, and a host of other reasons that ICT did not appear to be significantly viable or accepted warmly or quickly by consumers. Other researchers also found that despite all these factors banks, themselves, have been unable to have provided efficient customer service delivery because of which the clients who were even ready to adopt this delivery channel did not turn up again to innovation, and banks couldn't successfully build the required contents of electronic banking environment for consumers. More research need to be carrying out in different locations and different time frame may confirm or refute the previous findings by collecting the primary data to come up to a conclusion for the impact of ICT on customer service delivery and banks performance. It is quite evident from our study that enhancing ICT in the banking industry is a must in a rapidly changing market place, as the ICT revolution has set the stage for exceptional increase in financial activity across the globe.

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## ROLE OF SERVICE SECTOR IN INDIAN ECONOMY WITH SPECIAL REFERENCE TO TOURISM INDUSTRY

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### Abstract

*With the start of civilization, human nature is temperamental and full of curiosities. In order to discover change, he wanders from one place to another to know different people, their lifestyles, their culture, their food and everything what he can know about them. The different civilizations all over the world are result of travelling. Even Vasco da Gama discovered sea route to India only through travelling. People travelled from one place to another for pilgrimage, for knowing the ancient culture and for many other reasons. This travelling has now been given the name of tourism. Tourism has now emerged as a full-fledged industry and as per the classification of CSO (Central Statistical Organization) India; it occupies a major place in the service sector. Even with the lack of basic facilities, this industry is flourishing and providing jobs to many along with increasing the Gross Domestic Product.*

**Keywords:** Service, tourism, economy

Collin Clark in his book "Conditions of Economic Progress" agrees that there is close relationship between development of the economy on one hand and occupational structure on the other and economic progress is closely associated with certain distinct necessary and predictable changes in the occupational structure.

Our Indian Economy is divided into three sectors—The Primary Sector, comprising Agriculture, Fisheries, Forestry, Animal Husbandry. The Secondary Sector, comprising Small and Large scale industries. The Tertiary Sector, comprising Transport, Communication, Banking, Finance and other services.

According to A.G.B. Fisher "In every progressive economy, there has been a steady shift of employment and investment from the essential primary activities to secondary activities of all kinds and to a still greater extent into tertiary production" Agriculture forms the backbone of the Indian economy and occupies a place of pride but the share of agriculture is decreasing continuously and that of industrial and service sector is continuously increasing.

The service sector contributes the most to the Indian GDP. The Sector of Services in India has the biggest share in the country's GDP, it accounts for more than 50% contribution. The various sectors under the Services Sector in India are construction, trade, hotels, transport, restaurant, communication and storage, social and personal services, community, insurance, financing, business services, and real estate.

### The Tourism industry in India

Tourism industry in India has outshone as a main factor of economic development. Indian tourism Industry has played its share in the Gross Domestic Product (GDP) of the country alongwith earning foreign exchange and creating job opportunities. Tourism has been making efforts for India's economic - social development because it provides unlimited job opportunities at national as well as local level.

Tourism in India has now become a well developed industry with a business of around 32 billion dollars. This accounted to about 5.3 – 6.0 percent of the GDP of the country. The percentage of foreign tourists in India is increasing every year by an annual increase of about 20% - 25%. Since last few years, the Tourism Ministry of India in association with the State Government has started various plans to plans to promote tourism in the state as well as the whole country. Tourism covers the area namely pilgrimage, tracking, mountaineering, river rafting, hiking, skeepng along with wildlife tourism, ecotourism, village tourism, medical tourism etc. With the establishment of tourism as an industry and further for its promotion several tourists spots have been developed to attract national as well as foreign tourists. For the

development of Indian Tourism, Tourism Development Corporation was established in the Public Sector on October 1<sup>st</sup>, 1966. During 2008-09, the Ministry of Tourism launched seven international campaigns for promoting Indian tourism in the international markets. Keeping the same objective in mind, the different states of India have also implemented various policies to encourage tourism in their states. As per the statistical data of Ministry of Tourism it was found that the number of foreign tourist in India is continuously increasing.

Year	Number (in Lacs)	Foreign exchange earning (in U.S. Millions)
2000	2.15	3460
2001	2.54	3198
2002	2.38	3103
2003	2.73	4463
2004	3.46	6170
2005	3.92	7493
2006	4.45	8634
2007	5.08	10729
2008	5.28	11832
2009	5.11	11136
2010	5.78	14193
2011	6.29	16564
2012	6.31	17737
2013	6.58	18445
2014(Jan-June)#	6.97	9334@

Source : Ministry of Tourism, Govt. of India 2013

@ Growth Rate over Jan-June, 2013

# Revised estimates.



### Indian Tourism Industry: an overview

India has a large bouquet of visitor attractions that it can boast of. Its enormous diversity has always attracted both foreigners as well as its own citizens to explore the mirth and gaiety that India has to offer the world. Every corner of the country offers exquisite as well as exclusive tourism resources which echo the heritage as well as the tradition of that particular area.

### Ideals and Standard of Tourism Industry

The tourism industry of India is based on certain core nationalistic ideals and standards which are 7S- *Swagat or welcome; Sahyog or cooperation; Soochna or information; Sanrachna or infrastructure; Swidha or facilitation; Safaai or cleanliness; Surakshaa or security*

### Scope of Tourism Industry

The tourism industry, initiating the advertising campaign such as the “*Incredible India*” campaign promoted India’s culture and tourist attractions in a fresh and memorable way. The industry along with creating jobs in a variety of related sectors like customs, travel agencies, airlines, tour operators, hotel industry and guiding has helped growth in other sectors as diverse as horticulture, handicrafts, agriculture, construction and even poultry. Both directly and indirectly, increased tourism in India has created jobs in a variety of related sectors. The numbers tell the story that almost more than 20 million people are now working in the India’s tourism industry.

### Tourism Industry in Uttar Pradesh: A special reference

The state of Uttar Pradesh, situated in the northern part of the country, is one of the most fascinating states of the Union of India. Uttar Pradesh is India’s most populous state with a population of over 190 million people. It is divided in 70 districts with Lucknow as its capital. It is bounded by Nepal on the North, Himachal Pradesh on the North West, Madhya Pradesh on the South, Haryana on the West, Rajasthan on the Southwest and Bihar on the East. The service sector comprises of travel and tourism, hotel industries, real estates, insurance and financial consultancies. Uttar Pradesh attracts large number of tourists.

Owing to its rich and varied culture, monuments, ancient places of worship, its monasteries make Uttar Pradesh an immense tourism delight and a centre of attraction for visitors coming to the state. The important tourist cities are Agra, Fatehpur Sikri, Allahabad, Samath, Gorakhpur, Varanasi, Lucknow, Kanpur, Mathura having religious as well as architectural importance.

The Uttar Pradesh Tourism Department, has undertaken certain policies to promote tourism in the state. The objectives of the Tourism Development Policy (source : [www.tourism.dept.gov.in](http://www.tourism.dept.gov.in)) are – Providing economic benefits to the local population and enhancing employment opportunities; Improving and diversifying tourism products base; Increasing the hotel capacity; Increasing the number of visitors; Increasing the investment in the tourism sector; Increasing the revenue in the tourism industry by providing better facilities and value based services to the tourists.

### U.P. Tourism’s Strategies for bringing about development

Development of basic infrastructure, to be undertaken by government bodies.; Planning tourist circuits through a master plan.; Enhancing and encouraging the participation of the private sector in the state government’s efforts at providing the necessary facilities to domestic and international tourists.; Dovetailing development funds from different sources.; Improving the product diversity to attract a range of tourists.; Coordination between various government departments.; Proper restoration of heritage properties and their publicity.; Providing cheap, clean and satisfactory facilities to tourists in matters of transport, accommodation, food and recreation.; Organizing cultural shows at fairs, festivals and seminars with a view to attracting more tourists.; Setting high standards and quality benchmarks for the tourism sector.; Extensive and effective marketing of tourism products and services.

### Reason for decline of tourism in Uttar Pradesh

Although the Government is making rigorous efforts to develop the tourism industry but there are certain barriers which are hindering its overall development. Tourism is a major source

of foreign exchange and these barriers hamper the growth of tourism industry from the view point of foreign tourist specially.; Still Indian tourism industry does not have the desired and well developed infrastructural facilities.; There are very few national as well as international airports. Those airports which are operating do not have sufficient facilities for the tourists. They are not fully equipped for providing the basic facilities to the foreign tourists.; The deteriorating condition of the roads is another problem faced by the tourists.; There is a scarcity of luxurious hotels, proper and hygienic restaurants, well equipped shopping malls and outlets displaying branded products are some of the reasons.; Efficient human resource and trained guides are also a problem faced by tourists.; The tourists also fear due to safety and security reasons. They even resist in coming because of the fraud and misbehaviour with them.; Terrorism has made vulnerable disaster to the tourism industry. Bomb blast and other terrorist activities have created a fear in hearts of the tourists and they are unable to visit with mental peace and stability.

### Suggestions for improvement

Thus for overall improvement of the tourism sector in the Uttar Pradesh, it is important that the visitors’ attraction and satisfaction requires maximum improvement and focused attention on a priority basis. For optimum productivity and sustainable growth of the tourism sector, the management of the tourist centres needs to decipher and understand the components constituting attraction in the tourists’ perception. Efforts should be made to provide good shopping opportunities, volume of operations, entertainment facilities, air connectivity, transport connectivity and long time packaged tours at lower price. There should be proper law and order situation at the tourist destinations.

Efforts should be made to ensure uninterrupted power supply for the comfort of the tourists. Further there should be coordination among the tourism department and the various agencies like the transport, airways, hotels and associates. Well trained and efficient human resources should be employed at every level to provide polite and courteous hospitality to the tourists.

Tourism has been pivotal to social progress as well as an important vehicle for widening socio economic and cultural contact throughout human history. Tourism promotes social cohesion and community bonding. By adding value to culture, heritage, nature, environment and ecology, it promotes preservation and conservation.

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## BRAND MANAGEMENT OF ELECTRONIC MASS-MEDIA IN THE REPUBLIC OF UZBEKISTAN

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### Abstract

*This paper discusses about brand management in the media market of the Republic of Uzbekistan. The author focuses on study of leading websites of the country, such as "Daryo.uz" and "Anbor.uz". Also in the paper based on the views of market participants identifies the main problems faced by the media in brand management.*

**Keywords:** Brand, brand management, mass-media, electronic mass media

Development of the market forces companies to find different ways of management in order to increase the number of consumers. Brand is the main for many companies one of ways which allows distinguishing their company is a. Working on the good brand, managing brand's popularity is an essential part of managing process. Mass-media market is a unique market. It differs from other markets. If many market participants which produce a product or provide a service just aims at selling a product or service, mass-media market participants work on two clients at the same time. On the one hand they also try to sell their products - newspapers, magazines, TV-Shows to viewers, readers and listeners, but on the other hand they also try to attract advertisers. Accordingly, in order to attract more consumers and advertisers a company needs to stand out from the others. As a result, if the media is able to build, control, and manage a strong brand it is much easier to succeed.

### Literature review

#### The importance of brand management

The key to market success in any type of business is its effective marketing activities, which includes processes of identifying customer needs, developing products; determining products price, establishing a system of marketing, and promoting sales. As long as marketing is focused on meeting the needs of consumers, the marketing activities always begin with a comprehensive study of the market. Market research studies the behavior of consumers, their tastes, preferences and needs. Since the late 1950's, a system of marketing tools, a certain structure which achieves the goal and solutions of marketing objectives in the target market, defined as the marketing mix. At the end of the 1970's, marketing tools have been combined by Jerome Barney (1991) in four groups, and the system was called "the concept of 4P" - from the initial letters of the English name of each element, namely: product, place, promotion, and price.

It is clear that the different nature of products, the changing role of a service component in various products, intangibility

of services extent influence the choice of marketing tools, principles of forming product and pricing policy, as well as methods for their promotion.

Modern marketing activities cannot be imagined without branding. Nowadays, there is no clear definition of the term. In fact it refers to the process of building, development and brand management. Some marketing specialists consider branding as a science, art, and activities to create long-term preferences of consumers goods. The most successful situation is when consumers start to perceive the brand as a separate product category (Kotler, 2009). Dictionary of Business and Management defines brand as: "name, sign or symbol used to identify the products of the seller and to differentiate from the competition".

David Aaker (2007), who formulated the basic theory of branding, defines brand as "a set of feelings" and defines it as: "a set of attributes associated with the brand name and symbol that strengthen (or weaken) the value of a product or service offered under the symbol". This definition explains each brand in its own precise and versatile, but the most successful and concise. We purpose following definition: "Brand - is a set of perceptions in the mind of a consumer".

In practice, people often confuse two similar concepts - brand and trademark. In fact, brand is not only a trade mark consisting of the name (brand-name), graphic (logo) and the sound character of a company or product. The concept of brand is broader because it additionally includes the following: the product or service with its characteristics, expectations, functional and emotional associations (brand attributes); visual image of the brand generated by advertising (brand-image); the level of brand awareness, the strength of the brand (brand power); perception of the brand's commitment to its customer (brand loyalty) and other (Kotler, 2009).

Brand - is set of the following product features: its name, packaging, pricing, history, reputation and the method of advertising. Brand is also defined based on the values and philosophy of the brand, which exist in consumers' mind; it's not only a picture or image (Berrou, 2007). Brand



performs the following functions: economic, information and protection (against unfair competition).

When it comes to mass-media, we can note that their main components reputation and reputation risks are on the first level(Ann, Bagiyev, Tarasevich, 2005). Functions of reputation overlap with functions that brand plays (Grigoryev, 2006): Information (confirmed information about the object); Protection (protects the good reputation of bad facts, that is, the error does not affect the overall picture of the object if it has a good reputation); Economic (for the firm strengthens name, respectively profitable).

That is why the reputation of the mass-media should be considered as part of the brand.

**Mass-media market in Uzbekistan**

The Republic of Uzbekistan is situated in the central part of the Central Asia; According to statistics (National Statistical Committee of Uzbekistan, 2013) the territory of the country is 447.4 sq.km, while population of the country is nearly 30 million people. The country can be described as symbioses of the ancient and modern culture, in other words there is modern and new capital Tashkent and at the same time historical and antique Samarkand, Bukhara and Khiva cities.

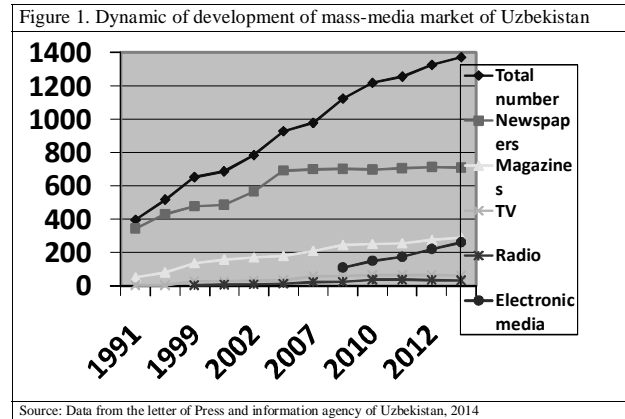
Economy of the country started a new era after 1991 when Uzbekistan became independent. Before those times the country was a member of the former Soviet Union and was like many other members of the union, a supplier of raw materials for the giant economy of the former USSR.

Mass-media market of the country is as young as the country itself. During the first years of independence the number of players on the market was low. According to information of Press and information agency of Uzbekistan (2014) the total number of participants in 1991 was around 395. Most of the players during those years belonged to newspaper and magazines sector of mass-media. In the beginning of 1990's the proportion of newspapers and magazines in total market was approximately 96-97%. There were some national TV-channels and radio stations. The main reason for such a low numbers of television and radio stations was the fact that Uzbekistan for many years was a member of the USSR. The majority of sound and picture media were on the territory of the central cities of Russia. As a result, after the collapse of the Union most sound and picture media became part of the Russian Federation.

Great work which has been done in Uzbekistan became the basis of the development of the media market. As a result, by the beginning of the new century, the number of media doubled, and by the end of the first decade of the 21st century there were more than 1,200 mass-media. The market dynamics is illustrated in figure<sup>1</sup>. As can be seen, the largest

share of the market belongs to printed press such as newspapers and magazines. In the recent years, however, their growth is not as it was in the 1990s.

Since the beginning of 2000's the market got a new player - the electronic media. Huge development of the Internet has led to a sharp increase in electronic media. Some printed press started developing their electronic versions, while some reformatted their strategy and went totally to network. In 2008, the number of electronic media was about 80, whereas by the end of 2013 their number almost tripled and reached.



**A brief history of electronic media in Uzbekistan.**

With the development of information technologies in the country, electronic resources and web projects that have positioned themselves as the media appeared and gradually began to develop. Internet journalism in Uzbekistan was formed spontaneously, often by people who have no relationship to traditional media, which, of course, can be considered as positive moment of formation of this trend. Experience of the first web-publications showed that the Internet can create successful media projects. Since the discovery of the first information sites in Uzbekistan many resources left the web space, but there are some which continue to operate successfully. According to statistics, which was provided by the Press and Information Agency of Uzbekistan (2014), currently there are more than 250 electronic media.

**Methodology**

In order to study the brand management process of players of mass-media market it was decided to:

- identify the major market participants; explore main issues, which arise during brand management process;
- Firstly, we organized the survey among the ordinary users of internet mass-media. Two questions were addressed to respondents:

*Do you visit internet mass-media resources of Uzbekistan?*  
*What is the main internet mass-media resource which you use in order to get information or news?*



Gathered answers gave us main picture of level of using internet mass-media resources and the list of top players in this market. However the ordinary readers are not the main consumers. There are also companies that publish advertisements about their products and services. Among these companies were representatives of “Nestle Uzbekistan”, “Click-mobile payment system”, “Pepsi Uzbekistan” “Imkon+ Ice cream”.

The following questions were addressed to company representatives about internet mass-media market participants.

*Awareness of the existence of the portal.*

Respondents were asked to assess selected media resources on the following scale:

Select the appropriate definition for you	Point
I have never heard about this resource	1
I knew about the existence of this resource	2
I visit this resource as an ordinary user	3
I promote my product on this resource	4
I am fully user of resource (as a user and promoter of goods)	5

*The level of substitutability*

Respondents were asked to assess selected media resources in the frame of substitutability. We asked them:

*If you stop promoting your product through this media resource will you find another equal one?*

The answer “YES” – gives us reason to believe that the level of substitutability of internet media resource is “HIGH”

The answer “NO” – gives us reason to believe that the level of substitutability of internet media resource is “LOW”

Ones, the key players of internet mass-media market were identified, we asked survey participants to answer a few additional questions. These questions should help in determining the reputation and reliability of the internet media in vision of advertisers.

Indicator	Select the appropriate one	Point
The level of Internet media brand's reputation	Very high	5
	High	4
	Middle	3
	Low	2
	Very low	1
The level of respect among consumers	Very high	5
	High	4
	Middle	3
	Low	2
	Very low	1
The level of respect among rivals	Very high	5
	High	4
	Middle	3
	Low	2
	Very low	1
The level of reliability	Very high	5
	High	4
	Middle	3
	Low	2
	Very low	1

After identifying leaders among internet mass-media market participants, we asked top 3 leaders to take part in our survey. However only two of three agreed to take part in survey. Both of the survey was organized through interview face to face. Our respondents were the head chief editor of “Anhor.uz” Lola Islamova and co-founder of “Daryo.uz” Farhod Fayzullayev. During the interviews presenters “Anhor.uz” and “Daryo.uz” were asked about their opinion about development of mass-media in general and electronic segment of the market in particular. Also, they mentioned about the history and steps of development the resource and their competition with other resources. At the end representatives of electronic media resources answered to the following questionnaire:

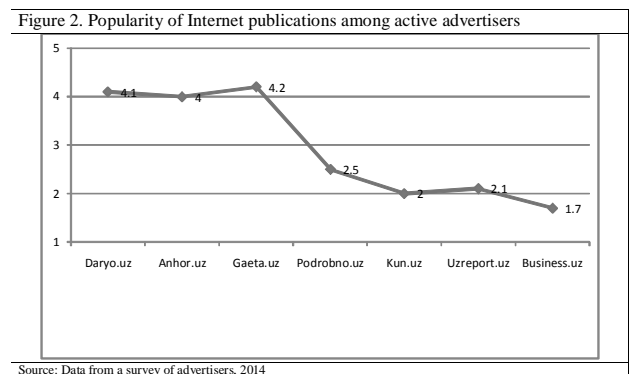
Nº	Question
1.	What do you understand by the term brand management?
2.	What is the target audience of your resource?
3.	What steps are you taking to promote your brand among the readers?
4.	What steps are you taking to promote your brand among the advertisers?
5.	What are the main factors helping to development of resource?
6.	What are the main factors impeding to development of resource?

As a result of these meetings we could collect information about situation on the market. Respondents helped us to identify main issues which are arising on the market.

**Findings**

The first survey which was conducted among ordinary mass-media users, showed us that the most famous internet Medias of Uzbekistan are “Gazeta.uz”, “Anhor.uz”, and “Daryo.uz”, nearly 90% of respondents mentioned them in their answers.

Survey among the goods producers also showed us the leadership of three abovementioned resources. As a result their average rate higher than 4, which means that all respondents are aware of the resources they are active readers of this resources and even some of them run adverts (Figure 2).

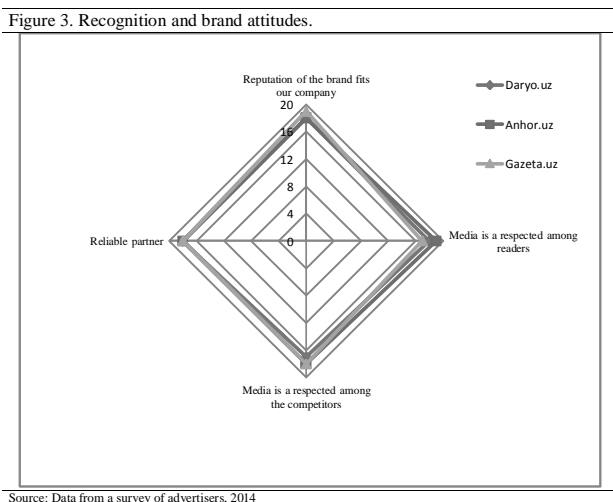


The next indicator which we got was a level of substitutability. Represents of goods and service promoters rated all three

resources more substitutable rather than replaceable. This testifies to the high competition in the market, the advertiser still always can find an alternative resource.

Also, we asked respondents to evaluate these three media-resources. Summing up the results we have obtained the following results. All three editions are reliable partner according to view of advertisers, they got 18 points out of 20. Better reputation among competitors has Anhor.uz and “Gazeta.Uz”, while all three resources have good level of respect among readers (consumers). The reputation of the brand is higher for “Gazeta.Uz”, which is likely because of long presence in the market (figure-3).

Figure 3. Recognition and brand attitudes.



Source: Data from a survey of advertisers, 2014

The last stage of our research was interviews with main players of internet mass-media market of Uzbekistan. During meetings with represents of resources we could get the following information:

**Anhor.uz**

The activities of the web portal «Anhor.uz» officially began in April 2014. The target audience of the resource is adults, educated people with higher education who are interested in local and global social and political events. Site has its own authors, journalists and popular bloggers. The highlight of columnists and opinion polls publications is the most interesting aspect of the resource for visitors.

Brand management is necessary for the recognition, promotion, to attract readers and advertisers which effect to increasing of profit. At the same time because of unstable market process of brand management is more chaotic and unplanned. The main tool for companies brand management is social networks.

**Dayro.uz**

The activities of the web portal “Daryo.Uz” officially began in 2013. The target audience of the resource is the young and middle-aged people in Uzbekistan and abroad. The main content is local and international events, news from the world of movies, music, cars and sports, as well as an overview of technological innovations.

Brand management of web portal is organized through the main product - it which is news. Rapid and high-quality material, promotes awareness of brand. In other words resource In other words, the resource is hoping that prompt delivery, reliability and quality of news will be the main tools for making brand more famous.

Simultaneously, both participant of interview were similar in their opinion that the media need to manage the brand. The main issues that interfere for development of resources are the shortage of qualified personnel, the low degree of payback, financial instability and unstable advertising market.

**Conclusion**

Based on the above information, we can draw the following conclusions:

The internet users of Uzbekistan are mostly the members of young generation, which gives reason to believe that electronic mass-media market of Uzbekistan has huge potential; During the last 7 years the number of electronic media resources tripled; The main players on the electronic media market is “Daryo.uz” “Anhor.uz” and “Gazeta.uz”; The level of competition in the market is very high, the promoters of the products always can find an alternative resource.; Big 3 electronic resources of Uzbekistan organizing brand management thought social networks, the most popular is Facebook; Main issues which faces electronic resources are shortage of qualified personnel, the low degree of payback, financial instability and unstable advertising market

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## INFLUENCE OF PERSONALITY DIMENSIONS AND AESTHETIC ORIENTATION ON CONSUMER'S COLOUR PREFERENCE DURING CAR PURCHASE

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### Abstract

*Purchasing a car can be a normal decision for some, but can be a very special decision for others. Of the many attributes a car signifies, aesthetics is one of the most significant while making a decision. Colour of a car has been rated as a very important attribute as per studies carried by various agencies so far. The objective of the study is to highlight importance of colour in selecting a vehicle and finding a correlation between influence of personality traits of a person and his choice of colour. It has also been seen that the purchase decision is dependent on Aesthetic orientation of a person which is in turn dependent on personality traits. So the study tries to find the dependence of colour on both personality as well as aesthetic orientation. Methodology deployed for the study is surveying 214 people of different backgrounds and questioning them on the basis of a questionnaire, and mapping their behaviour basis the responses and generating a pattern for understanding choice of colour dependent on the personality traits and aesthetic orientation. The study performed first detected the personality traits of a person, and hence aesthetic orientation was defined. It was largely seen that personality traits are very significant in determining the colour preference, but linking it to aesthetic orientation gave results which were better linked to colour choices. The study was carried basis age groups, gender, and MHI. In the study a strong correlation was found and a scale was designed mapping color of car basis the personality traits of a person.*

**Keywords:** *Personality Dimensions, CAD, Aesthetic Orientation, Colour Choice*

Purchasing a car is a very important decision for most of us and many people even regard car as a member of the family. Apart from the cost and technical specifications, what rules the decision in favour of a particular model of the car, is the aesthetics of the car. In fact, a large number of customers do not understand the technical specs and base their purchase purely on the looks and the price of the car. Within aesthetics, the colour of the car plays a prominent role and yet most car manufacturers offer limited colour options to car buyers. Many studies have been done on colour preferences of people with regards to products like apparels, white goods and electronic appliances but no studies have been carried out to identify the colour preference of customers with a high-involvement purchase like a car. This is a maiden attempt to study the impact of personality on colour preferences of customers while purchasing a car.

The esoteric remark, "Any customer can have a car painted any colour that he wants so long as it is black." made by Henry Ford, founder of Ford Motor Company in 1909, in his autobiography *My Life and Work* (1922) Chapter IV, [p. 71-72] may sound dated but still holds true in a lot many ways.

It remains a mystery even today as to whether this remark was made because black was the favourite colour of Henry Ford or because no other colour could dry as fast as black. In any case, neither of the reasons stands any ground in today's world as auto manufacturers and paint manufacturers have developed world-class technology and processes to offer distinctive colour options with great manufacturing ease and speed. In spite of this progress, the customer is still given a small basket of six to eight colours to choose from while purchasing a car. At times, the customer has to choose whether he would want to pick up the car in any available

colour or wait for months together to take delivery of the car in the colour of his choice.

Through this study, we are trying to understand the significance of colour choice for customers while they are making a car purchase. Also, there is an effort to understand the different personality types of an individual and the level of aesthetic orientation in each personality type. Both variables, that is, consumer's personality type and aesthetic orientation have been analysed individually and jointly to see the impact on colour preference at the time of car purchase.

In this research, the main objective is to see if colour preference has any impact in the consumer's decision at the time of purchasing a car. To study this effect, we shall test the impact of various personality types on car colour preference. In addition to this, we will also review presence of aesthetic orientation and its significance in colour preference.

We have also tried to study the demographic factors of consumers and the impact each factor, namely, age, gender and income has on preference for colour.

Based on the above discussion, the aim of the present study seeks to gain insight in the aesthetic preferences of consumers while buying a car and the usefulness of the knowledge of this preference to both – car manufacturers and consumers.

### Literature Review

Cohen's Original CAD scale

Cohen [1967 #396] developed CAD scale to measure interpersonal orientation, which was used by marketers to predict consumer behaviour. CAD scale was based on Horney's [1945 #391] tripartite model of interpersonal orientation. The dimensions were compliant, aggressive and detached.



Compliant individuals are identified by Cohen [1967 #396] as being people in need of love and appreciation; aggressive individuals as manipulative of others; whereas the detached individual as distant and independent from others. Hence, compliant, aggressive and detached individuals can be described as moving toward, against, and away from others [Cohen, 1972 #282]. Also an individual may exhibit some of the traits of being compliant, aggressive, and, detached at the same time.

Studies used the CAD scale demonstrated relationships between the three dimensions (Compliant, Detach and Aggressive) and patterns of brand and product usage, television and magazine preferences [Cohen, 1967 #396]. Kernan [1971 #394] also found a relationship between the dimensions and the use of information sources, and fashion approval. Gabbott [1996 #42] found the specific pattern of CAD scale measurements of individuals based on personal interaction in the service setting.

Revision of the CAD Scale

After conducting exploratory and confirmatory factor analyses, a refined and revised version of the CAD scale was developed by Kerry Jackson and Mark Gabbott [1998] academics of the Monash University, Australia. The revised version of the CAD contained 7 of the original items measuring the compliant dimension, 4 measuring the aggressive dimension, and 7 measuring the detached dimension.

DuPont announced that silver, black and white are the top colours in the first-ever ranking of worldwide vehicle colour popularity.

DuPont Global Automotive Colour Popularity Report, which is regarded as the most authoritative source for automotive colour popularity information and trends with detailed breakdowns for the top automotive markets studied the top global colours as in Table 1.

Table 1 - Colour Popularity Chart

Colours	India	Global
1. Silver	27%	22%
2. Black	8%	20%
3. White	28%	22%
4. Grey	9%	13%
5. Blue	5%	6%
6. Red	6%	7%
7. Brown / Beige	9%	5%
8. Green	5%	2%
9. Yellow / Gold	1%	1%
10. Others	1%	2%

**Source:** DuPont Automotive Systems 2011 Global Car Popularity Report

By gathering and analyzing colour popularity data around the globe, DuPont wants to better identify trends and help their customers (automobile manufacturers) in the automotive industry develop colour palettes for the future.

Although the results suggest an ongoing convergence of colour choice globally with colour preferences becoming more homogeneous across regions, distinct regional differences remain. The top three colours — black, white and silver (refer Table 2)— continue to show strongly around the globe with growth of these colours across regions. The top colours become ‘aspirational’ with a universal appeal.

Table 2 - Colour Popularity Chart- Top Colour Choice

Sr #	Countries	Top colour choice
1	North America	1) White, 2) Black and 3) Silver
2	Europe	1) Black, 2) Silver and 3) White
3	India	1) Silver, 2) White, 3) Grey and 4) Brown
4	Japan	1) White, 2) Silver and Black
5	China	1) Silver and 2) Black
6	Russia	1) Silver, 2) Green, 3) Black and 4) Blue and Red

Source : DuPont Automotive Systems 2011 Global Car Popularity Report

Changes across Markets

Colour preference change from one market to another year to year citing of various factors like new vehicles being introduced; reduce in size of vehicle, consumer preference and economy as a whole. These and other societal, cultural and demographic influences affect regional trends over time.

Automotive Colour Trends

In the automobile industry, it is very important to forecast trends of next 2-3 years as the time taken to develop, source and manufacture a vehicle is almost the same. There are trend shows held like the ones of “Contrast of Colour” which focus on global interest in automobile coatings, it is a fresh approach to long-lasting colour preferences.

There can be an ample of reasons to purchase a new car, yet colour is often the one of the most important factor before purchasing a vehicle. Consumers have become very savvy about how and where to look for latest colour trends and they do look for guidance on “what’s new” (and newsworthy) in colour.

Web-portal, <http://www.automotoportal.com/article/what-does-the-color-of-your-car-tell-about-you> mentions that the colour of car speaks volumes about one’s personality and driving habits. Business class would prefer car with darker color, bus and truck drivers like lighter, and sports car drivers often choose cars with strong appealing colours

Red cars denote those who are full of zest, energy and drive, brave, ambitious and impatient characters, who also think, move and talk quickly. The color red is a synonym for sex, speed, thoroughness and dynamism.

Brown or orange color denotes those who are practical, independent and who like to race. These colors represent



sensibleness, time and simplicity.

Yellow cars describe someone who is idealistic and novelty loving, and who is also intelligent and warm.

Green cars indicate someone who is careful and unsociable, but also has hysterical tendencies.

Blue cars are chosen by the imaginative, loyal, and trustworthy people.

Pink cars are chosen by gentle, loving and affectionate drivers. Pink represents creativity and individuality.

Silver and grey cars describe someone who is cool, calm, and slightly aloof and who is prone to criticizing other drivers.

**Black** cars are chosen by stubborn, disciplined people, who like classic cars and elegance. They are not easy to manipulate.

**White** cars represent status-seeking, extrovert drivers, who are also optimistic, simple and who you can rely upon.

### Aesthetic Orientation

I. C. McManus and A. Furnham [2006] studied the relationship between personality traits, demographics and aesthetic preferences. The study assessed the role of personality, education and demographic factors such as age, gender, etc on aesthetic activity and came to the following conclusions:

More aesthetic activity was associated with music and art education.; Science education had a substantial negative relationship with aesthetic activity, both directly and also indirectly via reduced art education.; More aesthetic activity was particularly related to higher scores on the personality factor of openness, and also to lower scores on agreeableness and conscientiousness.; Higher parental social class was also associated with more aesthetic activity, as also was lower age.; Sex had no relationship to aesthetic activity, as neither did masculinity, femininity; Positive aesthetic attitudes were also related moderately to aesthetic activity, but were particularly strongly related to openness to experience, and somewhat less to extraversion.; Class, age and sex had no direct relationship to aesthetic attitudes.

### Chinese Consumer aesthetic attitude

Yaonan Lin and Ching Yi Lai [2007] developed a useful framework for understanding consumer aesthetic attitudes in 2007. The findings of the study suggest that some aspects are very much influenced by culture norms in China. The most important of these are aesthetic “utility”, “conformity”, “simplicity” and “feelings” each being derived from traditional values in China. Other aspects of the aesthetic attitudes, such as “westernization”, and “novelty” are derivative of western culture.

Consumer aesthetics has become an important area of marketing lately. A good product design is essential in a competitive market and whether or not a product is of good design depends mainly on consumer’s aesthetic attitude.

Holbrook and Hirschman [1982] showed that consumption always depends on subjective consumer aesthetic attitudes, which themselves typically root from value and cultural background.

The study suggests that the dimensions of “Utility,” “Conformity,” “Simplicity,” and “Feeling” seem to be derived from the Chinese traditional values, whereas those of “Westernization” and “Novelty” seem to come from Western cultural influences. With respect to their rituals, cultural artifacts, and cognitions, Chinese and Western cultures are different, but their underlying values are becoming mixed in the ‘cultural melting pot’ [Gudykunst, Ting-Toomey, & Nishida, 1960].

### Research Hypothesis

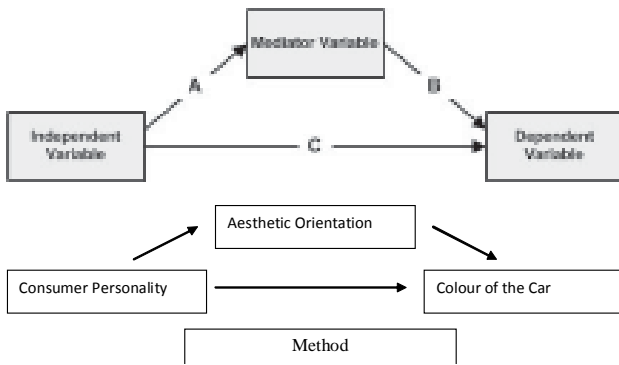
Based on the research problem and literature review the set of Null Hypothesis developed are:

**H1<sub>0</sub>** There is no impact of consumer personality (CP) on colour preference (COL) at the time of car purchase.; **H2<sub>0</sub>** There is no impact of a consumer’s aesthetic orientation (AO) on the car colour preference (COL).; **H3<sub>0</sub>** There is no impact of a consumer’s personality (CP) when routed through aesthetic orientation (AO) on the car colour preference (COL); **H4<sub>0</sub>** There is no influence on the colour preference (COL) in reference to the moderating variables demographics (gender, age, income) of the consumer.; **H5<sub>0</sub>** There is no effect of consumer personality (CP) on aesthetic orientation (AO) of the consumer.; **H6<sub>0</sub>** The choice of colour is not predictable for different consumers’ categories and it is only by chance.

In order to gain a better understanding of customer’s colour preferences during the purchase of a car, we have developed and formulated each of the research questions on the theoretical concept of the mediation model.

### Frame of Reference: Mediation Model

In statistics, a mediation model is one that seeks to identify and explain the method that underlies an observed relationship between an independent variable (IV) and a dependent variable (DV) via the inclusion of a third explanatory variable, known as a mediator variable (MV). Rather than hypothesizing a direct causal relationship between the independent variable and the dependent variable, a mediation model hypothesizes that the independent variable causes the mediator variable, which in turn causes the dependent variable. The mediator variable, then serves to clarify the nature of the relationship between the independent and dependent variables. While the concept of mediation as defined within psychology is theoretically appealing, the methods used to study mediation empirically have been challenged by statisticians and epidemiologists and formally derived by Pearl (2001).



**Sample**

Males and Females aged between 25 and 54 (M = 39.42, SD = 8.13), who had purchased car in last two years or planning to purchase within next 6 months were targeted as participants. After a proper screening process 151 usable samples were collected. Samples were collected through online survey. A majority of respondents (89%) had a college level education or higher. The research team opted for the web-based questionnaire method of communication using the popular website www.surveymonkey.com.

**Measurement**

With the constructs of the study being measured with multiple items, 5-point or 7-point Likert-type items were adapted for this context from a published scale (see Table 3 for the specific items). Personality scores were measured with revised CAD scale adapted from Jackson, K. & Gabbott, M (1998). Aesthetic orientation was measured with the scale adapted from I. C. McManus and A. Furnham (2006)

**Reliability Tests of Scales used**

Reliability Test was performed to check internal consistency test. Cronbach's alpha and the composite reliability (CR) was used for the CAD and AESTHETIC Orientation scales. As shown in Table 3, all constructs show a value above the threshold (.6 for both Cronbach's alpha and CR, adopted by Bagozzi and Yi, 1988).

**Table 3 - Constructs and Their Measurement items**

Construct and Measurement Items	Codes	α	CR
<b>Compliant</b>			
Giving comfort to those in need of friends is	COMP 1	.78	.91
To feel that I like everyone I know would be	COMP 2		
To give aid to the poor and underprivileged is	COMP 3		
To have something good to say about everybody seems	COMP 4		
Sharing my personal feelings with others would be	COMP 5		
Putting myself out to be considerate to others' feelings is	COMP 6		
To be fair to people who do things which I consider wrong seems	COMP 7		
<b>Aggressive</b>			
Knowing that others are somewhat envious of me is	AGG 1	.74	.83
Using influence to get ahead would be	AGG 2		
Having enough money or power to impress others is	AGG 3		

A strong desire to surpass others' achievements seems AGG 4

**Detach**

Enjoying a good movie by myself is	DET 1	.76	.88
For me to pay little attention to what others think of me seems	DET 2		
Living all alone in a cabin in the woods or mountains would be	DET 3		
Being free of social obligations is	DET 4		
For me to avoid situations where others can influence me would be	DET 5		
If I knew that others paid very little attention to my affairs it would be	DET 6		
For me to work alone would be	DET 7		

**Aesthetic Orientation**

Listen to music (popular, classic)	AES1	.76	.84
Go to concerts, discos, opera, art galleries	AES2		
Play a musical instrument	AES3		
Read about art in newspapers, magazines or books	AES4		
Draw or paint	AES5		
Read a novel, non-fiction book (not for work or study) or poetry	AES6		
Go to the cinema, theatres (plays, musical, etc)	AES7		
Act or take part in a theatre	AES8		
Go dancing (any form)	AES9		

**Results and Analysis**

**Influence of Consumer personality on Colour Preference and Colour Choice**

Consumer Personality		Colour of the Car			
IV	MV	DV	Test	Significance	Remarks
CAD		Colour Preference	Linear Regression	0.014	Significant
		Compliant-Colour Choice	CHI-Square Test	0.602	Insignificant
		Aggressive-Colour Choice	Linear Regression	0.424	Insignificant
		Detach-Colour Choice	Linear Regression	0.002	Significant
		Willingness To Wait	Linear Regression	0.000	Significant
		Max Waiting Time	Linear Regression	0.000	Significant
		Aesthetics	Linear Regression	0.050	Significant

The result shown above were significant (0.014) for the regression between CAD score and Colour Preference. Significance of Chi-square test for each personality type are compliant = 0.602, aggressive = 0.424 and detached = 0.002. Except for the influence of Detach personality type where the result is significance, impact of compliant and aggressive personality types in the choice of colour is insignificant. Results of regression between CAD and other Dependent Variables (willingness to wait, Max waiting Time) and Aesthetic Score were found to be significant.

**Influence of Consumer Personality on his Aesthetic Orientation**



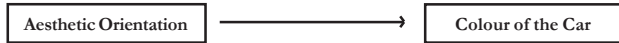
Result seems to be significant (however ANOVA is 0.050 > .05 which may improve further by increasing sample size





and precision) hence we find CAD is influencing the aesthetic orientation of the consumer. It may be noted that here also, aggressive personality type does not have a significant impact on the aesthetic orientation like in earlier analysis of aggressive personality to colour choice.

**Influence of Aesthetic Orientation on Colour Preference and Colour Choice**

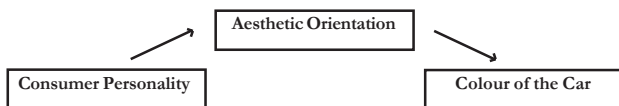


IV	MV	DV	Test	Significance	Remarks
Aesthetic		Colour Preference	Linear Regression	0.000	Significant
		Colour Choice	CHI-Square Test	0.002	Significant
		Willingness To Wait	Linear Regression	0.000	Signifi
		Max Time Waiting	Linear Regression	0.845	Insignificant

ANOVA is .000, that is, the aesthetic orientation of a person is strongly influencing the colour importance and has a significant impact on the colour preference at the time of car purchase.

Chi-square test of aesthetic orientation to the colour choice is significant (.002). It rejects the null hypothesis and clearly states that it is not only by chance that the aesthetic orientation has significance in the choice of colour. It states that this phenomenon is predictable.

**Indirect Effect of CAD personality to Colour Preference and Colour Choice**



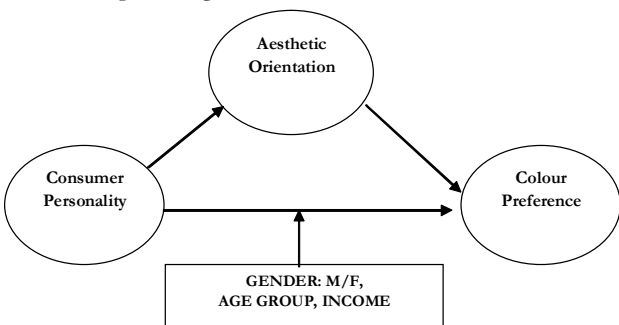
IV	MV	DV	Test	Significance	Remarks
CA D	Aesthetic Orientation	Colour Preference	Linear Regression	0.000	Significant

The result is significant i.e. Personality Types and Aesthetic Orientation both are influencing the importance of colour in consumer purchase behaviour.

**Partial Mediation Effect**

Independent variable – CAD, Dependent variable - Colour Importance

Mediating variable - Aesthetic Attitude, Moderators – Gender/Age Group/Income



**Direct Influence IV to DV, i.e., CAD on Importance of COLOUR**

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	COMPLIANT SCORE	.146	.054	.789	2.690	.008
	AGGRESSIVE SCORE	-.071	.064	-.275	-1.115	.267
	DETACH SCORE	-.095	.031	-.527	-3.061	.003

A. Dependent Variable: Colour Importance

**Indirect influence (role of mediating variable): IV-MV-DV**

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	2.110	.529		3.988	.000
	COMPLIANT SCORE	.092	.052	.493	1.770	.079
	AGGRESSIVE SCORE	-.026	.060	-.101	-.437	.663
	DETACH SCORE	-.070	.029	-.386	-2.381	.019
	AESTHETIC SCORE	.042	.008	.376	4.958	.000

A. Dependent Variable: Colour Importance

We can see that significance Beta coefficient of Compliant, Aggressive and Detached personality have reduced and thus it can be interpreted that there is partial mediation.

**Influence of Demographic Variables on Preference and Choice of Colour**

IV	MV	DV	Test	Significance	Remarks
Gender		Colour Preference	Linear Regression	0.691	Insignificant
		Colour Choice	CHI-Square Test	0.009	Significant
Age		Colour Preference	Linear Regression	0.015	Significant
		Colour Choice	CHI-Square Test	0.105	Insignificant
Income		Colour Preference	Linear Regression	0.904	Insignificant
		Colour Choice	CHI-Square Test	0.279	Insignificant

**Influence of Gender to colour preference and Colour Choice**

Result is not significant (ANOVA: 0.691) hence we didn't find impact of gender influencing the importance of colour choice. As the result is insignificant it can be interpreted that COLOUR PREFERENCE is important irrespective of gender however they differ in specific colour choices



Hence it can be interpreted that Both Genders were having Importance of colour while there choice of colour were significantly different.

#### **Influence of Age to Colour preference and Colour Choice**

Regression analysis: Age to colour preference :Result is Significant (ANOVA: 0.015) hence we find impact of AGE GROUP influencing the importance of colour choice.

CHI-Square: Age to Colour Choice : To understand the influence of Age on specific colour choice, CHI-Square test is conducted

Further analysis of Chi-square test reveals the rejection of null hypothesis (Ho) i.e. the impact of age group on specific colour choice is by chance is accepted as the significance is  $0.105 > .05$ . this means that age group preference for specific colour choice is by chance only

#### **Influence of Income to Colour preference and Colour Choice**

Regression analysis: Income to colour preference : Result is insignificant (ANOVA: 0.904) hence we didn't find impact of INCOME GROUP influencing the importance of colour choice.

CHI-Square: Income to Colour Choice

Further analysis of Chi-square test reveals the acceptance of null hypothesis (Ho) i.e. the impact of INCOME GROUP on specific colour choice is by chance is accepted as the significance is  $> .05$ . This means that Income group preference for specific colour choice is not predictable.

#### **Findings, Conclusions and Contributions**

Based on the results of the above analysis, the findings and conclusions of the study are presented in this section. Then we have tried to contribute some managerial implications. And finally suggestions for further research are presented.

#### **Findings and Conclusions**

As stated in the initial section, the research objective was to gain better understanding of consumer's preference for colour while making a car purchase. In order to understand this phenomenon, few questions were identified based on the literature review and the aesthetic orientation of people. The research questions formulated were:

impact of consumer personality on colour preference at the time of car purchase?; impact of a consumer's aesthetic orientation on the car colour preference? impact of a consumer's personality when routed through aesthetic orientation on the car colour preference?; Is there any influence on the colour preference in reference to the moderating variables demographics of the consumer?; the effect of consumer personality on aesthetic orientation of

the consumer?; Is the choice of colour, predictable for different consumers' categories?

A web-based survey was done and responses from across 151 participants were analysed to seek perspectives from the target audience who has purchased a car in the last 3 years or will purchase a car soon. The section below provides a summary of findings and conclusions followed by the sequence of: Compliant, Aggressive, Detached, Aesthetic Orientation, Demographics.

#### **Compliant**

Karen Horney [Self-analysis, 1942] believed that people's personality was actually their adaptation to their culture and also a result of the defense mechanism they developed to deal with difficult relationships. This formed the basis for CAD, a tool to understand one's personality. The compliant personality category is seen as a process of "moving towards people". The findings of the survey revealed a strong bent towards the compliant personality type, that is, the compliant personality in the respondents was very high. This stems from various reasons like:

Indians have a deeply-rooted culture and belief in spirituality and traditions; Traditional Indian family values are highly respected and even though nuclear family are becoming common in urban areas, multi-generational patriarchal joint families have been the norm; Our society has introduced the art of physical and mental discipline through yoga and other exercises which deeply imbibes the compliant personality

#### **Aggressive**

An aggressive personality type is often defined as those individuals who are high-achieving workaholics, drive themselves with deadlines, and are unhappy about delays at work. Such individuals would make sufficient use of money, power and influence to surpass others. Because of these characteristics, such individuals are often described as "moving against people". During our findings, we found a very low component of aggressive personality in the participant's interpersonal orientation. Also when tested on its impact on the dependent variable of colour preference, the result was quite insignificant.

An aggressive personality type was found to have insignificant impact when tested on the aesthetic orientation too. While there could be several reasons for minimal presence of aggressive personality type, the primary reason is the compliant nature of Indians.

#### **Detached**

Detachment Needs is also called the "moving-away-from" or "resigning" solution or a detached personality. They



suppress or deny all feelings towards others, particularly love and hate or like and dislike.

So similar to compliant, the responses from detached personality were significant when tested for colour preference but when closely looked at the choice of colour, the impact was insignificant.

### **Aesthetic Orientation**

Aesthetic orientation examines our affective domain response to an object or phenomenon. Aesthetic judgments usually go beyond sensory discrimination and may be culturally condition to some extent. Classical Indian architecture, sculpture, painting, literature, music, and dancing shared the underlying spiritual beliefs of the Indian religio-philosophic mind with one another.

The CAD did influence the aesthetic orientation of the consumers significantly and the aesthetic orientation of a consumer strongly influences his/her decision or attitude towards colour preference while purchasing a car. A Chi-square test on the same also rejected the null hypothesis and ascertained the presence of a relationship.

### **Demographics**

We tried to carry out the study keeping in mind the impact of gender, age and/or income on the outcome variable. It was important to see if the demographics of the consumer had any role to play in the colour preference of the car.

Gender did not show any significant impact on the colour preference of car but there is a relationship which can be predicted when the specific colour choice is tested with gender.

Age, like gender did not show much significance in the colour preference but suggested that there is a relationship when tested for age and choice of a specific colour.

Income did not impact the significance of colour preference but revealed the acceptance of a null hypothesis when tested for choice of colour.

### **Contributions**

Impact of colour preference during car purchase

Since measuring a consumer's personality and its relation to purchase behaviour is always a difficult task, it is also evident that consumers do prefer colour as an important aesthetic at the time of car purchase. This has been measured across various variables of personality, aesthetic orientation and demographics.

Owning a car is becoming a necessity for most households and the increasing sales figures and entry of global players in the Indian market communicate this fact. Individuals do give significant weight to aesthetics at the time of car

purchase and colour is one of the important aesthetics. The participants have showed their different opinions based on the different backgrounds of culture, personality, age groups and aesthetic choices.

Managerial implications

The important consideration for managers not only in car manufacturing companies but also managers in the car-paint manufacturing units is to study this colour preference of consumers regularly. There are surely a lot of reasons to buy a car, yet colour is an important decision criterion and more often the 'driver' for purchasing a vehicle. Consumers are always on the look out for colour trends and they do go through a fairly long thought process to decide their choice of colour while purchasing a high-involvement product like a car.

In addition to this, they can look at several combinations of colour preference with respect to different personality types and demographics. While introducing a new model of a car, the company anyways carries out a study of their target audience personality and the perceived association with the car. It can be an added advantage to understand the colour choices of consumers with respect to different types of car.

### **Implications for Further Research**

Due to the exploratory and descriptive nature of this study and limited literature review in this area, there are limitations to the present study and some more opportunities and suggestions for further research are presented.

Exclusion of Colour Variants

For the purpose of our study, we have included the colours in their original or basic form to avoid spread in responses. Hence we have taken the colours as black, blue, red, green, grey, white, silver, yellow and made it mandatory for the respondents to choose one of these. Variants like dark blue, light blue, silky silver, off-white, maroon, lemon, turquoise blue, etc have been kept out of the scope of the study to limit the responses within a close loop to arrive at strongly represented responses.

Gender-wise choice of specific colour

In this study, we tried to find out a relation of gender between gender and the importance of colour at the time of car purchase. However for those respondents who did give importance to colour preference and indicated their choice of colour, we did not proceed to study the gender-wise preference of a specific colour.

However, the same can be done with a post-test tool of Haberman. The usual belief is that Male respondents prefer dark colours like black and blue and Female respondents



prefer lighter or chroma colours like white, red and silver since their preferences are towards gentle and pleasant colours

Choice of colour as a spur of the moment decision

Often the decision of colour and other accessories is at spur of the moment. People finalise the car and then start thinking about such variables strongly. Hence it is often seen that the time-span of such decisions is very small. This shall be a limitation of the research, whereby it is assumed that each respondent has invested sufficient time in deciding the colour preference for his car purchase

Recall of the decision made for colour preference

In high involvement products, the recall of decisions is usually very high. Even in the case where the car purchase by the respondent is slightly dated, even then there is still a fair chance that he will remember the reasoning for his decisions because car purchase is a high involvement decision. Also if there is a limitation of such nature, then the same should be handled by conducting Focus Group Discussions.

Determine the Specific colour choice by personality type

One may try to identify if a particular personality type has a liking towards any specific colour. For example, would an aggressive personality prefer the colour black would silver or white be the popular option for a compliant personality. This can be done by taking the median for each of the personality types C, A and D. Then determine the above median and below median for each personality type and see the colour choice made by the respondent. Use of cross tabulation or Chi-square has to be made to arrive at this result.

Impact of Price Discrimination based on colour

In our research we have judged the importance of colour by assessing the consumer's willingness and waiting time the consumer can invest to get the desired colour. This may also be assessed by willingness to pay more to get the desired colour. Also the study may be conducted Brand wise and some other dimensions like impact of price discriminations on colour choice may also be an important study.

Impact of other demographic characteristics

In our research we have taken only age/gender/income as demographic variables. Impact of other demographic characteristics such as Geographic, religion etc may be studied to formulate improved supply chain management incorporating colour choices.

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## THE PROBLEMS OF TRANSFER PRICING

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**Abstract**

*Each item has a price, but not every company is able to independently set the price at which it wants to sell its goods. Firms need to have a streamlined method of setting prices for their goods, and their financial condition depends on it. When choosing a method of pricing, there must be considered and internal and external constraints. The paper discusses the stages of formation of prices in a continuous process of pricing, as well as methods of pricing, their advantages and disadvantages. This paper includes interesting information about the transfer pricing and its interrelationship with tax issues in terms of world economy and Uzbekistan. Author tried to describe need of transnational corporations and holding companies for transfer pricing and potential of Uzbekistan to develop and regulate transfer pricing. There were written some key issues for implementation of transfer pricing. Author approached to transfer pricing as a tool which plays an important role in effective regulating transnational corporations' activities in Uzbekistan. It's notable that legislation issues of transfer pricing were also described. Paper shows the basic results of research aiming to investigate transfer pricing issues in Uzbekistan. Availability of two things – systematic approach and principle of system is characterized as main condition to regulate transfer pricing.*

**Keywords:** Pricing, Transnational corporations, Tax, National legislation

Each item has a price, but not every company is able to independently set the price at which it wants to sell its goods. If the goods are not differentiated, and competitors are numerous, the company does not have market power and must accept the price given by the market.

At present, modern business, in particular transnational corporation, represents the whole structure of interconnected units interacting on a contractual basis. Contract, being a legally binding document, also serves the interests of transnational corporation and allows its separate divisions to interact in a mutually beneficial manner and at the same time achieve greater profits with the least tax cost. The fact is that today in the framework agreement, transnational corporation acquired the character of a support tool which allows achieving the optimal tax regime. We are talking about the mechanism of transfer pricing, which allows affiliates to install a lower price for the goods (works, services) based on the principle of freedom of contract in the contract and to minimize tax loss of corporation as a whole. As is known, the transfer price - is the price at which the sale of goods are carried within the transnational corporation between its affiliates and which differs from the objectively established market (free) rates for international transactions. Using the mechanism of transfer pricing, affiliates of transnational corporations set the price of goods, works and services, which is several times lower than the market for identical goods (works, services). In fact, the principle of freedom of contract, valid in civil matters, provides its members the right in its sole discretion to determine the terms of the contract, in particular its price. Despite the operation of the objective of market mechanisms to encourage actors to set prices based on market factors, counterparties in setting prices in order to achieve a certain goal may come from subjective considerations, which include avoidance motive (minimization) from taxation.

**Transfer Pricing and Tax:** The use of transfer pricing, carried out in various ways and means, referred to as tax planning, which is an integral part of the management activities of large corporations. Although, if we consider this mechanism from the perspective of the state we can say that it is a tool to avoid tax. The structure of the instruments to avoid tax is more significant in countries where the possibility of tax evasion is limited. The need for complex mechanisms of tax planning is absent in those jurisdictions where legal climate provides opportunities to minimize taxes without significant risk when tax evasion is relatively cheap. Transfer pricing (price distortion transactions) as a way to avoid (minimize) the tax is typical for the almost all countries of the world. As a result of the application of standards to reduce the tax burden due to price manipulation, the state loses due tax payments that would have received in the case of utilization of right (free) prices by taxpayers.

As a rule, the transfer prices are used within groups of interdependent companies. For example, the mining holding company sells its products to sales companies belonging to the same holding, at a lower price, and sales company in turn sells the goods to final consumers at market price. Price of sales of products between the companies is considered as transfer price.

Indeed transfer pricing can significantly save on taxes, using calculations of intracorporate price. However, transfer pricing, first and foremost - it is an objective requirement of the market and a powerful stimulus for economic development. For example, in case of the same mining company, the whole cycle, from the process of production to selling to end consumers, divided into many stages, but single leadership is responsible for the implementation of each of them. The effectiveness of the particular unit, for example, sales at such business organization is not clear. As a consequence, it is more

difficult to track which steps actually generated profit, which units should be reformed, what weaknesses in the organization of work should be paid attention to. Moreover, in centralized management system divisions' coordination costs could potentially exceed the income from the enterprise.

In order to minimize tax costs and create an efficient tax planning model transfer pricing was invented. Contractual relations between units inevitably lead to intra calculations that are impossible without valuation transferred products. The price at which products are sold from one unit to another, called the transfer price, and that price-setting process became known as transfer pricing. General Motors, General Electric, IBM, Toyota Motors and others are the most well-known international companies using transfer prices.

**Transfer Pricing in Uzbekistan:** Although today, there's sufficient number of units of transnational corporations extensively using transfer pricing mechanism in the Republic of Uzbekistan, in the Uzbek legislation the term "transfer price" has not used yet. Moreover, the existence of free economic zones in the individual states is a powerful incentive for the use of such a mechanism.

However, the Uzbek legislation does not prohibit the use of transfer prices. According to article 356 of the Civil Code of the Republic of Uzbekistan implementation of the contract is paid at a price fixed by agreement. At the same time the Tax Code does not provide nor determining the market price, nor the provisions on transfer pricing. As a result, nowadays in Uzbekistan because of the lack of the legal framework governing the transfer pricing there is a practice of understatement the market value of the goods (works, services). Because of such conditions, the state budget loses tax revenue. In the case of acceptance appropriate legislation, the tax authority finding out the fact of use of transfer pricing, could claim in court invalidation of the transaction in accordance with Article 124 of the Civil Code of the Republic of Uzbekistan. As a result, business entities rarely would use transfer prices that will allow the state to fill its budget.

### **Transfer Pricing in Global Economy**

At present, the legal regulation of transfer pricing has been done at the international level through agreements on avoidance of double taxation and at the national level by the rules of domestic tax legislation. In this case, the regulation of transfer prices is to ensure that the tax authorities should not aim to eliminate transfer pricing, and find out whether or not it leads to minimize tax liabilities. Exploring the scope of the rules governing transfer pricing, by type of tax, it is noted that in majority countries they are applied to taxes on income (profit).

At the level of the International Society of the Organization of Economic Cooperation and Development for this purpose there have been developed so-called "arm's length principle".

The essence of this principle is that the interdependent companies (for example, companies of the same holding company) use prices different from market in maintaining their relations, independent companies (located from each other "at arm's length distance") use market prices. The state, in turn, corrects such non-market prices as if the companies were independent. This principle finds its incarnation at the level of international agreements and intra-national norms. Most of the agreements on avoidance of double taxation contain articles on the adjustment of profits of associated enterprises. For example, Article 9 of the Agreement between the Government of the Russian Federation and the Government of the Republic of Uzbekistan for the avoidance of double taxation of income and property from the 2<sup>nd</sup> March 1994 states that it is possible to additional taxation in cases when the associates of Contracting States apply prices other than market prices. This rule was formulated as follows: "... if the entity is an associate and in any case there are appeared or set situations between enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then the profit that would have been credited to one of the enterprises, but because of the presence of such relations have not so accrued, may be included in the profits of that enterprise and taxed accordingly".

### **Conclusion**

In general we can say that at the present time, the use of transfer pricing has been done quite freely in various countries and the Republic of Uzbekistan is no exception. Considering the creation of the free industrial zone in Navoi region, it is believed that the practice of transfer pricing will be expanded. Consequently, it is very important for Uzbekistan to take the appropriate legal framework to adequately reflect the negative impact of the use of transfer pricing within the holding companies and transnational corporations presenting in the territory of the Republic of Uzbekistan.

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## ANALYTICAL DESIGN OF REED

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### Abstract

*Frequency is an important electrical quantity which is present in only Alternating Current (AC) circuits. Frequency measurement is very important in various AC applications, especially in AC power systems designed to run efficiently at one frequency only. When AC is being generated by an electro-mechanical alternator, frequency will be directly proportional to speed of the machine shaft and it could be measured by measuring the shaft speed. To measure the frequency at some distance other means of measurement will be necessary. One simple method of frequency measurement in power systems utilizes the principle of mechanical resonance. As every physical object possessing the property of elasticity has an inherent frequency at which it will prefer to vibrate. Various researchers focused on its construction manipulation to achieve reduced calibration time but rare focus on reed.*

**Keywords:** Alternating current, Natural Frequency, Reed, Resonance, Reed Type Frequency Meter, Vibration

Reed type frequency meter is device which indicates the measurement of frequency. The instrument is consist of multiple reed in which each reed has a different natural frequency and is marked accordingly. Using number of reeds makes it possible to cover a wide frequency range. The instrument can also be used to measure electrical frequency of AC signal in a range of 45-55 Hz, 47-53 Hz, 55-65 Hz, and 57-63 Hz which is available in 0.5, 1, and 1.5 accuracy class when connected across input of 110,220,380,440 volts. Reed type frequency meter works on the phenomenon of resonance hence it is also called as mechanical resonance type frequency meter. The natural frequency of reed designed should be equal to twice of the frequency of AC current because force of attraction between electromagnet and reed is twice in a pulse. The instrument when mounted on the vibrating body, the reed whose natural frequency is nearest to unknown frequency of the body vibrates with larger amplitude.

### Why Reed Design is Important?

Reed is key component of the vibrating reed frequency meter which is responsible for indicating the AC frequency. In traditional method, design of reed is based on space availability of housing as per Indian standard 2419 (IS 2419) for instruments. The reed undergoes annealing process to soften the material of reed followed by bending free end. The important of reed design is calibration of its frequency. Highest frequency provided by instrument manufacturers in range of 55-65 Hz is of 65 Hz. In tradition design the calibration for 65Hz reed should be performed by adding minimum weight. In order to bring down the natural frequency of reed to its indicating frequency, mass in the form of solder metal is added behind the bend portion of reed, as frequency is inversely proportional to mass. It means that amount of mass to be added increases when desired natural frequency of reed decreases. This process of calibration is tedious and time consuming. Hence need is arises to find a suitable method for all mentioned ranges of frequency meter which overcomes the existing problems in mass production.

### How to find Natural Frequency of Reed

Calculation of natural frequency when a cantilever beam is subjected to compound loading is not a regular engineering practice. In this case of reed type frequency meter the reed

is subjected to uniformly distributed load and a point load at. The load is uniformly distributed load throughout effective length of reed due to its own weight. Concentrated mass at the free end of the reed as point load because of bend. This unusual problem is solved by Dunkerly's method. This method enables the frequency of an oscillation to be deduced when it is due to two or more masses. For example a cantilever oscillates because of its distributed mass and because of any point load on it. Any engineering professional know how to work these out separately but together the formula will be different. Suppose a beam oscillates a frequency  $f_1$  due to one load,  $f_2$  due to another load. When all loads vibrate together, the resulting frequency  $f$  is found using the reciprocal rule below.

..... (a)

Hence by applying Dunkerly's formula for the frequencies obtained from above two different type of loading natural frequency of the reed can be calculated. Dunkerley's method gives lower bound approximation which makes the design usable. Any error in approximation will increase the practical natural frequency which can be reduced by adding some weight at the tip of the reed.

### Analytical Design

Every physical body has an infinite number of resonant or natural frequencies. The body will vibrate with a different vibration envelope for each of these resonant frequencies. Vibration envelope referred as the mode of vibration, hence the resonant frequencies referred as modal frequencies. Vibration envelope of a stick can be observed by holding it horizontally by its end and moving it rapidly up and down. The first mode will look like a wedge with the apex at hand. When the meter stick reaches the edge of the vibration envelope, it must come to a stop so it can reverse its direction. Eyes can see the stick when it briefly stops moving, but when it passes through the midpoint it is going very fast and appears as a blur. If the stick shaken even faster second vibration mode will be observed. No one has been able to shake it fast enough to see the third mode. The first three vibration modes of a cantilever beam are shown in Figure 1. The Reed of the reed type frequency meter vibrates with first mode of vibration.

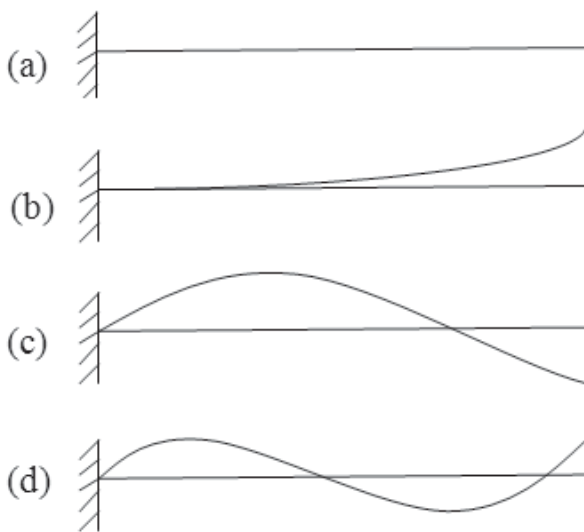


Figure 1a: No vibration.  
 Figure 1b: First Mode Vibration Envelope.  
 Figure 1c: Second Mode Vibration Envelope.  
 Figure 1d: Typical Third Mode Vibration Envelope.  
 Here the natural frequency is in rad/sec for each mode of vibration is proven and represented by  $\omega$ .  
 Natural frequency of first mode:  
 $\omega_b = (1.875)^2 \text{ rad/sec.}$  ..... (b)  
 Natural frequency of second mode:  
 $\omega_c = (4.694)^2 \text{ rad/sec.}$   
 Natural frequency of third mode:  
 $\omega_d = (7.855)^2 \text{ rad/sec.}$   
 The natural frequency of a straight reed can be calculated in Hz by the formula:

$$f = \text{Hz} \dots\dots\dots (c)$$

By putting value of  $\omega$  equation (b) in equation (c) from above we get,

$$f = 0.5595 \text{ Hz} \dots\dots\dots (d)$$

Natural frequency is the frequency at which a system naturally vibrates once it has been set into motion. In other words, natural frequency is the number of times a system will oscillate between its original position and its displaced position, if there is no outside interference. For example, consider a simple beam fixed at one end and having a mass attached to its free end. If the beam tip is pulled downward and released, the beam will oscillate at its natural frequency. Natural frequency because of the length of span and bend length must be taken in account together to calculate resultant natural frequency of reed. Natural frequency because of effective length can be calculated by the equation (d) and natural frequency of beam having mass at its free end can be calculated by the equation shown below.

$$f = \text{Hz} \dots\dots\dots (e)$$

The deflection of cantilever beam due to end mass is calculated by:

$$\ddot{a} = \dots\dots\dots (f)$$

By putting value of  $\ddot{a}$  from equation (f) in equation (e) the frequency due to mass at free end of the reed can easily calculated,

$$f = \text{Hz} \dots\dots\dots (g)$$

**Result**

The table 1 shows the comparison of results obtained from

analytically, analysis and practical trials.

**Table 1 - Result Comparison of Frequency**

Required frequency(Hz)	Analytical Frequency(Hz)	Analysis Frequency(Hz)	Practical Frequency(Hz)
55	54.94	55.02	55.03
56	55.96	56.04	56.06
57	56.94	57	57.03
58	57.98	58.02	58.05
59	58.95	59.05	59.06
60	59.98	60.04	60.07
61	60.92	61.08	61.09
62	62.00	62.01	62.04
63	62.93	63.07	63.09
64	63.95	64.03	64.05
65	64.99	65.02	65.04

**Conclusion**

The Dunkerly’s method gives lower bound approximation. These analytical calculation are useful because the frequency obtained in analysis and practical trails is always greater than analytical results. Hence the frequency can be calibrated by adding weight at free end of the reed. If analytical results are higher than other two method of results its frequency cannot be calibrated.

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